MG Association Meeting, THERE IS NO MEETING IN DECEMBER!

Alta Vista Gardening Club, Prescott, fourth Tuesday of the month, 12:30pm. Call 928-443-0464 for location and information.

Prescott Area Gourd Society, third Tuesday of the month, 6:30 pm, at the Smoki Museum.

Prescott Orchid Society, meets 3rd Sunday of the month, 2pm at the Prescott Library, call Cynthia for information. (928) 717-0623

Prescott Area Iris Society call 928-445-8132 for date and place information.

Verde Valley Iris Society call Linda Smith at 928-567-7470

Check out the new MG blog. More garden information, events and pictures. http://yavapaigardener.blogspot.com

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End of Year Tradition
by Nora Graf

What a year—for me, anyway. I had a terrific garlic, basil and tomato crop. My peppers were ho-hum and there were just not enough fresh peas. But as I say, there is always next year. I already have more peas planted along with sweet peas and next years crop of garlic. The tarragon is doing well along with the shallots so “next year” is already going well. The difference is I will not be here to enjoy it. I will be temporarily moving out of the area. My job has been a tumultuous process this year. I will still do the newsletter. If something has a time limit and if you are not an email person, contact Mary Barnes for help. (My mailing address is PO Box 4709, Tubac, AZ 85646) I should be back home next summer sometime and hope to see everyone then.

Speaking of the next newsletter, the December issue will be the last one till Feb 1. I take the month of December off because it tends to be a busy time, not much gardening going on and I need a break. So for all the Master Gardeners out there I want to thank you for your support and help over the past year. I especially want to thank Paul Diemer and Marilyn Perkins for checking my grammar, punctuation and spelling. They are always a big help in getting the newsletter done. Thanks to Jeff Schalau, Karen Pizzuto and all the extension staff who make the Master Gardener program work and put up with me.

I went looking for end-of-year traditions with a gardening theme but I discovered there seem to be none. I decided because most of the gardening world seems to be in a blue funk, buried in snow, who the hell gardens in December, especially late December. Well, we do for heaven’s sake, so does anyone have any December traditions they want to pass on? December is generally a wonderful month in Arizona, so we should have some traditions. I’ll have to make some up. Not a gardening tradition but there is one thing I do every December. I go down to my brother’s place in Phoenix for Christmas and for Christmas breakfast, well really brunch, sometimes lunch depending on how early everyone gets up, I make the most tooth numbingly sweet sticky buns. I’ve been making them for years. For a while I made two batches because I have a large family and hauled the second batch across town so everyone had plenty. There was the Christmas day when I had a flat tire driving across town only to discover that one of the lug nuts was different and I
couldn’t get it off, all the while sticky bun dough is slowly rising in the back-seat. Fun holiday memories.

There are lots of traditions for the New Year; most have nothing to do with gardening though, so I think everyone should visit the Desert Botanical Garden in January to see their new Berlin Agave Yucca Forest. It just opened up recently and, while I haven’t seen it myself, I am sure it’s terrific! Certainly if you are an agave yucca fan it’s a must. They have more than a 1,000 plants on display, some which have never been on display before. On January 23 they will have a tour with Wendy Hodgson, curator at DBG and agave specialist. I went to school with Wendy and know she will give a terrific program. The garden also has great musical events in January; check out the schedule: www.dbg.org

So our new Year-end/Year-beginning tradition should be to visit and support Arizona’s botanical gardens. There are a bunch of them and, except for the University arboretums, they are self-supporting and get nearly all their money from donations and grants. So don’t just visit, make a donation or become a member.

**The Arboretum at the University of Arizona**, Tucson, a unique collection of plants from arid and semi-arid climates around the world. Many campus trees are the largest specimens in Arizona and have been designated as Great Trees of Arizona. There are 5 trees on the National Register of Big Trees. Several are unique to the entire Southwest; a few were the first of their kinds to be planted in the Western Hemisphere. http://arboretum.arizona.edu

**The Arboretum at Arizona State University**, Tempe, The largest urban arboretum in Arizona, has over 300 species from different geographic areas, including the Sonoran Desert. It contains one of the best collections of date palms and conifers in the Desert Southwest, and a collection of native southwestern plants. http://uabf.asu.edu.arboretum (You can download walking guides at the websites listed above.)

