Art Filippino is a volunteer's volunteer. Many of us applied for and took the UA Extension Master Gardener Course to gain knowledge, perhaps meet new people, and join the ranks of gardening technicians to spread science-based information. Art had all this in mind, but the core reason he took the class was to be able to volunteer. That was 20 years ago. Art retired from volunteering on the MG Help Line phone force April 26.

The well-oiled Master Gardener Association did not exist in 1993. The Extension office was on Marina Street, Prescott. However, the MG Help Line did exist. That was Art's first duty as a Master Gardener. Among the calls handled there seemed to be a continuing request for soil testing. Back in Virginia, where Art and wife Irene most recently had lived, soil testing was easily had at Virginia State U. As the saying goes, one notices a need and fills it. He was able to talk the then Cooperative Extension Agent, Deborah Young, into adding this service. Under Art's direction, local pH soil testing was established and has become one of the most used Extension services with 200 to 250 tests performed annually.

Master Gardening is not the only in-retirement (Art is a retired Controller) activity. Working with little funding and a lot of energy, Art co-founded Project AWARE homeless men's shelter in Prescott. He is also a long-time member of the Lions Club.

Living in England 12 years kindled Art's interest in gardening. His approach is quasi-organic with only limited and safe use of pesticides. When the "killer bee" mania erupted some years ago, he volunteered to take a UA class to educate himself to the real and perceived dangers of the Africanized honey bee. His many talks to local garden clubs and service organizations undoubtedly help calm many who feared this easily excited Hymenoptera.

You can't take the volunteer out of a person. Art expects to continue being the local source of gardening information for his Home Owners Association. If ever stumped, he knows he can call the Master Gardener Help Line.
Humans have explored every inch of the world and moved into space; we have pondered and explored the very basis of our life, although I still can’t get my head around the Higgs-Boson particle or much of physics for that matter. Every few months we hear more extraordinary news of what is going on in our bodies. Scientists are still finding species of plants and animals that no one has described before. It’s exciting and sometimes just stunning with new insights into things that even 10 years ago we had no idea existed. They are still studying plants and not just how to genetically modify them. Did you happen to watch “What Plants Talk About” on the PBS program Nature in April? http://www.pbs.org/wnet/nature/episodes/what-plants-talk-about/video-full-episode/8243/ If you didn’t you should. On one hand it might make you afraid to go into your garden. I have visions of the plants criticizing my gardening attire. On the other hand, it brought the realization of how little we really know about plants and how they survive in this world. Plants can change their behavior depending on the circumstances at the time. How weird is that; well first you have to get to the point of thinking plants actually have “behaviors.”

The program talked about a native Nicotiana species in Utah. The plant changed the time it bloomed and the type of nectar it produced when attacked by predators. Nicotiana serves as a food source for the Sphinx moth that feeds at night. The moth lays its eggs on the plant that hatch into the tomato lover’s nemesis, the hornworm. Once the hornworm attacks, the plant can make nicotine that is poisonous to some insects but not others. It also releases chemicals that other plants can recognize and they start to produce defenses. If the infestation is serious, the plant will actually stop blooming in the night and start blooming in the morning and the nectar it makes is changed to attract hummingbirds, discouraging pollination by Sphinx moths. Scientists don’t understand the mechanism for this change, they just know it happens.

Dodder is a parasitic plant that you can see in the Verde Valley. I have noticed it in the Jerome to Clarkdale area but it does occur around the State. It appears as a bright yellow string wrapping around a plant. The plant germinates from a seed and sends up a shoot, which moves around looking for a host. It has to find one in about 72 hours—otherwise it will die. It finds a host by scenting chemicals in the area. Dodder can actually distinguish between plants and will pick one plant over another. Once it wraps itself around the host plant it inserts itself into the vascular system. The root of the parasite then dies. In experiments the dodder seedlings can consistently pick out a preferred host plant when given the choice of two different plants.

