“What’s Growing On…”

For agriculture news and horticultural tips, listen to me, Pam Burton, on the RCE Agricultural Program on Monday, Tuesday, Wednesday & Thursday on SNJ Today AM 1240 announcing local workshops, seminars, and horticultural tips.

From The Desk of Pam Burton

As I write this it’s early May and cold; still sweater weather. Heat is still on. Really? We all spent much of this Spring saying when will it get warm? When you read this, it may be sleeveless weather with the AC on high. We will probably be saying during these summer months of June, July and August…”Will it ever be cool again?” Welcome to Mother Nature and human nature!

While some people consider talk of the weather to be “filler conversation” we as gardeners know better. We are weather dependent for our garden tasks and I’m certain many of you check the weather, both short-term and long-term, as the first task of your morning … or at least right after the first cup of coffee so you can determine what you will do in your garden and when you can do it… Can I mow today? Do I need to water my plants?

In this technologically-driven world, gardeners know a secret that we all share in common. It’s still remains a good garden day to bask with the sunshine on our faces (using a sunblock of course) while we harvest our bounty, stroll through garden paths after a summer’s rain and see the moisture on the plants, and smell the sweet fecund smell of the earth as we work the soil. There’s NO app for that!

And so it goes,
Pam Burton
Be on the lookout!

Purslane

A client brought in a specimen that looked much like tiny jade plants and reported she had this all over her yard. It was identified as Purslane or *Portulaca oleracea*. Rutgers NJ Weed Gallery states “…Purslane is related to the flower of the same name. It is a severe weed pest in vegetable crops and newly seeded turf. It is an annual and produces numerous seeds…” Purslane is native to India and Persia and was identified state-side in Massachusetts in 1672. It’s been reported that a single plant can produce 240,000 seeds which may remain viable for 5 to 40 years. The control recommendation is to hand pull the purslane prior to it going to seed.

Resources:
- https://njaes.rutgers.edu/weeds/weed.asp?purslane
- University of California: http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7461.html
- University of Illinois Extension: https://web.extension.illinois.edu/cfiv/homeowners/030726.html

A perspective on Mullein

Non-native Common Mullein is usually considered a biennial weed and you will find it in areas that are not managed or “waste” land. Known as a pioneer plant, Mullein is one of the first plants to grow in a place that has burned. The flower spike grows quite tall and has yellow flowers. In Roman days people dipped the flower spikes in grease and use them as torches. Mullein has velvety leaves that are a greyish green color and feel like felt and these leaves were used to line the moccasins of Native Americans to ward off the cold. Hummingbirds use them to line their nests.

Resources:
- Fairfax County Public School: http://www.fcps.edu/islandcreekes/ecology/common_mullein.htm
- Colorado State University: http://www.colostate.edu/Dept/CoopExt/4DMG/Weed/mullein.htm
- Brandeis University: http://www.bio.brandeis.edu/fieldbio/Wildflowers_Kimonis_Kramer/PAGES/COMMONMULLEIN_PAGE_FINAL.html

Dame’s Rocket

A client brought in a tall stalk with dense clusters of purple flowers that resembled phlox and reported that she sees it roadside quite often. It was identified as Dame’s Rocket or *Hesperis matronalis*. In the research of Dame’s Rocket it does appear on both lists of wildflowers as well as invasive species for several states, with particular concern to wet sites with rich soil. It is a biennial in the mustard family, but readily re-seeds itself so it behaves like a perennial. The flowers of Dame’s Rocket are scented and can be used in floral arrangements.

Resources:
- Cornell University; http://www.gardening.cornell.edu/homegardening/scenecd89.html
- Purdue Weed Science; http://www.btry.purdue.edu/weedscience/2010/DamesRocket.html
- University of New Hampshire; https://extension.unh.edu/goodforestry/html/5-2.htm

Bluegrass

A client brought in specimens of weeds he described as being everywhere in his lawn. At first glance it appeared they were a type of grass, but what kind? By looking under the scope at the greenish white seed heads, the leaf Tip which was Boat-shape, the folded leaf vernation, smooth leaf surface and a medium long pointed ligule it was determined to be annual bluegrass or *Poa annua*. The best weed defense is a good maintenance program for the care of your lawn, as outlined in Rutgers Fact Sheet FS102 “Your Lawn and it’s care”. Keep in mind, in approaching weed control it’s more realistic to think about the management & control of weeds versus entire eradication.
Evening Primrose

Evening primrose, *Oenothera biennis*, is on the weed listing of many educational websites. It has 4 yellow oval-shaped petals at the tips of long stems. The seed pod is very distinctive and is about 1/8 inch round and 1-2 inches long. There are a multitude of species so specific identification can be difficult. The flowers open at dusk and wilt the following morning, hence the name evening primrose. But if you give some thought to that process you will realize that it is most likely to be night-flying pollinators that pollinate these flowers.

Resources:

- http://njaes.rutgers.edu/weeds/weed.asp?eveningprimrose
- Penn State: http://plantscience.psu.edu/research/centers/turf/extension/plant-id/broadleaf/evening-primrose
- Ohio State University: http://www.oardc.ohio-state.edu/weedguide/singlerecord.asp?id=520

Who knew?

A question came into the helpline – Can beet tops be eaten? Yes! Rutgers Fact Sheet 988 entitled “Picking Vegetables in the Home Garden states”…Beets can be harvested for both the roots and the tops. The tops can be used in the same manner as spinach or Swiss chard. The leaves of young plants can also be used in salads. Beets should be harvested when the roots are one to three inches in diameter. The smaller the root, the more tender they will be when cooked. Beet roots larger than 4 inches in diameter may be hard and woody. Beets can be stored after the tops are removed, leaving about 1 inch of the stem in place. and placed in plastic bags to keep them from dehydrating and becoming soft. Refrigerate to extend freshness…”

Telecommunication Problems

The County of Cumberland has agreed to act as the lead agency on behalf of 16 communities in South Jersey to pursue a petition before the Board of Public Utilities against Verizon NJ in an effort to compel Verizon to maintain copper landline services. CC Freeholder Director Joe Derella said, “Verizon is attempting to discontinue maintenance of copper landlines which means that telephone and telecommunication services, including internet service through copper landlines will ultimately deteriorate and fail. At that point, telecommunications may be unavailable and unless telephone service through Comcast or cell phone service is available there may be no landline coverage at all in many communities. The County and 16 communities are fighting against the effort by Verizon to discontinue landline maintenance.

Deputy Director Darlene Barber said, “A page on the County website has been set up to allow any person who is experiencing problems with telephone and telecommunication services to inform us of the problems in order to allow us to present this information to the Board of Public Utilities. The information can be found by going to www.co.cumberland.nj.us, click on the “citizen resource center” and the questionnaire link is in the second paragraph.

