**Events & Activities**

MG Association Meeting, 3rd Thursday of the month, see back page for meeting schedule.

Alta Vista Gardening Club, Prescott, fourth Tuesday of the month, 12:30pm. Call 928-458-9508 for information.

Prescott Area Gourd Society, third Wednesday of the month, 10:30am, at Miller Valley Indoor Art Market, 531 Madison Ave, Prescott

Prescott Orchid Society, 4rd Sunday of the month, 1pm at the Prescott Library, (928) 717-0623

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

Mountain View Garden Club, Prescott Valley, Dewey area, 2nd Friday of month, 1:30pm, call 775-4993 for location as it changes.

Native Plant Society Meetings - Prescott. 2nd Thursday of the month, 6:30pm. Attending the talk qualifies as Continuing Education. Non-members are welcome. Highlands Center for Natural History, 1375 S. Walker Rd. (928-776-9550).

The Verde Thumbs Garden Club, Cottonwood 2nd Tuesday, 6:30 pm at The Seventh Day Adventist Church. (928) 634-7172

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**Ticks**

*From the Urban Integrated Pest Management website Colorado State University*

[https://ccsipm.wordpress.com/tools/](https://ccsipm.wordpress.com/tools/)

Ticks are arachnids (related to spiders) that feed on the blood of animals. They are found throughout Colorado, commonly at higher elevations and can occur from early spring to late fall. They are less common during the hottest summer months. Rocky Mountain wood tick (Dermacentor andersoni) and American dog tick (Dermacentor variabilis) are the most common ticks associated with people in the State. These ticks are usually found on grasses and low plants, waiting to attach to a host. They don’t fall from trees, jump or fly. Some 30 species of ticks occur in Colorado.

**See our fact sheet**, [https://ccsipm.files.wordpress.com/2014/02/ticks.pdf](https://ccsipm.files.wordpress.com/2014/02/ticks.pdf)

Health impacts

Ticks are important because pathogens (bacteria, viruses or protozoa) can be transmitted when infected ticks feed on humans. Both of the common ticks in Colorado (Rocky Mountain wood tick and American dog tick) can transmit Colorado tick fever, tularemia and Rocky Mountain spotted fever. Western black-legged ticks, which transmit Lyme disease in the Pacific Coast states, are not known to occur in Colorado and no confirmed cases have originated here. Contact your medical provider with questions about symptoms and treatment.

**What to do**

Keep ticks off by wearing protective clothing.

Always conduct a thorough “tick check” after walking through areas where ticks might be present.

If you find a tick, remove it by grasping it with tweezers, as close to the skin as possible.

Two insect repellants are effective – products with permethrin, which is used only to treat clothing, and DEET, which is applied to exposed skin or clothing. Take precautions when using any insecticide. Do not apply DEET to hands or other areas that may come into contact.
with the mouth. After use, wash or bathe treated areas.

If you develop a rash or fever within several weeks of removing a tick, see your doctor.

Take a look at their interesting blog on various pest, insects issues.  [https://ccsipm.wordpress.com/tools/](https://ccsipm.wordpress.com/tools/)

There is also a facebook page called “Got Bugs?” Search for Urban Integrated Pest Management

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**Spring Calendar**

**April Calendar**
Your gardening efforts should be at full steam by now. I'm writing this in February and I am already pruning and cleaning up because the iris are aggressively sending out new leaves and the honeysuckle is putting out flowers and a few leaves. Spring is coming really early. For those of you with fruit trees, I hope you made it without a late frost. Here are a few tasks you should be doing now if not done already.

**For entire County**

**April**
- Fertilize roses after leaves emerge.
- Replenish mulch.
- Watch for insects such as aphids and white flies.
- Plant pasture grasses and alfalfa.