In experiments done in Douglas fir forests, scientists were examining the relationship of fungi to the trees. They provided radioactive Carbon-14 to one branch of a massive tree. Within 24 hours the carbon had been moved from the original site to trees growing nearby, especially small saplings. I don’t know about you but I find that pretty amazing. You should watch the program and you will never look at your garden in the same way again.


Haven’t you always wondered about it? The smell of rain is one of the most wonderful things about rain. Who hasn’t stepped out of the house and just reveled in the scent. Well, there is a reason for the smell. Scientists from Australia found the smell comes from a blend of oils that plants secrete in arid periods and accumulate in soil and rocks. When a rainstorm hits, the oils are mixed with a fungal substance called geosmin in the soil and released into the air. (Geosmin is also the chemical that helps produce the clean musky scent of freshly turned soil.) The oils also inhibit seed germination. The scientists speculate that plants produce the oils to suppress competition. Humans can detect geosmin in very low concentrations, as low as 5 parts per trillion.

Thunderstorms also play a role in the aroma. Lightning splits O3 and nitrogen atoms in the atmosphere and they can recombine into nitric oxide, which then interacts with other chemicals to produce ozone. You might even be able to smell the ozone in the air.

Embrace the science: enjoy the experience.
Did you know most corn grown in America is for livestock? (And now ethanol, a lot has changed since 1996.) Lucky you, though, you don’t have to eat that hard dry stuff. Great varieties of sweet corn are in your future.

Corn is a native to the Americas. Modern corn’s antecedents are found in Mexico but corn is no longer known as a wild plant. Its only known relative is the teosinte Zea mexicana. This plant is considered a weed and will hybridize with cultivated maize. Pollen from corns’ ancestors has been found in archaeological sites dating from 60,000 to 80,000 years ago. The earliest whole cobs are dated about 500BC, but it appears that it did not become a staple crop until about 800AD.

Popcorn seems to be the earliest type, but sweet corn was first discovered in South America where it was valued as a source of sugar and means of improving the alcohol content of beer.

There are a number of different types of corn that come in a variety of colors.

Flint: When dry, flints generally store better and have a greater resistance to insect damage. Kernels are hard and flinty. When dry, flints generally store better and have greater resistance to insect damage.

Flint/Flour types: Ears have a mix of hard flint kernels and soft floury kernels.

Dent: Mature kernels are dented to a flour heart and flint sides. Used for elote (roasted), tamales, tortillas, corn beer and animal feed.

Sweet Corn: Used for pinole (roasted and reconstituted or fresh boiled). Kernel colors develop when the corn is past milk stage.

Popcorn: Used for pinole (toasted and ground) and as popped corn. Popcorns are flint corns. The popping action occurs because a small amount of moisture is retained in the kernel. As the kernel is heated the moisture expands, popping out of its shell.

Cultivation of corn is simple. Although most people start corn directly in the ground, corn seed can be pre-sprouted (great if you are running behind schedule). Roll the seed up in damp (not wet) paper towel and place in a plastic bag. Put in a warm location. Remove seeds and plant in soil as soon as they germinate. They can also be given a head start by starting in containers inside. They are real sun lovers so you need to make sure they have plenty of light.

Plant corn after there is no chance of frost. One of the biggest problems with corn is that you need to plant lots of it, so space could be a problem. Corn is wind-pollinated and you increase the chances of a full ear forming with larger stands. I have had some luck with smaller plots by planting closer together than recommended. If nothing else, you’ll get a few good meals from it.

Corn is an extremely heavy feeder. Prepare the soil with plenty of nitrogen and phosphorus. A second feeding should be applied about 4 weeks after the seed sprouts.