**Desert Botanical Garden**: Phoenix
Specializing in the conservation, study and dissemination of knowledge about arid-land plants of the world with an emphasis on succulents and the native flora of the Southwestern US. http://www.dbg.org/

**Boyce Thompson Arboretum State Park**: Superior
A major center for plant research and a haven for plant-lovers, numerous examples of native plants from the Sonoran Desert and plants from arid and semi-arid regions of the world. http://arbo.pares.uabf.ag.arizona.edu/

**The Arboretum at Flagstaff**
Dedicated to exploring and understanding plants and plant communities of the Colorado Plateau (This is the only one that is closed during the winter; it reopens in April. Make it a spring-time tradition. www.thearb.org

**Arizona Sonora Desert Museum**: Tucson
A zoo, a natural history museum and botanical garden that focuses on the Sonoran Desert. Considered one of the best zoos in the world. http://www.desertmuseum.org/

**Tohono Chul Park**: Tucson
Tohono Chul focuses on the Sonoran Desert. It holds a variety of programs each year and is a delightful place to visit. http://www.tohonochulpark.org/

**Tucson Botanical Gardens**: Tucson
Thirteen unique gardens and numerous special events provide horticultural and ecological education to encourage responsible environmental stewardship. http://www.tucsonbotanical.org/
Not everyone likes fennel. Its licorice taste and odor turns some people off, but I love it. As a kid I loved black licorice and today one of my favorite treats are the candy coated fennel seeds my favorite Indian restaurant serves at the end of the meal. It is also the “secret” ingredient in the tomato sauce I make for lasagna. I haven’t tried absinthe yet but fennel is one of its primary ingredients. While I use the seeds, I haven’t really explored cooking the bulbs, one of my next projects. Fennel doesn’t have a bulb like a tulip, the stem has a swollen bulb-like base that is prized as a vegetable in many locations.

Fennel is from the Mediterranean, like many of our herbs, but it has become naturalized throughout the world. The plant’s colonizing efforts were started by the Romans. Apparently they carried it about with them while attempting to conquer the known world.

The name fennel comes from the Middle English fenel or fenyl and is pronounced finchio in Italian. This was a derivation of the Old English fenol or finol, meaning hay. (whewww!!!, thanks Wikipedia) In the 10th century fennel was part of a pagan charm, known as the Anglo-Saxon Nine Herbs charm. The charm was used to treat poison and infection. Nine was a significant number in Germanic paganism and folklore. (The other eight herbs for those dying to know were Mugwort, Cockspur Grass, Lamb’s Cress, Chamomile, Nettle, Crab Apple, Plantain and Thyme.) A charm was sung three times over the herbs before preparation. The herbs were then put into the mouth, ears and over the wound of the patient. The ancient Greeks called fennel marathon and it was associated with the 490BC Battle of Marathon. In Greek mythology Prometheus used a stalk of fennel to steal fire from the Gods. Giant fennel is also associated with the god Dionysus and his followers. Their Bacchanalian wands were made from the plant. (Please note that the giant fennel associated with both these stories is actually not even the same species we use in cooking.)

Longfellow wrote a verse about fennel:

“Above the lower plants it towers,
The Fennel with its yellow flowers;
And in an earlier age than ours
Was gifted with the wondrous powers
Lost vision to restore”

( Didn’t say it was one of his best verses.)

Fennel has always been a medicinal plant, often for icky stuff like purgatives and flatulence but also as a cough medicine and flea powder. From an old medicinal book: “taketh away nausea or inclination to sickness, jaundice, as also the gout and cramp. The seed is of good use in medicines for shortness of breath and wheezing, by stoppings of the lungs. The roots are of most use in physic, drinks and broths that are taken to cleanse the blood, to open obstructions of the liver, to provoke urine, and amend the ill colour of the face after sickness, and to cause a good habit through the body; both leaves, seeds, and roots thereof, are much used in drink, or broth, to make people more lean who are too fat. A decoction of the leaves and root is good for serpent bites and an aid to neutralize vegetable poison, as mushrooms, etc.”

