Murray Dunn, a Bollinger County Extension Council member, shared this about saving seed...

“When I was a kid my folks kept their garden seeds much as was common in our community. All neighbors had a Henry Field or Shumway catalog but did not buy much seed. The ladies would swap or trade seeds as each kept more than they anticipated planting for the coming year. During WW2 our barn burned and we lost our garden seeds but the neighbors furnished seeds. Neighbors would send kids to other neighbors to borrow seeds they did not have.”

“REAL men did not give much thought to the vegetable garden except sometimes for a few tobacco plants. My dad was an exception. He (born 1885) would burn a brush pile and spread on the ground when the ashes were cold and cover with an opened burlap bag held free from the ground with some heavy sticks, I think the burning helped to kill weed seeds and maybe the blackened ashes helped the soil to warm. His homegrown tobacco was for chewing and he would buy tobacco for cigarettes and pipe. Men traded tobacco plants and seed.”

“I put my watermelon seeds on folded paper on the cold air vents and allowed to dry for a couple weeks then put in plastic prescription bottles with holes drilled in the caps to allow additional drying if needed.”

The common practice of saving seed petered out after WW2 but with increasing costs factoring into many of our everyday decisions, saving and storing your own seed might be an option for you to explore. Buying seeds can be expensive but fortunately many kinds can be saved for next year’s garden with very little time and effort. Plants that self-pollinate are good choices for seed saving. Plants that have separate male and female flowers may cross-pollinate so it can be difficult to keep the seed strain pure.

Tomatoes, pepper, beans, and peas work well for seed saving. They are self-pollinating and have seeds that require little or no special treatment.
Saving and Storing Vegetable Seed
by Katie Kammler, MU Horticulture Specialist

before storage. The important thing is to pick open-pollinated varieties rather than hybrids. If open-pollinated plants self-pollinate or happen to cross-pollinate with another plant of the same variety, they will set seed that will remain true to the parent plant, setting similar fruit and seeds that will produce more similar plants. Heirloom varieties are the most common open-pollinated plants, ones that are passed down from generation to generation because they remain true to the parent plants.

Hybrid plants are not desirable for saving seed because they are a cross between two different varieties, combining traits of the parent plants. A good hybrid will produce plants with superior vigor, disease resistance, and productivity. Examples of hybrid plants are tomatoes such as ‘Big Boy’, ‘Early Girl’, and ‘Beefmaster’. If you were to save the seed from any of these hybrid varieties, you would still get viable seed that would produce plants and tomatoes but they will not be like the parent plant. They will be a completely new combination of the good and bad traits that were initially crossed. There is no way to predict the outcome of the seed that is saved from hybrid plants.

Vegetable plants that have male and female flowers, like corn and vine crops, can cross-pollinate so it is difficult to save seed and get a plant just like the parent. A stand of sweet corn can be pollinated by field corn on a windy day. The flavor of the current sweet corn crop will be affected, which is why it is recommended to plant sweet corn at least 250 feet away from other types of corn or vary the planting dates by two to three weeks.

Vine crops such as cucumbers, melons, squash, pumpkins, and gourds are all cross-pollinated by insects. The current crop will be true to form but if seed is saved, no telling what you might get. I think this is fun with pumpkins and squash because the cross can produce different colors and shapes but would not be good if you are interested in eating qualities. If you want to save seed from a vine crop that will be true to the parent crop, the flowers can be bagged and you would have to do the work of the bees and pollinate them by hand.

Once you have decided to save seeds from open-pollinated varieties, select only the most vigorous plants with the best-tasting fruit as parents for the next year’s crop. To save tomato seed, allow the fruit to ripen and then scoop out the seeds, along with the gel surrounding them. Put this in a glass jar with some water. Swirl the mixture twice a day and it will ferment, allowing the seeds to sink to the bottom in about five days. Pour off the liquid, rinse the seeds, and spread them out to dry on paper towels. Pepper seeds are easier; just allow the fruits to stay on the plants until they start to wrinkle. Remove the seeds and spread them out to dry. Pea and bean seeds are allowed to ripen on the vine until they dry and turn brown with the seeds rattling inside. This can take up to a month after you would normally pick them to eat. Strip the pods from the plant and allow them to dry for 2 weeks before shelling.