We are requesting that everyone experiencing problems go to the website and complete the questionnaire. The more information we have before the BPU the better.
Cannas

Rutgers Fact Sheet 1155 on Cannas recommends growing them in full sun as a bedding plant with plenty of space to spread their tropical like foliage and showy bold flowers. If necessary, fertilize cannas on a biweekly basis with a 5-10-5 or 5-10-10 ratio fertilizer and water them thoroughly once a week in dry weather. Trim the blooms after they wither. Cannas need to be dug after a hard frost and overwintered so you can replant them for next summer’s enjoyment.

George Washington Booker – Thank You!

In a discussion with a friend over the wondrous attributes of peanut butter, I learned some of the contributions of George Washington Booker to agriculture and the South. He is credited with being the Savior of the South in his quest to assist the man farthest down. George Washington Carver discovered crop rotation and in his agriculture experiments found over 300 products that can be made from peanuts. Peanuts have nitrogen fixing return bacteria on their roots known as legumes and he encouraged farmers to break their hold from the monoculture of cotton to diversify including legumes. He is quoted as saying, “It is not the style of clothes one wears, neither the kind of automobile one drives, nor the amount of money one has in the bank, that counts. These mean nothing. It is simply service that measures success”.

Resources:
- Cal Poly Pomona: https://www.cpp.edu/~nova/scientists/articles/carver.html

Hypertufa

Hypertufa is a lightweight stone-like synthetic version of the naturally porous sedimentary tufa rock. Tufa is difficult to find, so gardeners being gardeners came up with a way to simulate the tufa rock.

Hypertufa is a mixture of portland cement, perlite and peat moss with water added to the consistency of cottage cheese. It’s then molded over objects or containers to make your own one of a kind planter filled with succulents or alpine plants. Think European countryside with centuries old wonderful troughs used as planters. I will warn you, if you try this at home it’s a wonderful mess.

Resources:
- Oregon State University; http://extension.oregonstate.edu/gardening/use-hypertufa-make-containers-look-stone
- University of Illinois Extension; http://web.extension.illinois.edu/dmp/palette/100207.html
Creatures and Critters

Some Creatures and Critters that were featured at the Helpline Desk in 2015...! Keep in mind, there are numerous Rutgers fact Sheets on a variety of creatures and critters!

Ambrosia beetle

A client brought in a section of his dead Japanese Maple tree which exhibited many small holes the size of pencil lead and protruding from those holes in the tree trunk were thin toothpick-like columns of what looked like strands of sawdust. The cross section of the limb also showed the small holes and with a bit of prodding, we removed a very small insect which was identified as an ambrosia beetle, *Xylosandrus crassiusculus*. The females are known to bore through the bark and into the heartwood of the trees. It is non-discriminatory about the hosts it attacks. In researching control of this beetle it was found that the best line of defense is maintaining the vigor of the trees with proper fertilization, pH, and water management controls.

Resources:

- [http://entnemdept.ufl.edu/creatures/trees/asian_ambrosia_beetle.htm](http://entnemdept.ufl.edu/creatures/trees/asian_ambrosia_beetle.htm)
- Clemson University: [http://www.clemson.edu/cafls/departments/esps/factsheets/turforn/ambrosia_beetles_to22.html](http://www.clemson.edu/cafls/departments/esps/factsheets/turforn/ambrosia_beetles_to22.html)

Carpenter Bees

A client recently asked about prevention and control of carpenter bee damage. Rutgers Fact Sheet FS1095 on Carpenter Bees has a section on prevention and control of carpenter bees and recommends that preventative measures can go a long way in solving the problem before it occurs. Carpenter bees enjoy weathered and unprotected wood, so the use of treated wood or non-wood options can be effective. If your structure is already in place and the bees remain persistent seal the openings with caulking compound during night time when the bees are less active. Finally, FS1095 states “…Carpenter bees looking to create new tunnels are best swatted with a tennis racket or captured and killed using an insect net…” Having done this myself, I can tell you it’s summertime fun at its’ best!

Scarab Beetles and White Grubs

You will start seeing a variety of beetles emerge in the summer months in the northeastern USA, including Adult oriental beetles, Japanese beetles, Asiatic garden beetles and the green June beetle and the time for control of these beetles is during their larval stages as white grubs. If you’ve ever seen one, you know what I’m talking about and the damage white grubs can cause is extensive and can present as a gradual thinning, yellowing and wilting of turf even with adequate moisture. Eventually the scattered irregular patches all come together to make even larger areas which feel spongy underfoot. To add insult to injury, vertebrate predators will tear up the turf for the delicacy of a white grub tasty treat. There are two Rutgers fact Sheets on white grubs and they are FS1009 entitled “…An Integrated Approach to Insect Management in Turfgrass: White Grubs…” and FS293 entitled “…White Grubs…” and several methods of control are recommended for white grubs in these publications.
**Woodpeckers**

The topic of one Master Gardener class is Animals: Friend or Foe and in this spirited class it was widely agreed that some animals can be considered both. The woodpecker is an example of both friend and foe. It’s agreed the woodpeckers are quite beautiful, and when watched can provide hours of fun antics. They can act as a natural insecticide given the number of insects they eat in a given season.

The problem can occur with the potential damage done to trees and homes by the consistent drumming into wood for their forage of animals. Not to mention when they act as an early morning wake-up call by drumming into your house, gutter, loose siding or metal vent pipe at 6:00 am at a very rapid rate making for a raucous clatter. Two suggested reasons that they may do this drumming are to attract mates and defend their territories. Control measures include tactile, visual and sound deterrents. Or, if you can’t beat them join them, by adding a suet feeder to your yard.

**Resources:**
- [http://wildlife.rutgers.edu/faq.html#woodpecker](http://wildlife.rutgers.edu/faq.html#woodpecker)
- [http://www.birds.cornell.edu/wp_about/index.html](http://www.birds.cornell.edu/wp_about/index.html)

---

**Common Garter Snake**

Depending on local climate, the Common Garter snake may be the first snake to emerge in the Spring and the last to hibernate in the fall. The garter snake enjoys a diet of earthworms, tadpoles, fish, voles, toads and salamanders and they swallow their prey whole. The toxins that amphibians use as a chemical defense don’t seem to be a problem for garter snakes. Garter snakes are solitary creatures, until its’ time to hibernate when they gather in large numbers coiled together to help ensure they will maintain a minimum body temperature in order to survive. It’s known that literally hundreds if not thousands of snakes may congregate together for their winter hibernation. I have to admit, seeing that phenomenon is not on my bucket list.