**May**
- Adjust irrigation controllers for warmer temperatures and plant growth.
- Apply mulch as days get hotter.
- Watch for aphids and cutworms.
- Check shrubs such as juniper and pyracantha for spider mites; control by washing foliage now through August.
- Check undersides of elm leaves for elm leaf beetle.
- Promote beneficial insects by minimizing insecticide use and growing a variety of flowers and shrubs.

**Prescott area**

**April**
- Divide plants, fertilize, and water as in March.
- Protect tender plants from frost.
- Apply pre-emergent herbicide to ground covers.
- Plant cool-season grasses to control summer annual weeds.
- Pull cool-season weeds before they go to seed.

**May**
- Prune to remove winter damage.
- Dethatch tall fescue and perennial rye (rarely needed), follow with reseeding.
- Fertilize cool-season turf 1/2 lb N/1000 sq ft.
- Sow seeds of frost-tender annuals (e.g. cosmos, marigold, zinnia) now through June.
- Plant seedlings started indoors (wait until mid-month).
- Plant warm-season annual flowers (e.g. marigolds, zinnias, petunias, etc.).

**Sedona, Cottonwood and the Verde Valley**

**April**
- Adjust irrigation controllers for warmer temperatures and plant growth.
- Prune to remove winter damage.
- Divide late summer and early fall blooming perennials, fertilize and water as in March.
- Protect tender plants from frost.
- Fertilize cool-season turf grasses 1/2 lb N/1000 sq ft.
- Apply pre-emergent herbicide to warm and cool-season grasses to control summer annual weeds.

**May**
- Prune or remove spent blooms from blooming shrubs after bloom (e.g. forsythia, lilac, wisteria).
- Feed roses in bloom with a complete fertilizer.
- Feed and prune flowering shrubs after bloom.
- Fertilize bermuda grass 1/2 lb N/1000 sq ft.
- Fertilize cool-season turf grasses 1/2 lb N/1000 sq ft.
- Allow wildflowers to die and go to seed for next year’s crop.
- Sow seeds of frost-tender annuals (e.g. cosmos, marigold, zinnia) now through June.
- Plant seedlings that were started indoors.
- Plant warm-season annual flowers (e.g. marigolds, zinnias, petunias, etc).
When the weather shows signs of warming, gardeners are eager to spring into action. It is widely accepted that gardening is great exercise but, after a winter of not actively gardening on a regular basis, you could be setting yourself up for injury or strain. After some time off, easing your body slowly back into the demands of the garden is recommended. The most common gardening injuries are back strain and knee pain, according to J. Dan Nelson, a local area chiropractor. Some easy stretches can go far in helping prevent each of these.

Be sure to check with your doctor before starting any type of exercises, including stretches.

Lateral Stretch: For Back, Abdominals and Shoulders: Stand with feet together and knees slightly bent. Begin with left hand on hip, to support the spine and extend right arm overhead in line with your ear. Lean to the left and slowly reach to the left with your right arm. Hold your stomach in to keep your body in line. Switch and repeat on the right side.

Standing Forward Bend: For Back, Shoulders, Chest and Legs: Stand with feet together and knees slightly bent. Slowly bend forward placing hands on knees to avoid stress on lower back. (Tripod) Be sure weight is evenly distributed between both feet. Breathe deeply.

Cat–Cow Pose: For Back, Shoulders and Chest: Get down on all fours. Place your hands shoulder distance apart and your knees at hip distance. Cat: Gently tighten stomach muscles, pulling navel into spine and rounding the back—from head to tail bone. Lower and relax head and neck as you exhale. Cow: Drop your stomach toward the floor, arch your back and lift head upward as you inhale. Move smoothly from one position to the other.

Supine Twist: For Back: Lie on back with knees bent and arms out, palms up. Lower your knees to your right side, while keeping both shoulders on the floor. Turn your head in opposite direction of your knees looking out over the tips of your fingers. Inhale. Return to center. Repeat on the opposite side, exhaling as you lower knees.


