



THE GARDEN SPADE



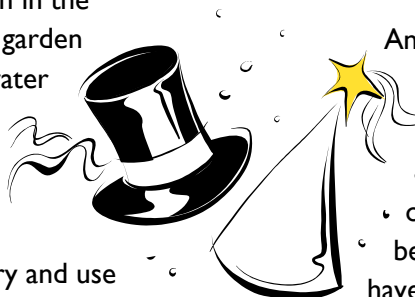
A monthly Gardening Publication of the University of Missouri Extension -- Southeast and East Central Regions

Gardening New Year's Resolutions

by Katie Kammler

With the Christmas snow and cold weather, our thoughts turn to spring, especially when the garden catalogs are arriving in force. The New Year gives us a chance to start our garden anew and there is always room for improvement! What do you want to change or do differently with your garden, yard, or landscape? Here are a few ideas to get you started.

- I will use mulch in the landscape and garden to conserve water and prevent weeds.
- I will only use a pesticide when necessary and use the right one for the problem.
- I will grow a plant that I have never grown before.
- I will take a soil test and follow the recommendations.
- I will plan my garden on paper first.
- I will give extra vegetables to the needy.
- I will keep my garden weed free. (Perhaps this should be in the next list)
- I will stake all the plants that need staked before they fall over.
- I will rotate my vegetable crops



- for pest management.
- I will water in the mornings to decrease disease pressure.
- I will use soaker hoses/drip irrigation to conserve water and decrease disease pressure.
- I will add compost to the garden to increase organic matter.
- I will take cuttings of plants to decrease the number of plants I purchase.

And the resolutions that we may make but will NEVER manage to keep.....

- I am going to cut back on buying plants so I can better take care of what I have.
- I won't impulsively buy pretty flowers that won't grow here.
- I won't order more seeds than I can plant or order from every seed catalog I get.
- I won't buy a pot just because it is pretty; I have to need it first.
- I will space my perennials appropriately, not forgetting how big they will get when mature.
- I will clean and put away my tools when I am done with them so my dog doesn't chew the handles off.....

January 2011

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Plant of Merit— ‘Afterglow Winterberry’

by Sarah Denkler

Appropriately named for the season this month’s Plant of Merit is *Ilex verticillata* ‘Afterglow’ Winterberry. This deciduous holly grows in zone 3 to 9 in partial to full sun. It is mainly grown for the bright red ornamental berries that light up a winter landscape and provide food for birds. The dark green foliage drops in the fall.

Native to North America, this large, 6 to 10 foot height by 6 foot shrub does require a male pollinator for berry set. ‘Jim Dandy’ is a perfect cultivar for this job and will pollinate up to 8 female plants. ‘Afterglow’ is tolerant of wet conditions growing natively in swampy areas. This cultivar has few insect or disease issues.

Photo courtesy of alsipnursery.com



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The Garden Spade

If you would like to continue to receive a hardcopy of the Garden Spade Newsletter, please fill out the form and enclose \$10.00 for your annual subscription. This covers printing and mailing costs associated with the newsletter.

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January Gardening Calendar

By Donna Aufdenberg

Outdoor Plants and Ornamentals

- Gently brush off heavy snows from tree and shrub branches.
- If we get ice formations on plants, allow ice to melt naturally from plants. Attempting to remove ice may damage plants further.
- Sow pansy seeds indoors for spring bloomers.
- Sow hardy perennials indoors for transplanting in spring.
- Check perennials to see if any have been pushed out of the ground by freezing and thawing weather. If so, push them back into the soil; otherwise the exposed roots will dry out and die.
- If a few warm days have caused your bulbs to nose out from under protective mulch, plan to thicken the mulch layer as soon as cold weather returns to prevent freezing.
- Coarse materials, such as corn stalks and evergreen boughs, can be used to mulch chrysanthemums when extra protection is needed during cold winter. This is a great use for left-over Christmas tree branches.