Storage is important. The seeds need to be in tightly-sealed glass containers. They require a cool and dry environment so your refrigerator is an excellent place to store seeds. A small amount of silica-gel desiccant added to each container will absorb moisture and help keep the seeds dry. Silica-gel is readily available for drying flowers at craft supply stores. Powdered milk can also be used. Label all seed with a variety and date so you can remember next spring what you have. This can also be a fun project for kids to help with and learn more about how plants grow.
**September Gardening Calendar**

By Donna Aufdenberg, MU Horticulture Specialist

**Ornamentals**
- Herbs such as parsley, rosemary, chives, thyme and marjoram can be dug from the garden and placed in pots now for growing indoors during winter.
- Cuttings of annuals can be taken to provide plants for overwintering. Good candidates include coleus, wandering jew, and geraniums.
- Spring bulbs may be purchased as soon as they are available. Bulbs should be kept in a cool dark space until late October.
- Get ready to bring houseplants indoors for winter. Prune back excessive growth and protruding roots. Check for pests and treat if necessary.
- Spring blooming perennials can be divided now.
- Divide Peonies now. Replant in a sunny site and avoid planting too deep.

**Lawns**
- Begin fall seeding or sodding of cool season grasses. Seedbeds should be raked, dethatched, or core-aerified, fertilized and seeded.
- Cool season lawns are best fertilized in fall. It is recommended to apply according to soil test results.
- Newly seeded lawns should not be cut until they are at least 2-3 inches tall.

**Vegetables**
- Egyptian onions can be divided and replanted.
- Consider sowing radish, lettuce, spinach and other greens in cold frame or low tunnel structures to prolong fall harvest.
- Pinch off any young tomatoes that are too small to ripen before frost. This will help to ripen the remaining fruit.
- Look for a good source of garlic. It can be planted in fall.
- Finish garden harvest and consider saving seed for next year.

**Fruits**
- Pick pears before they are fully mature, store in a cool, dark place to ripen.
- Bury or discard any spoiled fallen fruits. They can carry over disease spores to the next growing season if left on the ground.
- Check all along peach tree trunks to just below soil line for masses caused by borers. Probe holes with thin wire to puncture borers.

**Miscellaneous**
- Autumn is a good time to add manure, compost or leaf mold to garden soils for increasing organic matter content.
- If fall is dry, monitor plants for spider mite activity. Hose off with a forceful spray of water.
- Soil test now to have time to add lime before the spring gardening season.
- Make notes of what worked and didn’t work this year in the garden.

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**Garden Cleanup and Sanitation**

These practices help to reduce disease-causing pathogens. They also help to reduce numbers of insects and eggs that might overwinter.

- Dispose of all plant parts (including fallen fruit) remaining in the garden soon after plants have finished producing.
- If plant materials are not diseased, consider composting.
- Dispose of badly diseased or insect infested plants - send to the garbage.
- Till or deeply spade the soil to break up or incorporate remaining debris.
- Remove all stakes, cages and tools. Consider disinfecting.
- Remove anything that insects can overwinter in or under.
I was asked to choose my favorite flower, but for me, that’s impossible! That would be like deciding which of your children is the favorite! Each flower (and child) unfolds its own beauty, and when planted strategically, provides an ever-blooming garden that can be enjoyed for three full seasons.

When I think of spring, I think of daffodils! So bold with their yellow trumpets, they start with those silly leaves poking up before the snow is even done (that must be why they are called daffies) and who doesn’t love that first crocus! Another “first” to herald the end of winter are the helleborus. Their wide variety of colors can add relief to the drab remains of winter. Spring provides a plethora of blooms and variety of flowers.