**Resources:**
- Penn State University: [http://www.psu.edu/dept/nkbiology/naturetrail/speciespages/gartersnake.htm](http://www.psu.edu/dept/nkbiology/naturetrail/speciespages/gartersnake.htm)
- University of Michigan: [http://animaldiversity.org/site/accounts/information/Thamnophis_sirtalis.html](http://animaldiversity.org/site/accounts/information/Thamnophis_sirtalis.html)

---

**Garden Gab…..**

“Gardening is cheaper than therapy…..and you get tomatoes”

“No life is without difficulties…..and no garden is without weeds”
Rutgers Master Gardeners will be on hand at three Diagnostics Clinics this summer: July 15, August 12, and August 26 from 10 am – 11 am to help answer your horticulture questions. The clinics will be held at the Extension Education Center, 291 Morton Avenue, Millville, NJ and are FREE but pre-registration would be helpful. Please call 856-451-2800 Ext 1 or 4.

When bringing samples to the clinics, please review these recommendations as adapted from the Rutgers Plant Diagnostic Laboratory Submission Forms: (Note: Please record date, location, and circumstances of collection).

Landscape, Home Grounds and Garden:
   a) Collect several samples representing different stages of symptom development.
   b) Obtain samples just prior to the clinic to ensure that they are “fresh.” Dried samples are very difficult to analyze.
   c) For small plants, bring the entire plant (including the roots, if possible), and press flat between dry paper towels.
   d) For trees or shrubs, bring a generous woody portion including leaves, flowers, and fruits as available.
   f) Do not use tape to secure insects to paper. Place dry insects in a sturdy container stuffed with paper to prevent damage. Soft bodied insects should be placed in unbreakable containers filled with alcohol.

Turf Sampling
   a) Select samples from the TRANSITION zone between healthy and affected turf.
   b) Collect several samples representing different stages of symptom development from each location to be analyzed.
   c) Samples should be at least 5" (length) x 5" (width) x 3" (depth).
   d) Obtain samples just prior to clinic to ensure that they are “fresh”. Dried turfgrass samples are very difficult to analyze.
   e) Do not use tape to secure insects to paper. Place dry insects in a sturdy container stuffed with paper to prevent damage. Soft bodied insects should be placed in unbreakable containers filled with alcohol.

Plant Identification Sample:
The ideal plant sample consists of the entire plant in flower or bearing seeds or fruit. Most plant taxonomic keys use flower and fruit characteristics for plant classification. The minimum sample for a woody plant consists of a shoot (twig), representing at least 2 years growth, preferably with leaves attached. The entire plant, including roots, is required for many herbaceous plants. Detached leaves are seldom adequate for identification.

Insect SAMPLING:
   a) Most insects and similar animals submitted for identification should be placed in leakproof vials containing 70% ethyl or isopropyl (rubbing) alcohol. Soft-bodied insects must be submitted in alcohol.
   b) For mites, scales, aphids, thrips, caterpillars, or other larvae, submit the living insects on the affected plant part.
   c) Submit butterflies and moths in crush-proof containers or carefully folded in paper.
   d) Submit living grubs in soil (1 pint). Enclose any damaged plant tissue.
   e) For nematodes, follow instructions found in Rutgers Cooperative Extension fact sheet FS757.
Frequently Asked Questions:

Q: Can I bring pictures?

A: Yes, you may bring pictures to the diagnostic clinics, but please be aware that diagnosis via picture is difficult.

Q: Will you give me the answers to my problems at the clinics, on that day?

A: Perhaps, but the more likely scenario is that we will record your information, gather pertinent details, and then research the concern and get back to you with a recommendation.

Q: What are the resources you use for recommendations?

A: First and foremost we research Rutgers Fact Sheets and Rutgers website http://njaes.rutgers.edu/. After that we utilize several sources for research-based information, including reference books, colleagues, and .edu or .gov sites.

Goldenrod gets a bad rap!

Goldenrod, Solidago and Ragweed, Ambrosia bloom at the same time and in close proximity to each other. Allergy sufferers often blame the showier goldenrod for their sneezes and symptoms, when, in fact it is the less conspicuous ragweed that sends huge amounts of lightweight pollen airborne for pollination purposes. Goldenrod has many small bright yellow flowers and it depends on insects for pollination which is why you will see many bees and butterflies where there is goldenrod.

Goldenrod is a very attractive perennial with lovely yellow flowers and cultivars for home garden use are on the market and gaining in popularity. I have been to several gardens that have successfully used goldenrod in their landscape and have used them in fall floral designs for my home. Rutgers Fact Sheet 1140 on Incorporating Native Plants in Your Residential Landscape recommends planting Grey Goldenrod, Solidago nemoralis in a garden site with dry, poor soil. It requires full sun or partial shade and will grow approximately 2 feet tall. The yellow plumes will mix well with the violet colors of the New England or New York asters. Give it a try!

Resources:

- Clemson Cooperative Extension: http://www.clemson.edu/extension/hqic/hot_topics/2013/09goldenrod.html
- University of Illinois Extension: https://web.extension.illinois.edu/cfiv/homeowners/090903.html
Diseases

Black Spot of Roses
Rutgers Fact Sheet 1158 on Black Spot of Roses indicates the fungus *Diplocarpon rosae* is a common disease and affects only roses. The upper surface of the rose leaves will have round black spots with fringed margins surrounded by yellow halos. Eventually the spots enlarge until the leaves turn yellow and die. You may notice some purple or black blisters on the canes. As this disease can lead to eventual death, it is recommended to plant disease resistant varieties, maintain good air circulation and avoid overhead watering.

Blossom End Rot
Rutgers fact Sheet FS 011 addresses the cause and prevention of blossom end rot on tomatoes, Peppers, and Eggplant. The Fact sheet indicates it will appear as a dry, black sunken area on the bottom of a tomato and is directly related to soil moisture and the need of the plant for calcium. Bring in soil and get it tested to see if the pH is between 6.0 and 6.8 and be cognizant of the moisture needs of the plant.

Early Blight
Early Blight has been seen on tomatoes in our area which is not surprising given the amount of rain we’ve seen. Rutgers Fact Sheet FS 547 on Diagnosing and Controlling Fungal Diseases of Tomatoes in the Home Garden states, “Early blight first appears as circular, irregular, black or brown spots on the older leaves of the plant. As these lesions enlarge, a series of dark concentric rings develop in the center of the spot creating a distinct target pattern. Over time the tissue surrounding the early blight lesions can yellow and cause the leaves to drop.” Request your free copy of the fact sheet for more detailed information.

Late Blight
Late blight prefers wet, cool environmental conditions and travels rapidly through a crop so consider applying preventive fungicides to your tomato and potato plants before the disease is present. When applying fungicides, be certain to read the instruction carefully and to follow the directions on the label. The late blight group of pathogens have been referred to as “water molds” due to their affinity to water. The hosts of late blight are limited to members of the nightshade family which includes tomatoes and potatoes.