Houseplants

- Wash the dust off of house plant leaves on a regular basis. This allows the leaves to gather light more efficiently and will result in better growth.
- Allow tap water to warm to room temperature before using on houseplants.
- Fluffy, white mealy bugs on house plants are easily killed by touching them with a cotton swab soaked in rubbing alcohol.
- Insecticidal soap sprays can be safely applied to most house plants for the control of many insect pests.

Vegetable Gardening

- Soil test if you have not done so yet.
- Continue harvesting the carrots, parsnips, turnips, and horseradish left in the garden in the fall.
- Order rhubarb, asparagus, strawberry, blackberry, etc., transplants for setting out in March.

Fruits and Nuts

- Check all fruit trees for evidence of rodent injury to bark. Use baits or traps where necessary.

Turfgrass

- Avoid foot traffic on frozen lawns as this may injure turf grasses.

Secrets to a High Yield Vegetable Garden

Improve your garden soil!

Get a soil test!

Raised beds are more space efficient!

Avoid planting in square patterns or row. Instead, stagger the plants by planting in triangle patterns.

Don't forget to thin your root crop!

Grow upward using trellises, fences, cages or stakes!

Interplant smaller plants into larger plants or shady plants into full sun plants.

Stretch your season by utilizing row covers, cloches, or cold frames.



Forcing Bulbs

by Sarah Denkler

Many who love to keep their hands dirty when it is warm go a little 'crazy' in the winter when we are prevented from outdoor work. Could this be why gardeners around the world bring bulbs indoors and trick them into blooming during cold weather?

Some bulbs that can be forced include tulips, daffodils or paper whites, crocus, and hyacinth.

Spring bulbs need a period of cold to trigger bloom. This can be accomplished by planting bulbs in a pot and placing them in an unused refrigerator for up to 14 weeks. This technique is great if you have a particular date you are shooting for and need a controlled environment to achieve that date.

Bulbs can also be planted in pots during fall and left outside in the cold or in a cool basement for at least 12 to 14 weeks to grow roots. This is a good way to start forcing bulbs if it has never been tried before. Fluctuations in temperature may delay growth with this technique.

When potting bulbs use a clean pot with a well-drained media that will be supportive enough to hold the bulb and the added weight of the bloom. Perlite alone would not be a supportive media for bulbs. Any type of pot can be used but don't use one that will take away from the blooms or be overly decorative.

Bulbs should be placed close together but not overlapping. The number of bulbs will depend on personal preference and space available in the pot.

Small bulbs should be planted one inch below soil surface, hyacinth and tulips should be planted so the tips show above the soil surface, Daffodils should



be planted half in and half out of the soil surface.

When buds are set and close to bloom, plants should be brought indoors to the area for display. Make sure they are free from sources of too much heat or a hot sun.

Good varieties of daffodil for forcing include: Bridal Crown, Dutch Master, February Gold, Flower Record, Ice Follies, Mt. Hood and Unsurpassable.

There is an art in forcing bulbs. As it is mastered, new aspects can be added such as multiple varieties or species, recycled or odd shaped containers and special media. Keep

experimenting and delight your inner artist.

For a list of varieties that are good for forcing find more information from <http://extension.missouri.edu/explorepdf/agguides/hort/g06550.pdf>. Forcing Bulbs for Indoor Bloom. Extension Guide 6550. University of Missouri Extension.

Picture from <http://goodbulbs.com>

Repurpose, Reuse, Recycle - Pass It On

By Barb Gray

Provide water for birds in winter by cutting both ends from a large metal coffee can. Place a metal saucer over the top end. Place the open end of the can over a low wattage light bulb and a rock in the saucer for weight. The heat from the bulb will keep the water from freezing.

Growing Citrus in Missouri

by Donna Aufdenberg

I have had many gardeners over the years show an interest in growing citrus indoors in Missouri. Most people who inquire begin by saying they have saved a few orange seeds and they would like to try planting them. "Yes", they will germinate but will they grow, thrive or produce fruit?