A recent addition of grape hyacinths (muscari) to my spring garden has been a delight! I’m partial to the purple ones, but they actually come in a variety of hues. Tulips are always a pleasure, but, in my garden, the squirrels get to enjoy them before I can so I’ve given up the fight. Their stately presence, however, is very distinctive! The list goes on with bluebells (mertensia) and bleeding heart (dicentra), and don’t forget to consider flowering trees and shrubs to give your landscape height.

As the days lengthen and the sun becomes more intense, another series of flowers appear. Among them is the Siberian iris with its delicate blossoms, reminding us of the fragility and grace of nature. Peonies, columbine (aquilegia), allium, and bearded iris come along about then, and nothing beats the knock-out roses whose flowers last all summer. Daylilies (hemerocallis), if you can keep the deer away, are like a breath of fresh air in the garden. Newer varieties, like the ‘Stella de Oro,’ produce many flowers and stay in bloom longer. These faithful friends appear every year without muss or fuss.

Coneflowers (Echinacea) and tickseed (coreopsis), both available in a variety of colors and styles, are the stars of the summer garden, lasting well through the heat. Other summer favorites include yarrow (achillea), rudbeckia, or cheerful daisies (leucanthemum), with astilbe and hydrangea for the shade. Plus, what could be prettier than an arbor of clematis and climbing roses? Just thinking about it makes me want to make a pitcher of iced tea!

Then, just as the flower season starts to wind down, mums and asters pop open. Their colors are the perfect addition to all the fall treasures: pumpkins, gourds, and autumn leaves. A neighbor once commented that my yard “always had something going on” and yours can too. Start planning (and planting) fall perennials and bulbs now to give yourself seasons of an ever blooming garden.

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**Evening Herb Garden Tour**

The Doctor's Garden at Faust Park's Historic Village

Members of the St. Louis Evening Herbalists cordially invite you to a free tour of the Doctor’s Garden in the Historic Village at Faust Park located at 15189 Olive Blvd. in Chesterfield, MO.

**Tuesday, September 8, 2015 at 6pm**

Please RSVP to 636-532-3287

Cookies, Iced Tea, and Lemonade will be served.
The Cape County Master Gardeners presented a check for $1,000 to the Cape Girardeau Council of Garden Clubs for the care and maintenance of the Rose Garden in Capaha Park. The mission of the Missouri Master Gardener Extension Program is “helping others learn to grow.” The Master Gardener program provides in depth horticultural training to individuals throughout Missouri who then volunteer their time applying what they have learned to help others in their communities to learn about gardening and environmental education. The Master Gardener Program throughout Missouri promotes and raises public awareness of the University of Missouri Extension as a source of unbiased, research based gardening information. For more information about Master Gardeners please call the Cape Girardeau Extension office at 573.243.3581.

Horticulture Terms: Organic
by Katie Kammler, MU Extension Horticulture Specialist

The term organic simply means something that was once living. When organic is applied to farming/gardening practices it means a crop produced without synthetic fertilizers and pesticides. It does not mean that it is not sprayed. Organic gardening is generally a systems approach that looks at the whole picture, working to improve soils, reduce runoff, and increase the population of beneficial insects and soil microbes. Certified organic is a legal definition where all products that bear an organic label must meet the regulatory standards established by the National Organic Program. The program is under the authority of the United States Department of Agriculture.

Save the Date! 20th Annual Missouri Master Gardener Conference

This year’s event features choices for everyone, so gather your friends and make plans soon for 2015 Harvest in the Heartland, sponsored by Audrain County and the Heart of Missouri Master Gardeners.

Full time registration includes: MU campus tours, reception, Saturday all day tours w/entry costs plus transportation, or 2 advanced training sessions, a featured speaker and banquet, Sunday selection of 12 workshops w/3 time slots or 3 hours of advanced training, plus a sit down lunch.

Check out the conference website at:
http://www.momga.org/2015-master-gardener-conference/
Fairy gardens have been in the United States for more than 100 years. Since the Chicago World’s Fair the practice of creating fairy gardens has mostly been passed down from generation to generation.