Late blight has historical significance in that it is the disease that was responsible for the Irish Potato Famine in the 1840’s as well as epidemics since then. There are cultural, environmental and sanitation controls which we spoke about previously with Rutgers Fact Sheet “Vegetable Disease Recommendations for Home Gardens” - FS1124.

Late blight is caused by a pathogen that survives from season to season in infected potato tubers. The disease can be introduced early in the season from several sources including infected seed potatoes or volunteer plants growing from potatoes that are diseased and were not harvested the prior year. The spores can travel through the air to land on infected plants or they can be washed though the soil to infect potato tubers.

Because of its ability to spread rapidly, it’s important to be able to identify late blight on your regular scouting in your garden. Pay particular attention after periods of wet weather. On potato plants, check the underside of the leaves for a whitish growth at the edge of black lesions. The fruit of tomatoes may exhibit a firm, greasy dark lesion and again in moist weather, a white downy growth may appear.

When planning your garden for next year, be sure to plant disease resistant varieties and plant only
healthy certified seed potatoes.

Resources:
- Cornell University: http://vegetablemdonline.ppath.cornell.edu
- University of Vermont: http://www.uvm.edu
- Penn State Extension: http://extension.psu.edu
- Virginia Cooperative Extension: https://pubs.ext.vt.edu

Pepper anthracnose

Weather Alert ....Heavy rain & wind can cause pepper anthracnose to flare up quickly! Each spot of Anthracnose on mature bell pepper fruit is the result of a single spore landing on the fruit causing an infection. The pinkish-orange masses developing in the centers of lesions are millions upon millions of spores that will be splashed via rain and wind resulting in new infections. Rutgers Fact 1124 offers Vegetable Disease Recommendations for home gardens. For more information refer to: Cultivating Cumberland Newsletter: July 2015 Vol. 20, Issue 7, “Preparing for Pepper Anthracnose”, Dr. Andy Wyendant, RAREC

Cucurbit Diseases

By now, you will probably be getting ready to plant your pumpkins. In anticipation, Rutgers Bulletin E 310 offers recommendations on Diagnosing and Managing Important Cucurbit Diseases in the Home Garden. Cucurbit crops are susceptible to the air borne diseases as well as diseases such as Powdery & Downy Mildew which are blown in on air currents from southern US every season. For control practices scout your plants for disease and use good cultural practices for a bumper crop of pumpkins.

Mixed Herb Pesto

Pesto is versatile enough to use tossed with pasta, used as a bread dip in olive oil, topping for baked chicken, or simply stirred into light mayonnaise to enhance your favorite sandwich. This recipe is a perfect use of the beautiful fresh herbs growing in your garden!

Ingredients:
- 2-3 tablespoons olive oil
- 1/2 cup fresh chives
- 1/2 cup fresh parsley
- 1/2 cup fresh basil
- 1 spring rosemary
- Sprinkle of salt & pepper

Preparation steps:
Harvest fresh herbs: chives, parsley, basil & rosemary. Rinse well & pat-dry with paper towels.

Chop chives into 3” sections to prevent them from bunching up in the food processor. Place the herbs in a food processor. Add 3-4 garlic cloves. Sprinkle with salt & pepper. Drizzle 2-3 tablespoons olive oil over the herbs, then pulse until smooth. Taste and adjust seasonings as needed.

Drop herb mixture by tablespoon onto aluminum foil, or spoon into ice cube trays. Freeze until firm, then store in a labeled freezer bag. Store in freezer for up to 6 months. Allow frozen Mixed Herb drops to defrost 20 minutes before using in a recipe.

https://njaes.rutgers.edu/fchs/recipes/herbs/Mixed_Herb_Pesto.pdf
Tune into Vertical Gardening

There are several advantages to vertical gardening, including the use of vertical space versus horizontal, allowing for better use of the land. Another is the air circulation that flows through the plants in a vertical garden setting, which helps with disease control and yet again, vertical gardening can make harvesting a snap!

I want to share several radio spots related to the topic of vertical gardening for the listening audience which were recorded in 2015 and remain applicable in 2016. A reminder that I do 4 one-minute radio spots Monday through Thursday and they air on 1240 SNJToday at approximately 12:40 pm. Tune in for a new topic every day!

Types of vertical gardening:

One option of vertical gardening is a pallet garden. Before you begin this venture, first a few recommendations on choosing your pallet. Manufacturers outside the United States are required to treat pallets before shipping, so pests cannot be transferred from country to country. Look for the initials HT to be certain it has undergone heat treatment versus chemical treatment. Use new pallets if possible to avoid the worry of what was previously shipped on the pallet and how that product could affect the plants. Check for rough edges and secure loose nails. A planted in pallet garden is a fun choice for kids.

Resources:

- University of Wisconsin – Extension: [http://columbia.uwex.edu/2015/06/02/pallet-garden/](http://columbia.uwex.edu/2015/06/02/pallet-garden/)

In the garden, an obelisk is an ornamentation that is four-sided and square at the bottom and then tapers to a pyramid at its’ top. Obelisks are often used as a focal point at the end of a garden path or to mark an intersection of pathways. Obelisks are generally tall, and plants and vines look beautiful on them, including roses, annuals, vines of morning glories, hyacinth, beans, sweet peas and nasturtiums. For edible selections, you can try tomatoes and green beans. Not only does this vertical gardening add visual interest, it’s healthy for the plants, too.

Resources:

- University of Denver: [http://mysite.du.edu/~etuttle/classics/obelisk.htm](http://mysite.du.edu/~etuttle/classics/obelisk.htm)
- University of Florida: [https://edis.ifas.ufl.edu/ep432](https://edis.ifas.ufl.edu/ep432)

If you have hanging baskets, make certain you are watering them regularly during the dog days of summer. Although the baskets made of Spanish Moss or coconut fiber look beautiful, they may need even more water than you might think. Be sure to fill the container to the top and allow it to drip out the bottom every time you water. Consider a north or east facing location option that offers some shelter to minimize the watering needs. Do not water late in the day and keep the foliage dry. Lastly, don’t hesitate to trim your hanging baskets if they begin to look ragged.

Resources:

- University of Illinois Extension: [http://extension.illinois.edu/containergardening/hanging.cfm](http://extension.illinois.edu/containergardening/hanging.cfm)
- University of Florida: [http://gardeningsolutions.ifas.ufl.edu/mastergardener/newsletter/2012/more/hanging_baskets.shtml](http://gardeningsolutions.ifas.ufl.edu/mastergardener/newsletter/2012/more/hanging_baskets.shtml)

On plant choices:

Vines have a versatility to them that will serve a variety of landscaping purposes. They can provide a fast shade screen or add height to an area much quicker than waiting for a tree to grow. Vertical
vines are perfect for small garden spaces and can provide beautiful flowers, interesting foliage and wonderful fragrance. As always, when choosing a vine, consider the intended use, location, soil adaptability and type of support.