According to Michele Warmund, State Fruit Extension Specialist, there are many different types of citrus trees that can be grown indoors. Sweet citrus trees tend to be difficult, however sour oranges and other acid citrus species are easy to grow in containers. Many will also bear several crops of fruit each year if given optimum growing conditions.

Citrus trees can be wonderful houseplants if properly cared for. They have flushes of creamy white flowers with a sweet fragrance in addition to the fruit and the glossy dark leaves! Look for dwarf varieties.

Citrus trees grown indoors require a container at least 14 inches in diameter and a soil that is loose and well drained with a pH of 5.5-6.5. They like temperatures around 55-65 degrees F with at least



8 hours of sunlight. For trees to perform their best, night temperatures should not reach below 50 degrees F. Southern light exposure is best. Citrus trees also benefit from humidity levels of 30 to 60 percent. Beware of overwatering. Let the soil dry to the touch before watering and do not let citrus stand in a saucer of water. Watch for sucking insects such as scale, mealy bugs, white flies and spider mites.

Here are some varieties you might try:

Calamondin sour orange (*Citrus mitis*) is a compact tree that grows fruit about the size of quarters. They are not very sweet but do make a wonderful marmalade. Trees are said to grow anywhere between two to eight feet tall.

Meyer Lemon (*Citrus limonia meyeri*) grows the fastest of all the citrus varieties. They produce thin-skinned fruit that are large and less acid than ordinary lemons.

Tihiti and Persian Limes are quite thorny which may be a negative factor for some households. They are also very tender, hardy only to 32 degrees F.

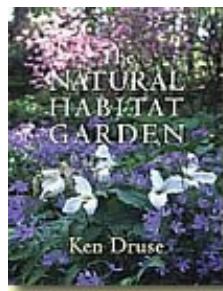
Meiwa Kumquats are great producers of small orange-like fruit that can be eaten peel and all! They are very ornamental and are very hardy down to 18 degrees F.

A Book Review

by Jamie Koehler, Master Gardener

The Book: *The Natural Habitat Garden* by Ken Druse

This gorgeous book will get you through the winter months while trapped inside dreaming of next year's garden. The author traveled the breadth of the country photographing native gardens. He encourages us to really let our gardens go wild and return to what they were meant to be. His definition of a native plant is that it must be from within 50 miles of your garden. Alt-



though inspiring and certainly earth friendly the author's philosophy is for those with acreage not a small garden. You really will enjoy reading the authors thoughts and will drool over the pictures. You may also not feel so guilty next year about letting a small corner of your yard get a little weedy.

Check out this book and others by Ken Druse at the website:

<http://www.kendruse.com/books.html>

Trivia Crossword: Plant Propagation Answers

by Donna Aufdenberg

Across

1. *Callus* - Formation of cells on cuttings prior to root growth.
3. *Chimera* - Mutation at a growing point on a plant which gives a plant two different genotypes.
5. *Tissue Culture* - Multiplication using plant tissue in a sterile environment.
7. *Sterilize* - Clean, Sanitize
8. *Hybrid* - Offspring that does not reproduce true to parent plants.
9. *Scarification* - Scratching the seed coat to induce germination.
11. *Cytokinen* - Plant hormone that promotes branching.
14. *Open Pollinated* - Heirloom, non-hybrid seed.
17. *Clone* - Exact genetic copy of parent plant.
18. *Grafting* - Joining separate plant parts together

so they form a union and grow together to make one plant.

Down

2. *Adventitious* - New plant organ arising at an “unexpected” location on the plant.
4. *Propagation* - Sexual and Asexual Multiplication.
6. *Cotyledons* - Seed leaves
7. *Stratification* - Exposing seed to cool, moist conditions to induce germination.
10. *Asexual* - Using vegetative parts to multiply plants.
12. *Radical* - First root formation of the plant emerging from the seed.
13. *Sexual* - Fertilization occurs and seeds are produced.
15. *Auxin* - Plant hormone that promotes rooting.
16. *Dormancy* - Condition preventing seed germination.