Some reminders for getting in garden-ready physical condition and staying there.
* Exercise for strengthening core muscles:
* A proper pre-gardening warm-up lets your muscles ease into the tasks and lubricate achy joints.
* Pace yourself. Ease into the tough tasks first, before you’re tired and more likely to overexert yourself. When lifting, always bend from the knees—not the waist.
* Try to keep your back as straight as possible, use your thigh muscles to do the lifting. Move your feet closer to the object you are lifting and take a wide stance to balance yourself. Keep the object close to you as you lift it.
* Whenever possible use Dr. Nelson’s recommendation to form a Tripod to support yourself in the garden using elbows, knees or feet to take stress off your back.
* Don’t lift and twist in the same movement.
* Don’t hunch. If you squat when you weed, keep your back as straight as possible and move along as you weed, don’t reach too far.
* Kneel on both knees at the same time to avoid the temptation to twist or strain. Use a knee pad.
* Use tools with comfortable handles; There are many new “ergonomically designed” tools on the market.
* Remember to change hands from time to time.
* When using long-handled tools, stand straight and keep your knees relaxed. If you need to twist or pivot, step into the twist to ease tension on the back.
* Get out that wheelbarrow or wagon and use it.
* Sunscreen—you need more than you think and need it applied more often than you think.
* Wear a gardening hat, wide-brimmed (bigger is better) and one made of a tightly woven fabric outdoors.
* Drink your water.
* And lastly, a couple of tips from Jeff Schalau, County Director, Agent Agriculture & Natural Resources University of Arizona Cooperative Extension, Yavapai County: “Watch out for paper cuts on those crisp new seed catalogs” and “keep the gopher traps at the ready – spring is their favorite time of year.”

Have a happy and safe upcoming season.

Resources and additional reading:
http://www.nwedible.com/2012/03/the-7-best-strength-exercises-for-gardeners.html
http://gardening.about.com/od/springinthegarden/a/Exercises.htm
Worm Farming

Some Master Gardeners are worm farmers. They use worms to create a rich compost (vermicompost,) to enrich their gardens. Like any compost, it will improve soil structure. No expensive chemicals needed but it does take an infrastructure that doesn’t use too much space. You can buy ready-made bins and the material you need but most of it can be purchased at the hardware store or use leftovers from your house for a do-it-yourself project.

What you need:

The worms. You can’t use just any worm. Eisenia fetida are the most commonly used. You can get them online or check locally. There are people that sell locally or if you have a friend with a worm garden ask them where to get the worms. One pound is approximately a 1000 worms, which is good to start with.

The bins can be made of different materials, plastic, wood or Styrofoam will all work. Plastic boxes are just easy to find and not very expensive. You will need two that are at least 12 inches deep. The box needs to be dark as worms like it dark so either get a dark plastic box or make sure the container is thick enough or dark enough to exclude light.

Drill with 3/32 and 3/16 drill bits
Small flowerpot or a brick
Old newspapers and household food waste

Putting it together.

1. Mark out on all four sides and the top of one bin. You want good air exchange. Mark about 20 holes in the bottom. Leave the second bin blank.

2. Drill out the holes using a 3/32 drill bit on the lid and sides. For the bottom use a 3/16th bit.

3. Place the brick or flowerpot in the center of the undrilled bin. Stack the drilled bin on top. You need the space for the liquid to drain.

4. As with most real estate decisions, it’s location, location, location. You don’t want the worms to get too hot or too cold. Site your worm bins carefully—some people even keep them in their homes and basements.

5. The bedding serves the same purpose as “brown” material in a compost pile. You can use shredded newspapers or torn up corrugated cardboard or dried leaves. Avoid glossy-color material and leaves with a strong aroma. Wet the material down until it is like a wet sponge, moist but still fluffy.

6. Add worm food. Table scraps are the best. Do not add oil or animal products like bone, meat or fat or dairy products like butter or yogurt. Acidic materials like citrus peels and coffee grounds can be used in moderation.