Resources:
- Clemson Cooperative Extension: http://www.clemson.edu/extension/hgic/plants/landscape/groundcovers/hgic1101.html
- http://gardening solutions.ifas.ufl.edu
- Colorado State University Extension: http://www.extension.colostate.edu/chaffee/mast/moss_baskets.shtml
- University of Rhode Island: DIY Pallet Garden Instructions (pdf)
- University of Wisconsin – Extension: Grow A Pallet Garden, August 2014 (pdf)

The Cardinal Flower, Lobelia cardinalis, is a native perennial that reaches 2-4 feet in height with a beautiful red flower. It’s not an unusual sight to see pollinators, including hummingbirds feeding on the nectar of the cardinal flower. Cardinal flowers are native to areas associated with moisture, such as marshes and along stream beds and are a stunning display when planted enmass. Buyer beware, Lobelia cardinalis is very poisonous, with extracts producing vomiting, sweating, pain and death.

Resources:
- Rutgers; http://www.water.rutgers.edu/Rain_Gardens/RGWebsite/Plant_List/cardinalsummary.pdf
- Rutgers; http://njaes.rutgers.edu/organiclandcare/weedmanagement.html
- http://www.gardening.cornell.edu/homegardening/scenea5db.html
- http://www.auburn.edu/~deancar/wfnotes/carfl.htm

It’s been said of clematis, "The first year they sleep, the second year they creep and the third year they leap”. Be sure to consider this when you chose a site location clematis and plan on adding vertical support. Your site location also needs to allow for consideration of shady for the roots of the clematis but full sun for the vines. It’s worth the time and effort to find the perfect spot with approximately 250 species of this well-loved plant which vary in bloom color, size and timing. When purchasing a clematis be sure to look on the label for bloom time, so you can determine proper pruning time.

Ohio State University Extension; http://ohioline.osu.edu/hyg-fact/1000/1247.html
Clemson University Cooperative Extension: http://www.clemson.edu/extension/hgic/plants/landscape/groundcovers/hgic1104.html

Hardy kiwifruit, Actinidia arguta can be grown successfully in our area and is not to be confused with Actinidia chinensis. It takes five to nine years for Hardy kiwi to bear fruit about the size of a grape, with no fuzz and which can be eaten out of hand. While in bloom, it’s been reported to smell like lily of the valley. It’s a vigorous long-lived perennial that needs both male and female plants for pollination and fruit set. Here’s where vertical gardening on a trellis system and a pruning schedule are strongly recommended to control the vines which can grow 40 feet in length.

Resources:
Cornell University: http://www. fruit. cornell.edu/mfruit/kiwifruit.html
Penn State Extension: http://extension.psu.edu/plants/gardening/fphg/hardy-kiwi
Water facts

Here are some interesting Water Trivia Facts from https://www3.epa.gov/safewater/kids/water_trivia_facts.html  (Last updated on Tuesday, February 23rd, 2016)

1. How much of the human body is water?  66%
2. How much of the earth’s surface is water?  80%
3. How much water must a person consume per day to maintain health?  2.5 quarts from all sources (i.e. water, food)
4. Of all the earth’s water, how much is ocean or seas?  97%
5. How much of the world’s water is frozen and therefore unusable?  2%
6. How much of the earth’s water is suitable for drinking water?  1%
7. What is the most common substance found on earth?  Water
8. How much water does the average residence use during a year?  Over 100,000 gallons (indoors and outside)
9. How much water does an individual use daily?  Over 100 gallons (all uses)
10. What does a person pay for water on a daily basis?  National average is 25 cents
11. How many miles of pipeline and aqueducts are in the United States and Canada?  Approximately one million miles, or enough to circle the earth 40 times
12. How much water is used to flush a toilet?  2-7 gallons
13. How much water is used in the average five-minute shower?  15-25 gallons
14. How much water is used on the average for an automatic dishwasher?  9-12 gallons
15. On the average, how much is used to hand wash dishes?  9-20 gallons
16. How much water drops with an inch of rain on one acre of ground?  27,154 gallons, which weighs 113 tons
17. How much water does it take to process a quarter pound of hamburger?  Approximately one gallon
18. How much water must a dairy cow drink to produce one gallon of milk?  Four gallons
19. How much water is used during the growing/production of a chicken?  400 gallons
20. How much water is used during the growing/production of almonds?  12 gallons
21. How much water is used during the growing/production of french fries?  6 gallons
22. How much water is used during the growing/production of a single orange?  13.8 gallons
23. How much water is used during the growing/production of a watermelon?  100 gallons
24. How much water is used during the growing/production of a tomato?  3 gallons

With water as one of our most precious resources we need to learn the importance of being stewards of the land. Rutgers Fact Sheet 450 provides recommendation on Using Water Wisely in the Garden, important in these dog days of summer. Did you know that a leak in a faucet or hose can waste 10 gallons of water a day?  Do the math – that’s equivalent to 3650 gallons a year.  Water in the morning, when there is little chance for evaporation and use drip irrigation if possible.  Soaker hoses can reduce water usage by 25-50% per year.  Use 2-3 inches of mulch to help conserve water retention, but don’t overdo it!
Garden Tips for June