Over the centuries fennel has become naturalized in some parts in the world, flourishing alongside roads throughout northern Europe, the United States, Canada, Australia and Asia. It grows easily from seeds that it produces in abundance and is considered an invasive species in Australia and the United States. I have grown fennel and found once you have it, it will reseed easily but is easy to control. It doesn’t resprout from the roots, so yanking it out when it is small is an easy task.

There are several cultivars of fennel (usually called Florence fennel) but most have a bulb-like base. The foliage is dill-like but thinner. It produces umbels of yellow flowers from which the seed is easy to collect. Anise and star anise are often confused with fennel but are separate plants. Fennel tends to have a lighter flavor than anise. The bulbs are aromatic and sweet. Another variety of fennel is
the bronze-leaf fennel, (*Foeniculum vulgare* "Purpureum"), which is grown as mainly a decorative plant.

Fennel is especially popular in Mediterranean cuisine where everything but the roots is used both raw and cooked. It is used in pastas, vegetables and risottos. It is also found in sausages, meatballs (delicious!!) and European Rye Breads (another of my favorite uses of fennel!). Eggs and fish also benefit from fennel and it is a major ingredient in some Italian and German salads.

In the Middle East it can be found in many spice mixtures including panch phoron (fennel, fenugreek, Nigella seed, mustard seed, cumin seed) and Chinese five-spice powder (Chinese cinnamon-bark from the cassia tree, powdered cassia buds, powdered star anise and anise seed, ginger root and ground cloves). In India and Pakistan the roasted seed are eaten as a breath freshener and digestive. Fresh sprigs and green fennel seeds are eaten also.

Fennel has many look-alikes. It can be mistaken for dill, coriander and caraway, although in my mind it looks nothing like coriander. Sweet cicely is sometimes mistaken for the plant but it is shorter and has white flowers. Giant fennel is large, coarse and pungent but is not a culinary herb. I don’t normally bring up look-alike plants but there is a reason. Watch out for hemlock, a fennel look-alike, that is very poisonous and is a native plant in Arizona. The poison can be absorbed through the skin by touching the plant. It is found in moist environments so if you are out hiking just be careful and don’t eat the hemlock!

Syria is the largest producer of fennel; India and Mexico follow but there is no reason you can’t grow your own. It’s easy. They don’t mind dry or less than optimum soil. If I can grow it in Camp Verde, no one should have a problem. They easily handle full sun. The plant is large and you need to give it room. You can really ignore it except for giving it water occasionally and let it do its thing. If you are growing it for the bulbs, sow several plants and then leave one to flower and reseed. For the best bulbs look for Florence fennel. Harvest when the bulb is about the size of a tennis ball. The plants will survive the frosts. Mine have even over-wintered so don’t get crazy and yank them out in the fall.

There are three varieties: *F. vulgare*, *dulce* and *piperitum*. *Vulgare* is grown commercially for seeds and essential oils. *Dulce* (also known as finochio or Florence fennel) is a good choice for the garden as it can be used for seeds or for the bulbs. *Piperitum* or Italian fennel is used fresh. The young stems are used in salads.

Fennel seed is readily available in most garden catalogs and on store racks. Renee’s Gardens is selling seed for a bulbing fennel called Trieste. Sand Mountain Herbs.com has several varieties, but look around—it’s everywhere.

### Braised Fennel with Diced Vegetables

2 large fennel bulbs, trimmed, plus 1 tablespoon chopped fennel greens  
1 Tablespoons olive oil  
1 carrot, finely diced  
1 small onion, finely diced  
1 celery rib, finely diced  
Several thyme sprigs or 1/4 teaspoon dry  
1 bay leaf  
Salt & freshly ground pepper  
1/12 cup dry white wine  
1 Tablespoon butter

Peel the outer leaves of the fennel, if they are badly bruised, remove them. Keeping the root end intact, halve each bulb lengthwise.