Wind is a real enemy of corn. A strong wind can knock down a field pretty quickly. If you have a small plot, you can go in and prop up the stalks. They seem to recover fairly quickly and I’ve had them still produce ears. To improve their anchoring ability, consider planting the seeds well below grade and as the plant grows shovel more soil around the base. Corn produces prop roots that support the plant. By graduallyhilling the soil around the base, Corn produces prop roots that support the plant. By gradually hilling the soil around the base, it increases the production of these roots and helps support the plant more firmly. Do not remove the “tillers” or additional stalks that develop around the base. These produce additional energy to the plant.
Water is essential. These are not particularly drought-tolerant plants. They will wilt if not watered frequently. (the leaves will curl up like a cigar.) Thoroughly soak at least once a week.

Some of the varieties grown by Native Americans will produce deeper roots and will grow at a faster rate. Experiment with some of these varieties, available through Native Seed/Search in Tucson.

Many of you are familiar with the loss of flavor and sweetness that occurs when corn is refrigerated. In some varieties it seems that to retain the best flavor you had to get the water boiling, rush out to the field and rush back into the house and drop the corn in. Today's modern sweet corn will now retain that sweet flavor for extended periods of time. The super sweet varieties have a more stable sugar content. (After picking, the sugars start to convert to starches.) Some people say that the super sweet varieties sacrifice a true corn flavor in favor of simple sweetness. Everyone has his or her favorite—you just need to experiment and find one you like.

Do not plant two corn varieties close together; cross-pollination can change the flavor of your corn. My experience has proven that. I once planted popcorn at 120 days and a super sweet variety that matured at 70 days, hoping they would tassel out at different times. No such luck.... I had the most interesting sweet corn. It was sweet but “stick to your teeth” starchy.

Major pests of corn are earworms. These can be prevented in small patches by placing a few drops of vegetable oil on the tip of the ear after the silks start to turn brown. This suffocates the worms. Bt can also be applied in the same way. Spraying can be done for large areas of corn.

A number of borers can cause damage to the stalk. Watch for small holes and bits of debris. Bt can be used on this pest also. Johnson grass is a host for these types of borers, so remove any near the corn patch.

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**Corn Chowder**

*from the Victory Garden Cookbook by Marian Morash*

4 oz salt pork. (For vegetarians just leave out and replace with your favorite herb.)
1 medium onion
2 C. potato chunks (1/4 inch cubes)
2 C. combination chicken (or vegetable) broth and water
Salt, pepper to taste
2 C. scraped corn*
1 C. corn kernels
½ C. heavy cream

Remove rind and cut salt pork into “logs” 2 inches long by 1¼ inches thick. Blanch in boiling water for 5 minutes. Drain; pat dry and cut into ¼ inch cubes.

Saute in a large saucepan over medium heat until crisp; remove and drain all but 3 tablespoons fat. Chop onion and cook in fat until softened and golden. Add potatoes, broth and water, 1-teaspoon salt and scraped corn. Bring to a boil; lower heat and cook, partially covered, until potatoes are tender. Stir in corn kernels and cook 5 minutes longer. Add heavy cream; cook until heated through. Season with salt, pepper and the pork bits if you like. Serves 4 to 6

For smoother texture, puree corn
Add chicken pieces if desired
Substitute fish stock and add pieces of cod or bass 8 to 10 minutes before serving.

*Scraped corn: Run a knife down the center of a row of kernels, slicing right down to the end of the ear. Continue until all the rows have been prepared. Place the corn over a bowl. Then, using the back of the knife, push or scrape down on the kernel—the flesh and milk will spurt out. Go back and forth, up and down the ear until it's finished. For larger amounts, invest in a corn scraper or make your own by attaching a dull-toothed blade onto a piece of wood.
One of the lost treasures of the human experience is a great loaf of caraway rye bread. Well, bread in general just isn’t as good as it used to be, but we won’t talk about that now. Caraway has been around a long time and is used in many parts of the world and is native to western Asia, Europe and northern Africa.