7. Add the worms.

8. Use a few sheets of wet newspaper and lay flat on the worms on top of the bedding. Roll a few sheets and wet them and tuck them around the edges creating a sealed barrier. This prevents fruit fly infestations.

9. Wait. It will take time to get the process going but within a few weeks they will be consuming their own weight in food a day. If you have put in a pound of worms, put in about a pound of food scraps a day. Try to have a variety of scraps. Feed them every few days but they can be left for as much as two weeks. To avoid smells, bury the scraps underneath some bedding and add the scraps to different locations in the bin.

You should start to see a dark brown coffee-ground type material. This is your compost that the worms have been creating. To harvest, add some food to one end of the bin and in a few days you can scoop out the compost. If you dig up a few worms that’s ok just make sure you aren’t
removing large quantities. You can also collect the liquid in the lower bin and use it on your plants.

All commercial worm farms use a system of stacked bins. The size varies but in any type of system, the bins are the same size and the drilled holes are consistent.

That's it, you now have a simple worm farm.

Links to worm farming information follow:

https://www.openpermaculture.com/magazine/10-easy-steps-worm-farm

Gardening4life.blogspot.com/2009/04/setting-up-composting-worms-bin.html

This video describes the types of bins, drill size, hole location, their purposes, food types—pros and cons, bedding materials, moisture, temperature ranges, site location and the worm species.

The following links use a bin system which provides for the containment of the liquid produced, the castings and the migration of the worms. The bottom bin does not move but the upper three rotate. This is similar to a 2-bin system but illustrates methods to handle usable by-products

Making Your Worm Farm
theproductivegarden.com/2011/10/how-to-make-a-worm-farm/

Other information is available on the site theproductive garden.com

Don’t Throw it Away! Regrow it!
by Nora Graf

I found a chart on Pinterest that Whole Foods put out. It promotes taking the scraps from your kitchen and re-growing them, creating a truly recyclable garden. I thought it was an interesting idea so went searching on the internet to see what was out there. While this idea strikes me as more fun than useful, what’s wrong with a little fun? Some of the ideas were expected, like planting garlic cloves and potatoes and sweet potatoes. If you have done any vegetable gardening you know these.

The idea of saving seeds from your leftovers and planting seems pretty pointless; that's just planting a garden and not what I would call re-growing from leftovers. The other problem is most of the vegetables you buy in stores are hybrids and unlikely to grow back as expected. Seems more likely to discourage people from gardening than anything.

Some were downright silly like starting avocados, various nuts and tree fruits from seed and harvesting them at some point. Really??!! While it is feasible it just seems to be impractical unless you have space and time.

There were some that might be fun to try, so here we go.

The most surprising were mushrooms. You would need a container filled with a mixture of nutrient-rich compost and soil. Take the stalk of the mushroom and put it in the soil so only the surface is exposed. Keep in a cool, humid, shady place and, if it takes, you should have new growth quickly. The stem should re-grow its cap.

I’ve heard about growing your own ginger for a long time, even tried it once with no luck. Keep in mind ginger is a tropical plant and needs a different climate than we have to grow well, so it will have to be babied a bit. Buy a healthy chunk of ginger at the grocery store and soak in water overnight (this step seems to be optional). Then plant it in a container with a good potting soil. The buds should face up. Theoretically the rhizome should sprout in a week or so.


Green onions, fennel, spring onions and leeks aren’t as difficult as ginger and this is actually a pretty easy way to create a small bed of onion greens. Cut off the root end and
place it in water—some of the stem should be above the water. In a few days the greens will start growing you can then start snipping them off to use in cooking. You can also plant in potting soil or in the garden. You can take a regular onion and cut the root end off and start it also.