- Allow the tops of spring-flowering bulbs to completely wither and turn brown.
- Protect ripening strawberries from birds with netting or row cover fabric. FS97 & 98
- Make plans to pick locally grown strawberries.
- Thin developing fruit on fruit trees if there seems to be an excessive amount. This will result in larger fruits.
- Prune fruit trees to eliminate suckers and watersprouts.
- Plant more gladiolus bulbs for a succession of bloom.
- Plant seeds of cabbage, cauliflower and broccoli directly in the garden for fall garden transplants.
- Check plants carefully and regularly for insect pests.
- Cabbage worms can be safely and effectively controlled with Bt.
- Be sure to thin vegetables, particularly root crops, so they will have room to grow properly. FS561
- Tomatoes that are supported with stakes or cages tend to have cleaner and larger fruits. FS678
- Harvest established asparagus beds through the end of the month. FS221 & NE221
- As perennials finish blooming, cut off the blooms and fertilize the plants.
- Stake perennials as needed.
- Apply mulches around shrubs, perennials and annuals to maintain soil moisture and an even soil temperature.
- Apply a labeled fungicide every 7 to 10 days to protect roses from black spot.
- Prune climbing roses after they have bloomed. Remove dead and older canes. FS44
- Fertilize roses during their first bloom.
- Pinch established chrysanthemums to develop fuller and stockier plants.
- Balled and burlapped or container trees and shrubs can still be planted. FS376
- Take softwood cuttings of shrubs to start new plants. FS49
- Remove spent flower clusters or forming seed pods from azaleas, lilacs and rhododendrons.
- Shape the growth of pines by snapping out one half to two thirds of the new candle growth.
- Raise the mower blades to a height of 2 to 2½” and mow frequently. Remove no more than one third of the total length of the grass blade.
- Lawn and garden areas need a minimum of 1” of water in the form of rain or irrigation each week.
- Move some houseplants to a screened porch or shaded location outdoors.
- Use bark mulch around young trees to protect them from lawn mower damage.
- Various pest problems can occur in May. If you have plants that you suspect may be facing a pest problem, bring in a representative sample to our office and we will help diagnose the problem and recommend the appropriate control.
- Fruit trees should be on a regular spray program. You can also plant vegetables in container and grow them on decks, patios or other small spaces. Use potting mix when planting.
- Fertilize zoysia lawns now with a 26-4-12 fertilizer.
- You can move houseplants outside to the deck or patio and enjoy them outdoors for the summer. It is best to gradually introduce them to more direct sunlight to prevent the leaves from being burned.
- Feed houseplants with a good quality indoor plant food such as Osmocote (slow-release granular).
- If needed, re-pot root bound houseplants to a larger pot. Use potting mix when repotting houseplants.
- Hibiscus, Jasmine, Oleander and Mandevilla are just some of the flowering tropical plants you can add to your deck, patio or balcony.
Gardening Tips for July

- Transplant new chrysanthemum plants.
- Start a compost pile. FS74
- Sidedress rhubarb with well-rotted manure or humus from the compost pile.
- Cabbage worms can be safely and effectively controlled with Bt. FS231 & FS277
- Continue pulling weeds. Put them in the compost pile.
- Train staked tomatoes to one or two vines by removing all other branches as soon as they appear.
- Thoroughly water your newly planted trees and shrubs. FS786
- As perennials finish blooming, cut off the blooms and fertilize the plants.
- Stake perennials as needed.
- Apply mulches around trees, shrubs, perennials & annuals to maintain soil moisture and an even soil temperature. Cover the soil 2" thick. Keep mulch away from the trunks of trees and shrubs. FS122
- Apply a labeled fungicide every 7 to 10 days to control black spot on roses.
- Prop branches of heavily loaded fruit trees.
- Renovate established strawberry plantings.
- Pinch established chrysanthemums to develop fuller and stockier plants early in the month.
- Make another planting of snap beans, beets, carrots, cucumbers and zucchini. FS562 & FS57
- Harvest vegetables regularly for continued production. FS988
- Remove spent flowers from annual flowers to keep them flowering.
- Divide clumps of crowded iris and Oriental poppies.
- Water the lawn and garden deeply or don’t water at all. FS829 & EB431
- Many plants are easily propagated by layering. Verbenas, euonymus and climbing roses are a few plants that will root if the stems are fastened down and covered with soil.
- Cutter flowers is best done with sharp shears or a knife which will help avoid injury to the growing plant. A slanting cut will expose a larger absorbing surface to water and will prevent the base of the stem from resting on the bottom of the vase. It is best to carry a bucket of water to the garden for collecting flowers, rather than a cutting basket.
- A brown or grayish cast over a lawn can be caused by a dull or improperly adjusted mower blades that shred grass rather than cut it.
- Store pesticides in a safe place in their original containers, away from children and pets. Use pesticides carefully in your garden. Read the labels and follow the directions, warnings and precautions are for your protection.
- Control mosquitoes by eliminating all sources of stagnant water.
- Check the soil moisture of container grown vegetables and flowers daily. As the temperature rises, some plants may need water twice a day.
- Continue attracting insect eating birds to the garden area by providing them with a fresh water source.
- Plants and trees that provide color in the month of July include Crape Myrtles, Spireas, Hydrangeas, Summersweet, Hypericum, Butterfly Bush and Golden Rain Tree. Visit the nursery and see these beautiful plants in bloom.
- Perennials that provide interest in the month of July include Daylillies, Rudbeckia, Phlox, Veronica, Ligularia, Tickseed and much more.
- Gator bags provide a great way to keep trees watered during hot and dry months. These bags, which can hold up to 20 gallons of water, are secured to the trunk of the tree, where they release the water slowly to the root ball over the course of 15-20 hours.
- Stop pinching Chrysanthemums by July 16th.
- Do not prune Azaleas and Rhododendrons after the second week of July for they soon will begin setting their buds for next year’s blooms.
- Various pest problems occur in July. If you have plants that you suspect may be facing a pest problem, contact our office for their recommendations of pest control. If using chemicals, follow the directions EXACTLY.
- Use Diatomaceous Earth to control crawling insects such as cockroaches, ants, slugs, silverfish, earwigs, fleas, spiders, millipedes, centipedes and carpet beetles. Use indoors and outdoors.
- Kill weeds and grasses in brick patios and walks.
- Spray roses to keep black spot and other problems under control. Many people are starting to use compost tea to keep pest and funguses under control.
- Fruit trees should be on a regular spray program.
- Control slugs and snails on hosta and other plants with diatomaceous earth.
- Fertilize fruits and vegetables as needed with a good quality, slow-release vegetable food such as Osmocote.
Gardening Tips for August