It is a member of the carrot family, so it is closely related to fennel, dill and parsley. The plant’s name has a confusing history. It is derived from the Latin ‘cuminum’ (cumin) and the Greek ‘karon’ (cumin) which became the Latin ‘carum’ now meaning caraway. (Thanks Wikipedia.) Other things come into the mix, including the Sanskrit ‘karaiv’ and the Italian ‘finocchio’, both of which normally refer to fennel. After that it gets more confusing, so let’s move on. The Romans are responsible for spreading caraway around Europe. It may be Europe’s oldest condiment. Evidence found in Switzerland dates back 5000 years.

Like all members of the family, caraway resembles a carrot. It has finely divided leaves with white or pink flowers in an umbel. The fruits (technically not seeds) of the plant are the crescent-shaped achenes that we call the spice caraway.

We use the spice for its anise-like flavor. It is very pungent. The sharp flavor is probably why it isn’t appreciated as much as other spices. While most are familiar with its use in rye bread, it is also used in casseroles, curry and even desserts. Some folks are familiar with caraway-scented sauerkraut. Apparently the use of caraway in sauerkraut at community festivals can create a lot of controversy! You can find it in cheeses also and the liqueur Aquavit. The roots of the plant have been used as a vegetable and the oil is used in soaps, lotions and perfumes.

In spite of America’s lackluster interest in it, caraway still is used throughout the world. It is an ingredient in the hot chili paste harissa. Primary producers are Egypt and Holland. The Egyptian variety tends to be milder.

Medicinally it has been used to relieve stomach complaints. Current research has shown that it may be an endocrine function support agent related to thyroid disorders and autoimmune diseases.

I haven’t tried to grow it. It does like warm sunny locations however, the summer heat would probably be too much for it. You might try it as an early spring annual or in the fall. It is typically more a biennial so if you can get it through its first summer it could work. Try mulching and find a spot where it would get afternoon shade during the summer.

Hearty Goulash Soup
http://recipes.epicurean.com/recipe/1366/hearty-goulash-soup.html

5 slices bacon, chopped
3 lbs. boneless chuck, trimmed and cut into 1/2-inch cubes
2 tablespoons vegetable oil
4 medium onions (about 1-1/2 lbs.), chopped fine
3 garlic cloves, minced
3 tablespoons paprika (preferably Hungarian sweet)
1-1/2 teaspoons caraway seeds
1/3 cup all-purpose flour
1/4 cup red-wine vinegar
1/4 cup tomato paste
5 cups beef broth
5 cups water
1/2 teaspoon salt
2 red bell peppers, chopped fine
4 large russet (baking) potatoes (about 2-1/2 lbs.)

Directions:
In an 8-quart kettle cook bacon over moderate heat, stirring until crisp, and transfer with a slotted spoon to a large bowl. In fat remaining in kettle brown chuck in small batches over high heat, transferring it as browned with a slotted spoon to bowl. Reduce heat to moderate and add oil. Add onions and garlic and cook, stirring, until golden. Stir in paprika, caraway seeds and flour and cook, stirring, 2 minutes. Whisk in vinegar and tomato paste and cook, whisking, 1 minute. (Mixture will be very thick.) Stir in broth, water, salt, bell peppers, bacon, and chuck and bring to a boil, stirring. Simmer soup, covered, stirring occasionally, 45 minutes.

Peel potatoes and cut into 1/2-inch pieces. Add potatoes to soup and simmer, covered, stirring occasionally until tender, about 30 minutes. Season soup with salt and pepper. Soup may be made 3 days ahead and cooled, uncovered, before chilling, covered. Reheat soup, thinning with water if desired. Makes about 16 cups, serving 12.
OLLI Gardening Class Huge Success

OLLI (Osher Lifelong Learning Institute) is a popular peer-directed organization within Yavapai College that many Master Gardeners are familiar with. Targeting people over 50 with continuing interests in learning, OLLI offers a wide range of 6 week programs.