Heat oil in large skillet, add the diced vegetables and herbs and sauté over medium-high heat until the onion begins to color, after several minutes

Move the vegetables to one side of the pan and add the fennel halves, cut sides down. Spoon the vegetables over and around them, season with salt and pepper, and pour in 1 cup water. Lower heat to medium, cover, cook until the liquid has evaporated, 10 to 12 minutes. Give the diced vegetables a stir and add 1/2 cup water. Cover and cook until the fennel is tender-firm when pierced with a knife, 15 to 20 minutes. By this time it should be nicely browned on the bottom.

Remove the vegetables and the fennel to a serving dish, placing the fennel cut sides up. Return the pan to the heat, add the wine and butter, and scrape the caramelized bits from the bottom of the pan. When the wine and butter have reduced by half, add the fennel greens, taste for salt, and season with pepper. Spoon the sauce over the fennel and serve.

(from *Vegetarian Cooking for Everyone*, by Deborah Madison.)
The apple trees of yesteryear are slowly disappearing. Many apple varieties common in the United States a century ago can no longer be found in today’s orchards and nurseries. But some historic apple trees still survive in abandoned farmsteads and historic orchards throughout the U.S. Now, scientists interested in conserving these horticultural treasures have set out to identify and catalogue them, working to discover if the last remnants of historical trees may still be alive in American landscapes.

American horticulturalists and historians often refer to the late 19th century as the ‘golden years of apple growing,’ when scores of apple and other fruit trees were planted in farmstead and kitchen orchards. Their ability to ‘keep’ all winter in cold cellars, produce flavourful ciders, and their versatility for cooking and baking made apples a staple in American homes. This period of American horticultural history was preceded by an era of fruit diversification that lasted into the early nineteenth century.

In 1905, the popular manual *The Nomenclature of the Apple* by W.H. Ragan listed 6,654 unique apple varieties referenced in U.S. literature between the years 1804 and 1904. A new book by Dan Bussey, *The Apple in North America* (in press), lists more than 14,000 named apple cultivars introduced to or selected in North America.

Market pressures on commercial apple growers have reduced the diversity of apple trees once grown in small family orchards to only a handful of commonly marketed apple varieties. Currently, a mere 11 apple varieties account for more than 90% of the apples sold in the United States, with ‘Red Delicious’ making up 41% of this figure.

Have historic and heirloom apple trees succumbed to their more popular commercially produced relatives? Apple trees can live to remarkably old ages; single apple trees have been known to live 150 years or longer. In many areas, it is still possible to find trees of ‘heirloom’ cultivars once abundant at the beginning of the 20th century. Remnant orchards planted before the modern era of fruit production hang on tenaciously around abandoned farmsteads and historic orchards.

Kanin J. Routson of the University of Arizona and colleagues at the U.S. Department of Agriculture’s National Centre for Genetic Resources Preservation published a study in the journal HortScience that assessed the genetic diversity of 280 apple trees growing in 43 historic farmstead and orchard sites in Arizona, Utah, and New Mexico. The study took place from June through September 2007 and focused sampling efforts primarily on sites dating back to the 1930s and earlier, with priority given to trees planted before 1920.

Using seven microsatellite markers, the researchers compared the samples to 109 cultivars likely introduced into the southwest in the late 19th and early 20th centuries. Genetic analysis revealed 144 genotypes represented in the 280 field samples. According to Routson, the study identified 34 of these 144 genotypes as cultivars brought to the region by Stark Brothers Nursery and by USDA agricultural experiment stations. One-hundred-twenty of the total samples (43%) had DNA ‘fingerprints’ that suggested they were representative of these 34 cultivars. The remaining 160 samples, representing 110 genotypes, had unique fingerprints that did not match any of the fingerprinted cultivars. The results of this study confirm for the first time that a high diversity of historic apple genotypes remain in homestead orchards in the U.S. southwest,’ the study explained.

The research team noted that additional genetic fingerprinting of apple cultivars will enable researchers to identify the unknown genotypes from the study. ‘Until further research is done, these unknown genotypes should be conserved and analysed for useful traits. Future efforts targeting orchards in the southwest should focus on conservation for all unique genotypes as a means to sustain both cultural heritage and biological genetic diversity,’ Routson added.
CACTUS CLUB FORMING IN PRESCOTT AREA

A local cactus club is forming in the greater Prescott area. Membership is open to anyone interested in growing, observing or photographing cacti and other succulents (including agaves, aloes, euphorbias, sedums, and yuccas).