- Enjoy fresh fruits and vegetables from local farms.
- Fertilize your roses the first week of the month and then don’t fertilize them any more this year.
- Be alert for wasp nests when mowing and gardening.
- Deadhead annuals to keep them blooming.
- Control weeds before they flower and produce seeds.
- Gather herb leaves before their flowers bloom.
- Divide overcrowded spring-flowering perennials.
- Make plans for your fall planting of trees, shrubs and perennials.
- Apply one inch of water to your lawn and gardens weekly during dry periods.
- Check with Extension for the latest recommendations on food preservation.
- Collards, kale, leaf lettuce, mustard, spinach, radishes, turnips and bok choy are good crops for your fall garden.
- Early September is ideal for sowing grass seed or establishing a new lawn. Prepare to renovate that tired lawn.
- Divide and transplant garden lilies and lilies-of-the-valley.
- Sow seeds of California poppy, columbine, delphinium and gloriosa and Shasta daisy.
- Watch for garden supply sales.
- Take cuttings of begonias, coleus and impatiens for winter houseplants.
- Remove melon blossoms at the end of season that won’t have time to set fruit. Ripening melons will then be larger.
- Donate vegetables to a hunger center.
- Colorful plastic golf tees can be stuck in the ground to mark the location of dormant plants such as spring bulbs or perennials.
- Since container-grown plants have a limited area from which to absorb water, plants in a sunny location may require watering several times a week. Check plants often to avoid water stress.
- Check on water needs of hanging baskets daily in the summer. Wind and sun dry them much more quickly than other containers.
- Clean up fallen rose and peony leaves. They can harbor disease and insect pests over the winter if allowed to remain on the ground.
- Pick summer squash and zucchini every day or two to keep the plants producing.
- Remove old plants which have stopped producing to eliminate a shelter for insects and disease organisms.
- Water the garden early in the day so plants can absorb the moisture before the hot sun dries the soil. Early watering also insures that the foliage dries before night. Wet foliage at night increases susceptibility to fungus diseases.
- To reduce the number of pests on your fruit tree for the coming year, pick up and destroy all fallen fruit.
- Bt is used by many gardeners to protect cole crops from chewing caterpillars.
- Every weed that produces seed means more trouble next year. Control weeds before they go to seed.
- Do not add weeds with mature seed heads to the compost pile. Many weed seeds can remain viable and germinate next year when the compost is used.
- Plants and trees that provide color in the month of August include Crape Myrtles, Pee Gee Hydrangeas, Viburnums, Hypericum and Butterfly Bush. Visit your local nursery and see these beautiful plants in bloom.
- Plant ornamental grasses such as Miscanthus, Pennisetum and Hardy Pampas Grass for motion and contrast.
- Fall mums are in – plant now for a colorful autumn.
- Check all plants, especially new ones, for water on a regular basis. Water deeply and thoroughly as needed.
- Gator bags provide a great way to keep trees watered. These bags, which can hold up to 20 gallons of water, are secured to the trunk of the tree, where they release the water slowly to the root ball over the course of 15-20 hours.
- Daffodils and tulips should be fertilized in early to mid-August. Apply 2 pounds of 5-10-10 or 6-12-12 per 100 square feet.
- Various pest problems can occur in August. Use Diatomaceous Earth to control crawling insects such as cockroaches, ants, slugs, silverfish, earwigs, fleas, spiders, millepedes, centipedes and carpet beetles. Use indoors and outdoors.
Rutgers Cooperative Extensions Fact Sheets

<table>
<thead>
<tr>
<th>FS #</th>
<th>Fact Sheet Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fact Sheet 2</td>
<td>Brown Marmorated stink bug— a non native insect in New Jersey</td>
</tr>
<tr>
<td>Fact Sheet 11</td>
<td>Blossom End Rote: Tomatoes, Peppers, Eggplant</td>
</tr>
<tr>
<td>Fact Sheet 20</td>
<td>Weed control around the home grounds</td>
</tr>
<tr>
<td>Fact Sheet 58</td>
<td>Mulches for vegetable gardens</td>
</tr>
<tr>
<td>Fact Sheet 106</td>
<td>Blueberry Pest Management for Home Gardens</td>
</tr>
<tr>
<td>Fact Sheet 112</td>
<td>Apple Pest Control Schedule for NJ Home Orchards</td>
</tr>
<tr>
<td>Fact Sheet 115</td>
<td>Cherry Pest Control Schedule for NJ Home Orchards</td>
</tr>
<tr>
<td>Fact Sheet 119</td>
<td>Weed control in home lawns</td>
</tr>
<tr>
<td>Fact Sheet 235</td>
<td>Spidermites</td>
</tr>
<tr>
<td>Fact Sheet 399</td>
<td>Vole Ecology and Management</td>
</tr>
<tr>
<td>Fact Sheet 419</td>
<td>Selecting Blueberry Varieties for the Home Garden</td>
</tr>
<tr>
<td>Fact Sheet 426</td>
<td>Moss in the lawn</td>
</tr>
<tr>
<td>Fact Sheet 450</td>
<td>Using Water Wisely in the Garden</td>
</tr>
<tr>
<td>Fact Sheet 521</td>
<td>Zoysiagrass Lawns in New Jersey</td>
</tr>
<tr>
<td>Fact Sheet 555</td>
<td>Best Management Practices for Watering Lawns</td>
</tr>
<tr>
<td>Fact Sheet 595</td>
<td>Low Water Use Landscaping</td>
</tr>
<tr>
<td>Fact Sheet 599</td>
<td>Principles of Low Water use Landscaping IV: Apply Mulches</td>
</tr>
<tr>
<td>Fact Sheet 610</td>
<td>Harvesting Melons at Peak Flavor</td>
</tr>
<tr>
<td>Fact Sheet 626</td>
<td>Fertilizing the home vegetable garden</td>
</tr>
<tr>
<td>Fact Sheet 678</td>
<td>Growing Tomatoes in the Home Garden</td>
</tr>
<tr>
<td>Fact Sheet 814</td>
<td>Managing diseases of landscape turf</td>
</tr>
<tr>
<td>Fact Sheet 871</td>
<td>Understanding the Fertilizer Labels</td>
</tr>
<tr>
<td>Fact Sheet 901</td>
<td>Topsoil Suitable for Landscape Use</td>
</tr>
<tr>
<td>Fact Sheet 921</td>
<td>Conserving water on home landscapes in NJ</td>
</tr>
<tr>
<td>Fact Sheet 924</td>
<td>Home Landscape Practices for Water Quality Protection</td>
</tr>
<tr>
<td>Fact Sheet 930</td>
<td>Natural Pest Control-using Beneficial insects to Control Landscape Pests</td>
</tr>
<tr>
<td>Fact Sheet 944</td>
<td>Roses and their Care</td>
</tr>
<tr>
<td>Fact Sheet 988</td>
<td>Picking vegetables in the home garden</td>
</tr>
<tr>
<td>Fact Sheet 1019</td>
<td>Poison Ivy and Brush Control Around the Home Grounds</td>
</tr>
<tr>
<td>Fact Sheet 1133</td>
<td>Cedar Apple Rust in the Home Landscape</td>
</tr>
<tr>
<td>Fact Sheet 1140</td>
<td>Incorporating native plants in your residential landscape</td>
</tr>
<tr>
<td>Fact Sheet 1151</td>
<td>Hollies for New Jersey</td>
</tr>
<tr>
<td>Fact Sheet 1152</td>
<td>Hydrangeas in the Garden</td>
</tr>
<tr>
<td>Fact Sheet 1153</td>
<td>Growing Dahlias</td>
</tr>
<tr>
<td>Fact Sheet 1155</td>
<td>Cannas</td>
</tr>
<tr>
<td>Fact Sheet 1158</td>
<td>Black Spot of Roses</td>
</tr>
<tr>
<td>Fact Sheet 1161</td>
<td>Cut Flowers for the Market and Home Garden - Zinnia</td>
</tr>
<tr>
<td>Fact Sheet 1173</td>
<td>Canada Thistle in Home Landscapes</td>
</tr>
</tbody>
</table>

Call 856/451-2800 x4 ask for Pam Burton. When calling to request a fact sheet refer to the Fact Sheet by FS# or by name. All fact sheets are free unless otherwise noted.