The plant lore associated with fairies includes tales such as

- a 4-leaf clover in your hat allows you to see invisible fairies
- Fairies wear petunias for skirts
- Fairies put their babies in tulips
- Foxglove flowers are worn as hats by fairies
- Ragwort, grass or straw is used as a makeshift horse by fairies

Do not mistake a fairy garden with an opportunity to clutter a small space with too many figures. Fairy gardens are meant to spark imagination. People should look at them and wonder what type of being would use this space?

It may be easy to find a premade fairy garden display at a box store or garden center but you may have as much fun finding small sized furniture and miniature plants on your own. Let the creative juices flow. Look for plants that have personality despite their size. Find small tables and chairs, a house, create small signs or objects from clay and don’t forget the paths.

The entire space should be to a scale set by you. While a store may provide many possible decorations for a fairy garden, choose those that maintain the same aspect ratio to keep the garden visually consistent. This includes the plants that are used in the space. However you tuck your fairy décor into the plants, make certain that each plant reflects the same scale to the decor that is used.

You can create a fairy garden that is modeled from an idea or from a favorite family vacation spot. Think about the plants that will most remind you of the place you want to portray and look for those plants or look-a-likes. Ferns can be used to create a tropical forest while small bushes might be used to give the feel of a woodland forest.

Plants should be scaled to resemble flowers or bushes for small beings, 1-8 inches in height when used close to fairy décor. Ideas include:

**Hosta 'Blue Mouse Ears'**

**Ophiopogon japonicas (Mondo Grass) ‘Nana’ or ‘Pygmaeus’**

**Adiantum venustum (Fern)**

**Ajuga ‘Binparcol’ or ‘Planet Zork’ or ‘Dixie Chip’**

**Leptinella squalida (Fairy Fern)**

**Acorus gramineus (Mini Sweet Flags) ‘Minimus**
**Fairy Gardens**  
by Sarah Denkler, MU Extension Horticulture Specialist

Aureus’ or ‘Oborozuki’ or ‘Variegatus’ or ‘Pusillis’  
For spreading plants use Sedum sp. with many varied foliage choices or Bryphytes (moss); check out his publication [http://bryophytes.plant.siu.edu/PDFFiles/Bryo-poster%201.pdf](http://bryophytes.plant.siu.edu/PDFFiles/Bryo-poster%201.pdf).

Miniature evergreens can be used as scaled down trees. Examples for our area include: Buxus microphylla ‘Morris Midget’ or Ilex crenata ‘Dwarf Pagoda’ both for shade or sun.

The plants above are listed for outdoor gardens but many of those plants can be used for container gardens. If you create a container garden use fewer plants with contrasting color and texture to reduce crowding of décor. Also, the container can really create an atmosphere. Do not rule out baskets, just remember to set them on a dish to catch any excess moisture. Soil should contain organic matter, possible bark based, so water will move through it yet hold a sufficient amount to keep plants healthy.

**Local Garden Highlight!**  
by Donna Aufdenberg, MU Extension Horticulture Specialist

The new Shawnee Park Community Demonstration Garden celebrated it’s ribbon cutting in July. The garden, coordinated by Emily Scifers, is located at the Shawnee Park Center which is located at 835 South West End Boulevard in Cape Girardeau, MO. It features nine raised beds planted with an assortment of vegetables and herbs. There are also 4 ground beds located on the outskirts of the garden planted with ornamentals and flowers. Outside the garden is a fruit planting that consists of several fruit types and varieties.

The Garden was made possible through grant money obtained by Cape Girardeau Parks and Recreation and the Cape Girardeau County Public Health Center. These grants also funded existing community gardens and educational programs related to gardening, cooking and nutrition that encouraged healthy eating and active living.

The garden is beautifully designed with stonework and nice walkways. If you get a chance, stop by. I believe this year has been successful in producing a variety of vegetable and herbs. It also provides an opportunity for local Master Gardeners to lend a helping hand and earn volunteer hours!
GARDEN LUNCH N LEARN
The Butler County Extension Center will offer garden education during lunch the first Thursday of the month August to October.

Lunch and Materials: $10.00

September 3 - Lawn Maintenance
October 1 - Composting

222 North Broadway, Poplar Bluff, MO.
Seating is limited. Please register by the Monday before lunch so we can have lunch ready.