Lemongrass is used frequently in Asian dishes and it is easy to grow. After cutting off the leaves to about an inch above the stem, put in a container of water. Once the roots get about 3 inches long you can pot it in soil and you now have a perennial supply. Well, that is if you protect it from the cold. It is frost sensitive. You will need to protect it in the winter. I bring mine inside where it does poorly but survives until spring. http://www.gardenbetty.com/2010/10/how-to-propagate-lemongrass/

Pineapple is a fun one to try, just don’t expect a giant full-sized pineapple, although it could happen. Take a pineapple and either twist the leafy top off or slice it off. If you slice it off remove all the soft fruit and skin around the root bud (see picture). Remove some of the lower leaves. Place in water for about two weeks and the roots should start sprouting. Plant in a rich soil and place in a sunny location. It might need some afternoon shade here. New leaves should start to appear fairly soon. It will be two to three years before a pineapple is ready to harvest. I’ve grown pineapple—just never had one survive long enough to grow fruit. It has to be protected from the cold. http://www.17apart.com/2013/02/how-to-plant-
grow-pineapple-top.html

Basil and cilantro are easy ones. With basil just take a stem about four inches high and put in a glass of water with the leaves above the water line. With cilantro take the bottom of the stem. Roots should start in a few days. Once the roots are a couple of inches long you can plant in soil.

Lettuces, celery, cabbage and bok choy are also easy to re-grow. Once again cut off the root with a bit of the stem. Submerge the roots with top above water. Spritz the top with water at least a couple times a week. In our dry climate you may need to do this more often. In about a week the leaves should re-sprout. You can then plant in soil with only the leaves above the soil.

Root plants like turnips, beets and carrots are easy too, take the tops and place in water. New growth should start to appear in a few days; let grow until the roots have grown about 2-3 inches long and plant in soil.

To me, most of these sound like fun projects you might want to do with young children. As an adult I think it’s just easier to grow from seed except for the exotics like pineapples, ginger and lemongrass but if you hate to throw anything away this might be the way to go. So have fun,
**MG Announcements**

**Volunteer Wanted!**
Do you enjoy writing? Taking photographs? The Public Relations committee needs a chair. Write articles about Master Gardener events for the newsletter, send out press releases to the media (approved first by Jeff), work with the historian to cover the year in photos and words, coordinate “master gardener journalists” with cameras or smart phones to take photos at events. If this sounds like fun, contact Mary Barnes or Debbie Allen.

10 Plants Each!
At last years Monsoon Madness sale we ran out of plants very early prompting a call for more plants for this years sale. If everyone donated 10 plants, we could raise a lot more money to support the Master Gardener program. **No excuses! 10 Plants!**

**Desert Horticulture Conference, Tucson**
Registration and schedule for the 2015 Desert Horticulture Conference, June 15 is now available online at [http://cals.arizona.edu/deserthort/](http://cals.arizona.edu/deserthort/).
Be sure to register now to receive the Early Bird and Starr Pass Resort hotel discounts. $75 if you register by May 22, $100 after that date. Hands-on workshops have limited seating, sign up early.

2015 Newsletter Schedule
The newsletter comes out every two months. Deadlines have changed. The list below shows the issues, when they will be published, basically the day they will be available (or close to it) for you to read and the deadlines for each issue. Longer articles need to be sent in earlier than in the past, so please note that. If the article is time-sensitive, please let me know ahead of time but please get it to me by the deadline. There is a lot more latitude to the short announcements (a few lines) and if you let me know in advance something is coming I can be a bit flexible about things.

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FROM THE EDITOR: Please send or email articles and announcements to the address below. All articles must be in my hands by the 5th of the month. Short announcements (no more than 3 to 5 lines) will be accepted until the 25th.
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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 Meetings

April 15 in Prescott: Master Gardener Bob Gessner will talk on “Fungi in our gardens and landscapes”.

*The Prescott meeting is held at the Extension office on Rodeo Dr.*

May 20 in Camp Verde: Master Gardener Garry Neil will speak on “Lichens”.

*The Camp Verde Meeting is held in the Yavapai County Superior court building, 2830 Commonwealth Dr.*