Scouting for Disease

by Sarah Denkler

Although it is cold, winter can be a great time to scout out plants in the landscape. Scouting is a time honored chore... or quiet pleasure.... that every gardener should do on a regular basis for plants, just as a doctor would do a regular check up to maintain good health.

On deciduous plants in winter, leaves are missing, revealing an ocean of woody stems and bark to inspect. Evergreen plants still hold their needles but are not hidden by the leaves of deciduous plant surrounding them and so are also easier to see.

When scouting plants, pay careful attention to their overall appearance as well as inspecting individual stems, needles and the base of the trunk.

Overall, your plants should have uniform growth with no evidence of weaker stems or dead branches. Individual stems should be inspected for scale



or evidence of insect feeding. Vascular disease can show up in winter as discolored areas on stems and branches. Look closely at evergreen needles and leaves for spots. Of course, in winter, there may be discoloration due to the effects of cold weather but disease will appear different in both pattern and color.

Check the trunk and the base of the tree for signs of damage, borer infestation or evidence of rot. Do this for both evergreen and deciduous trees. In some cases the first sign of trouble is found at the base of the tree.

If nothing else, you are establishing a base view of your plants that will help you later on as you continue to scout for issues. If you notice a change then you may be faster to react if there is actually a disease present.

Fairy Candelabras: Using an Unusual Plant to Provide Year Round Interest

by Jaime Willmann

I am always on the lookout for a plant that can flower and provide year round interest. Sometimes gardeners love plants so much that they either plant so many and need to get rid of a plant and replace it with a better one, or choose a much smaller variety to put in a spot that is “just perfect” for the new plant. If you only have a tiny spot in your yard, if you love trough gardening, alpine plants, or rock gardening, this may be a plant for you to consider.

Androsace, is also known as *rock primrose* or *fairy candelabras*. They are alpine plants belonging to the Primrose order. About 100 of this genus are known, and when the mountains of India, Tibet, and China are thoroughly explored, even more species may be found. In the Alps, about twenty species are found and they can also be seen growing in the Himalayas and China.



Photo Courtesy of:

<http://magnar.aspaker.no/liste.htm>

Of most of the Androsace, *Carnea* ssp. *Laggeri* is the easiest of Androsace to grow. This hardy perennial is USDA zones 4-7 but care should be taken to treat it as the alpine plant it is. *Laggeri* is a small plant and is ideal for troughs, rock gardens and raised beds. *Laggeri* adds beauty in two ways – first through the late spring flush of pink flowers it provides, but also through the small evergreen cushion of foliage in the winter months. The flowers of *Laggeri* are small clusters of very small cupped, deep pink flowers with yellow eyes. The foliage consists of mid green pointed leaves arranged in small, tight rosettes. Overall, the plant creates a very small cushion reaching only 2 inches tall by 6 inches wide.

Laggeri prefers full sun, a soil ph between 5.6-7.8

and drainage is critical. These are best planted in crevices between stones at least 15 inches in depth. They should be packed firmly with pure sandy peat, or very sandy or gritty loam, not less than 15 inches deep. Providing a top dressing of soil and gravel helps before winter and should be renewed in the spring. This not only prevents rot and disease, but it also encourages fresh roots to be made from the underside of the stems. When growing *Androsace Carnea Laggeri*, be on the

lookout for aphids, slugs, and spiders. Remove dead rosettes to prevent rot and disease.

I can picture this rock primrose en masse. A grouping of small evergreen cushioned mounds could be a striking contemporary display, a formal grouping, or on a sloped rock garden, or tucked in-between two or three well placed rocks. This plant may require a little extra care because it is an alpine plant in a Midwestern environment, but any plant that works hard to look good all year

long, in my opinion, is worth the extra attention it may require.

Hot Topic!

Turn in your MG HOURS?