The idea for a club originated with a program on cold hardy succulents given by Gene Twaronite, Instructional Specialist with the Yavapai County Cooperative Extension. A number of people at the program suggested forming a cactus club for this region.

The club as envisioned, according to Twaronite, would be informal, meeting perhaps once a month at various home gardens. The main purpose would be to bring together cactus lovers of all ages and backgrounds to share their knowledge, cuttings, and gardens with others. As the club progresses, there might also be occasional guest speakers or field trips to local natural areas to view some of our native succulents.

When not teaching about Firewise landscaping to area residents, Twaronite is an avid cactus and succulent enthusiast, who grows and displays many different species in his five acre wild garden in west Chino Valley.

Anyone interested in a local cactus club is invited to call Gene Twaronite (928 445-6590 ex. 231 or e-mail twaronit@cals.arizona.edu).

Protection of Agricultural Lands: Options for Saving Family Farms and Ranches

Join Yavapai County Cooperative Extension and the Central Arizona Land Trust as they present Protection of Agricultural Lands: Options for Saving Family Farm and Ranches, a workshop for land and estate preservation. The workshop will be held Friday, December 11, 2009 from 10:00 a.m. to 2:30 p.m. at the City of Cottonwood Public Safety Building, 199 S 6th St in Cottonwood.

Whether you’re a producer or merely a landowner, we hope you will join us for this informative workshop that is designed to help rural families keep and preserve their landholdings long into the future.

Lunch will be provided, and there is no cost to attend. If attending, RSVP no later than Dec. 7 by calling 928-899-4595 or emailing erikg@ag.arizona.edu

Gardening blogs

I hope you are reading my blog but if you are looking for something a bit more lyrical try the Coconino County Master Gardener blog. The latest article about a “mishmash” garden is fun. There is also an interesting article on mulch. http://blog.ltc.arizona.edu/highhelevationgardening/2009/02/

Volunteer Opportunity

2010 Camp Verde Pecan and Wine Festival
This is a fun annual event (wine, pecans, and antiques) and the Master Gardeners help with the pecan judging (weigh pecans, display them, assist judges) and staff an information table (similar to what we do at the Farmers Markets). Pecan judging: Friday morning, Feb 12th. MG Information table: Saturday and Sunday, Feb 13th and 14th. If you can chair the judging volunteers or can help with the pecan judging contact Mary Barnes, mcbarn1@cableone.net, 583-0889. If you can help staff the MG information table contact Lynn Hazlewood, klwoodz@cableone.net, 776-1018.
Congratulations!

The following MGs reached 50 hours.

Christi Armer (mentor–Cynthia Cartier-Roberts)
Darrell Barwick (mentor–Mary Barnes)
Lynnette Delacruz (mentor–Lisa Gerber)
Eileen Ferguson (mentor–Sherry Morton)
Jackie Haggerty (mentor–Cynthia Cartier-Roberts)
Teri Hutchins (mentor–Bev Bostrom)
Harold Sedgwick Sr.
Patrick Beatty (mentor–Sherry Howard)
Tammy Bergstrom (mentor–Herdis MacLellan)

Gardening Seminars

Garden Watering and Irrigation—January 12th (Prescott), January 26th (Verde Valley). Topics include wise watering practices, irrigation systems, gray water and rain harvesting.

Vegetable Garden Maintenance—February 9th (Prescott), February 23rd (Verde Valley). Topics include IPM, thinning, pruning, weeding, disease removal, harvesting, propagation and fall clean-up.

FROM THE EDITOR: Please send or email articles and announcements to the address below. All articles must be in my hands by the 10th of the month. Short announcements (no more than 2 or 3 lines) will be accepted until the 25th.

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MG Association Meeting
There is no meeting in December. The next meeting will be January 20.

Cindy Scott from Underwood Garden Heirloom Seeds
“Heirloom Seed, What Are They and How to Gather & Save Seeds”