Master Gardener Angie Mazella, rounded up 12 other MGs each of whom presented a one hour program on various gardening subjects during the 6-week class held in April-May. Varied topics were covered: irrigation, vermiculture, vegetable gardening, native plants, weeds and a host of others.

The class proved to be very popular with enrollment near the maximum and few people missing any class. Angie is considering doing the class again. It is likely she will have many repeat MG presenters.

The 12 Master Gardener presenters were: Matt Lukaszewski, Herdis Maclellan, Nancy Deane, Bob Gessner, Steve McIntyre, Sandy Lundgren, Lois Gotfredson, Sally Bethea, Joy Inman, Mary Barnes, Sue Smith and Bill Cart.

Congratulations

Jerry Riggins—mentor Faun Vogel
Jan Lockhart—mentor Jan Billiam
Mike Wagner

Iris Sale @ Prescott Farmers Market
Saturday May 11, 2013, 7:30 AM to 12:00 Noon.

Location: Yavapai College, 1100 East Sheldon Street, Performing Arts Parking Lot Prescott, Arizona.
Prescott Area Iris Society (PAIS)
Join PAIS for our Farmers Market Iris Sale. Many beautiful potted iris available in single and bi colors. Proceeds used to support community service projects in the Prescott area.
Visit also the beautiful Wm. R. Dykes Medal Iris Gardens at the Yavapai College Sculpture Garden adjacent to the Farmers Market.
For information call Judy (928) 776-7217 or Dennis (623) 980-6627. Visit our web site at http://prescottirisociety.org.
Email: president@prescottirisociety.org

Kaleidoscope of Color 2013
Saturday, May 18, 2013, 10:00 a.m. to 3:00 p.m.

The 14th annual Iris Exhibit, Kaleidoscope of Color 2013, sponsored by the Prescott Area Iris Society (PAIS), will feature an amazing variety of iris in all the colors of the rainbow. Come attend our free event and vote for your favorite iris. Enjoy the stunning displays of blooming and arrangements from local gardens. See planting and care demonstrations. Potted iris will also be on sale. Visit also the beautiful Wm. R. Dykes Medal Iris Gardens sponsored by PAIS located at the Yavapai Community College Sculpture Gardens.
For more information: Visit our web site at http://prescottirisociety.org
Contacts: Carolyn (928) 778-1551 or Dennis (623) 980-6627
Email: president@prescottirisociety.org

Kaleidoscope of Color event location: Mortimer’s Nursery, 3166 Willow Creek Road, Prescott, Arizona.
**MG Opportunities**

Sign-up for Monsoon Madness has started. Lots of help needed. Contact Missy Sandeen, rmsandeen@bullerinetworks.com, 771-9856.

**Farmers Markets**
Still lots of openings for staffing information tables at the Farmers Mkts. For Prescott (Saturday mornings) and Prescott Valley (Tuesday afternoons) contact Carole Jolly, carolejollyfun@gmail.com, 830-9190; for Camp Verde (Saturday mornings) contact Susan Williams, verdegardener@yahoo.com, 602-885-8117.

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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(928) 567-6703

Art Filippino and Jeff Schalau

**Searching the MG Newsletter on the Extension Website**

Trying to find something in the back issues of Yavapai Gardens has always been difficult. There is a partial index available. Steve Moody has figured out a way to do it and it works better than the U of AZ’s CALS search engine.

Go to: http://www.arizona.edu/search/google

In the search window type in: "Yavapai Gardens" (including the quotes) and the topic you are looking for. For example:

"Yavapai Gardens" tomato blight

The search engine retrieves all the issues with tomato blight information.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jeffrey C. Silvertooth, Associate Dean & Director, Economic Development & Extension, College of Agriculture and Life Sciences, The University of Arizona. The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, or sexual orientation in its programs and activities.
Next Meeting

May 15th, 6:30pm, Prescott – Class Welcome (in lieu of monthly MGA business meeting). Come meet the 2013 Associate Master Gardeners. MGs do NOT need to provide refreshments.