As the New Year begins, **Master Gardener Volunteer Hours for 2010 need to be turned into local coordinators.** Please send them to your local Master Gardener Co-ordinator. We accept them via mail, email, phone, and fax. Don't forget, you can also enter hours online.

<http://report.missourimastergardener.com/>



2011 GARDEN WALK

SAVE THE DATE

Experience the Gardens of historic Ste. Genevieve

May 14 and 15, 2011

(10:00 AM to 4:00 PM)

Saturday and Sunday

Tour Historic House and Private Gardens

Master Gardener Plant Sale (Begins at 9:00 AM each day)

Heirloom Plant Sale and activities at the Bolduc Museum

Garden Tour/Tea at the Felix Vallé House

Boxwood and Lily Sale at the Guibourd House

Garden Accessory Marketplace

Native Plant Sales

Garden Related Antiques

Specials at Local Restaurants

Horse Drawn Wagon Rides

Saturday Only

Farmers Market (7 – Noon)

Bird House and Bird Feeder Contest

Individual Tickets \$7 - Groups of 5 or more \$6

Register for Walk at the Welcome Center, Corner Market and Main

Sponsored by the Ste. Genevieve Master Gardeners, Inc. and the University of Missouri Extension Office

For more info, call Bob at 573-883-3290

January 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3 Parkland MG, 6:30pm @ Courthouse Annex (3rd floor)	4	5	6 Great Plains Veggie Growers Conf., St. Joseph, MO. http://www.greatplainsgrowers.org	7	8
9	10	11	12	13 Delta Area MG, 7 pm, Medical Arts Bldg, Sikeston	14	1/15
16	17 Ste. Genevieve MG Meet- ing, 6:30pm, at the Ste. Genevieve Co. Ext. Center	18	19	20 Cape Girardeau Co. MG, 7 pm, Cape Co. Ext. Center	21 Ag Expo, Poplar Bluff	22 Ag Expo, Poplar Bluff
23	24 Perry Co. MG meeting, 6:30 pm, Perry Co. Ext. Center	25	26	27	28	29
30	31	<i>Contact your local Extension Center if you have questions about any event on the calendar or if you have a horticultural event for the calendar.</i>				

Upcoming Events....

FEBRUARY

- 1 - Poplar Bluff Master Gardeners meet on the first Tuesday each month at 6:30PM at the Butler County Extension Center
- 7 - Parkland Master Gardeners meet on the first Monday each month at 6:30PM at the Farmington Courthouse Annex (Third Floor)
- 10 - Delta Area Master Gardeners meet on the second Thursday each month at 7:00PM at the Medical Arts Building in Sikeston, MO (808 E. Wakefield Ave.)
- 17 - Cape Girardeau County Master Gardener Meeting is held every Third Thursday of each month at the Cape County Extension Center at 7PM
- 21 to 23 - 31st Annual Small Fruit and Vegetable Conference held in Springfield, MO <http://mtngnr.missouristate.edu/commercial/conference.htm>
- 21 - Ste. Genevieve Master Gardener Meeting is held every Third Monday of each month at the Ste. Genevieve County Extension Center at 6:30PM

28 - Perry County Master Gardener Meeting is held every Fourth Monday of each month at the Perry County Extension Center at 6:30PM

ADVANCED TRAINING

'Pruning Fruit Crops'

January 24, 2011 - 6:00 p.m. to 8 p.m. at the Ste. Genevieve Community Center. \$10 - Call Katie Kammler at 573-883-3548 for more information.

'Bloom all Year'

January 27, 2011 - 9:00 am to 12:00 pm at the First United Methodist Church 500 N. Main Street, Poplar Bluff, MO. \$10.00 - Register by calling 573-686-8064.

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

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Master Gardener

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January 2011 Garden Spade



Time To Turn In Your Volunteer Hours For 2010!!
The Master Gardener Hour Reporting form can be found at <http://mg.missouri.edu/mgforms.htm>