What's Growing On is prepared by Pam Burton, Horticultural Assistant, Rutgers Cooperative Extension of Cumberland County.

Sincerely,

James R. Johnson
Agricultural Agent
Nursery Management Commercial
Internet: jjohnson@NJAES.rutgers.edu

Wesley L. Kline, Ph.D.
Agricultural Agent
Vegetable & Herb Production
Internet: wkline@NJAES.rutgers.edu
For important announcements concerning the Cumberland County Extension Center visit:
http://Cumberland.njaes.rutgers.edu

If you have any questions concerning the website, please call our office at
856-451-2800 x1 for agriculture and
856-451-2800 x4 for Home Horticulture and Master Gardeners

Public Notification and Non-discrimination Statement
Rutgers Cooperative Extension is an equal opportunity program provider and employer. Contact your
local Extension Office for information regarding special needs or accommodations. Contact the State Extension
Director's Office if you have concerns related to discrimination, 848-932-3584.
Incredible Journey

Each fall, monarch butterflies from the U.S. and Canada begin a 2,000 mile migration to Mexico. The following spring, their great grandchildren return. This summer, an exciting opportunity for teachers is coming to a town near you.

The powerful story of the monarch butterfly inspired the emergence of the Monarch Teacher Network (MTN) in 2001 and its Canadian partners in 2003.

‘Teaching and Learning With Monarch Butterflies’ is a two-day teacher workshop combining classroom and field experiences. It enables pre-K through 12th grade educators to teach essential skills in literacy, math, science, geography, technology, Spanish, the arts and social studies... through the captivating story of monarchs. Teachers complete the workshop with all the materials they need to bring this exciting and dynamic subject into their classrooms.

Workshops are taught by a team of experienced classroom teachers and educators. Participants are provided with the knowledge, skills, materials and confidence to raise monarchs in the classroom and create an outstanding learning experience for their students. Workshop graduates can apply for $200-$800 MTN fellowship awards to participate in one week tours of Mexico or California where we visit the over-wintering colonies of Monarchs and explore local Mexican culture in the state of Michoacán or other animal migrations and old growth forests of California.

Each participant receives: Hands-on instruction by experienced teachers; Rearing cages, books, posters, DVDs and other essential materials; Strategies for butterfly gardens and “Monarch Parades”; Inquiry-based science activities for all abilities; Activities for Mexican/pre-Hispanic culture, history and Spanish language; Activities for language arts, math, social studies, drama, and fine arts; Distance learning projects with schools in Canada/Mexico/California; Proven models for engaging community support; Post-workshop on-going support.

This workshop is Co-sponsored by EIRC and the Rutgers Master Gardeners of Cumberland County.

Photo credit: Mike Aporius
Winnipeg Free Press
Here is what people are saying:

- “This was the most awesome learning experience in my 30 years of teaching.”
- “Thank you for all the insights - reflecting on our way of life and how to make a difference.”
- “Everyone’s commitment, dedication, energy and obvious passion for this project are outstanding and contagious … wonderful ambassadors for the planet Earth!”
- “What a magical place the classroom will be! I can’t wait to try to connect kids even more to the environment.”
- “I have never had monarchs in my classroom and now I am excited to start this new amazing classroom activity! I feel fully equipped to start this new hands-on adventure!”

### Workshop Details

**Dates:** August 18 and 19, 2016  
**Location:** Extension Education Center  
291 Morton Avenue  
Millville, New Jersey  08332  
**Time:** 8:30 a.m. to 4:00 p.m.  
**Cost:** $99.00

---

**Name** ________________________________  
**Summer E-mail (important)** ________________________________

**Home Address (street, city)** ________________________________  
________________________________________________________

State __________________  
**zip** __________________

**Home phone:** (_____) __________________________  
**Grade** __________________  
**T-shirt size** __________________

**School Name & Address:** ________________________________

________________________________________________________

---

No space will be held until the completed form is received.

Mail this completed registration and payment to: Monarch Teacher Network™ at: EIRC–MTN, South Jersey Technology Park, 107 Gilbreth Parkway, Suite 200, Mullica Hill, NJ 08062, or fax: 856-582-4206. Checks should be made payable to EIRC-MTN. For credit card payments, call Brian Hayes. 856-582-7000 X110.

Inquiries: bhayes@eirc.org 856-582-7000 X110 or Visit www.MonarchTeacherNetwork.org
Rutgers Master Gardeners of Cumberland County & the Cohanzick Zoo invite your School Art Class or County Youth Group to Compete In The “September Fun Scarecrow Contest” September 24, 2016 at the Cohanzick Zoo! Cash Prizes!

Theme: Pollinators… please give your scarecrow a creative pollinator hat!!

Entry Form: School/Organization Name ________________________________
Teacher/Leader Name _____________________________
Contact Phone __________________________ Email ___________________________
Scarecrow Class Competition: Mini _______ Full Size _______
Scarecrow Kits can be picked up at the Zoo.
*Finished scarecrows must be delivered to the Zoo by 9-23-2016 before 5 PM.
*Judging is on Saturday 9-24-2016 @ 10:00 AM – PLEASE BE THERE!!!
Call or email Rutgers Cooperative Extension at 856-451-2800 Ext 4 or email pamelabu@co.cumberland.nj.us for more information.
Please Fax Entry Form to Rutgers Master Gardener of Cumberland County at 856-451-4206 ASAP & no later than 9-12-2016.

PLEASE: Do NOT use live or perishable items in the construction of your scarecrow…it gets mushy and rotten!

Rain or Shine!
The Pollinator Victory Garden:  
Winning the War on Pollinator Decline

Wednesday, June 8, 2016  
5:30 to 8 p.m. Rain or Shine

Rutgers Cooperative Extension  
355 Court House - South Dennis Rd.  
Cape May Court House, NJ 08210

Presenter: Kim Eierman  
Environmental Horticulturist, founder of EcoBeneficial

Participants will learn how to:
- Attract an array of pollinators
- Know which plants they need for food
- Provide them with shelter
- Help win the war on pollinator decline

Each participant will receive starter plants for their victory garden!

Beginners class, no prior experience required  
$25, Dinner included
Registration due by June 1, 2016
Call (609) 465-5115, ext. 607 or email dana.tvndall@co.cape-may.nj.us

Jenny S. Carleo, Agricultural and Resource Management Agent

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and County Boards of Chosen Freeholders. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.