Call 573-686-8064.

www.extension.missouri.edu/Butler
Upcoming Events

The following Master Gardener meetings are held each month. All are welcome to attend. Please contact the local extension office to confirm location if you did not attend the previous meeting.

Parkland MGs - 1st Monday at 6:30pm, Horticulture Classroom at Mineral Area College, Farmington, MO

Poplar Bluff MGs - 1st Tuesday at 6:00pm at Holy Cross Episcopal Church in Poplar Bluff, MO (Do not meet in January)

Ste. Genevieve MGs - 2nd Thursday, at 6:30pm, Ste. Genevieve County Extension Center

Cape Girardeau MGs - 3rd Thursday at 7:00pm, Cape County Extension Center

Perry MGs - 4th Monday at 6:30pm, Perry County Extension Center

Jackson Beekeepers - 4th Tuesday @ 7:00pm, First Presbyterian Church, 206 E Washington, Jackson, MO

SEMO Honey Producers - 2nd Thursday @ 6:30pm, Church of Christ, Poplar Bluff, MO (Do not meet in December or January)

Parkland Beekeepers - 3rd Tuesday @ 7:00pm, North College Center, Mineral Area College, Park Hills, MO

South Central MO Beekeepers - 1st Friday, Howell Electric Coop, West Plains, MO

**Thursdays, August 20 to November 19** - Master Gardener Core Training; Webster University, 1103 Kingshighway in Rolla, MO 6-9pm. Call 573-458-6260 to register.

**Mondays, August 24 to November 11** - Master Gardener Core Training; North College Center at Mineral Area College, Park Hills, MO 6-9pm. Call 573-883-3548 to register.


**Tuesday, September 8, 2015** - Evening herb Garden Tour. 6:00pm at 15189 Olive Blvd. Chesterfield, MO. Call 636-532-3287 to register.

**Thursdays, October 1, 2015**—Lunch N Learn series at noon for Composting. MUST Pre-register at 573-686-8064. Cost $10.00

**Wednesday, October 7** - Wild Edibles with Steve Bost. 9am-12pm at Cave Springs in Hunter, MO. Bring walking shoes and a chair. Register at 573-686-8064 to get directions.

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**The First National Protecting Pollinators in Ornamental Landscapes Conference**

The First National Conference on Protecting Pollinators in the Ornamental Landscape will take place October 13 and 14, 2015 at the Kanuga Conference Center in Hendersonville, NC. Hosted by Michigan State University and North Carolina State University, this conference is intended for extension educators, academic and industry researchers, growers, and representatives of related industries interested in or involved with ornamental plant production or maintenance.

Sessions will include research presentations and discussions on topics such as: Function of urban pollinators, threats to pollinators, impacts of neonicotinoids and other pesticides, pollinator-safe products and strategies, and educating the public about pollinators. For more information, visit www.ornamentalpollinators.org and look for more details to come!

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**Congratulations to the Master Gardener Interns who just finished Master Gardener Training on August 17, 2015 in Cape Girardeau!**

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**Interested in beekeeping.** Follow the Missouri State Beekeepers Association at scientificbeekeeping.com or on Facebook to connect with knowledgeable groups.
Editor’s Corner

The Garden Spade is published monthly by University of Missouri Extension staff for individuals and families living in Southeast and East Central Missouri. This newsletter is provided by your local extension council.

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We welcome and encourage Master Gardener groups and individuals to submit items to the newsletter. We encourage the submission of any news such as upcoming volunteer opportunities, community events related to gardening, warm wishes or congratulations to fellow gardeners. We also encourage Master Gardeners sharing experiences and writing articles on timely topics.

All entries into the group news sections must be received by 4:30 on the 15th of each month for the following months news.

Email news to: kammlerk@missouri.edu, denklers@missouri.edu, or aufdenbergd@missouri.edu

Disclaimer. No special endorsement of mentioned products is intended, nor is criticism implied of similar products not mentioned.

September 2015 Garden Spade