Welcome to this, our February edition of the Pinal County Cooperative Extension newsletter. We hope that the articles here will give you a peek into the wide variety of educational programs available from our faculty and staff. With school starting once again and people coming back from winter vacations, our stakeholders are gearing up for a new year. From 4-H registration, to garden and landscape seasons, to family and personal enrichment, there is much happening. If something looks interesting to you, why not come and let us share with you.

Sincerely,

Rick Gibson
County Extension Director
Working Safely in the Garden or Landscape

While often peaceful, the garden or landscape is not always the safest place to work. No one really wants to lose fingers or toes in a lawn mower accident, finish a great day in the garden with a strained back, or spend an afternoon in the emergency room recovering from heat injury. These are just not fun experiences. Yet, all too often, a day in the yard ends up with someone in pain. Safety should be a topic of concern for all who work outdoors.

People find all kinds of ways to hurt themselves. Lawn mower accidents, dehydration, muscle strains, flying debris injuries, cuts, punctures, and a whole host of other problems can afflict those who work in gardens and landscapes.

According to the National Institute for Occupational Safety and Health (NIOSH), 789 traumatic injury deaths occurred among landscape service workers and their first line supervisors between 2003 and 2006. While most of these deaths, about 33%, were related to transportation to and from jobs, a good many were due to falls, being struck by falling objects, and electrocutions. Of those deaths reported, 318, about 40%, occurred around private residences.

While news of fatalities can be quite sobering, other less serious accidents can significantly impact lives. A strained back, for example, is still a painful injury and can take its toll on an individual’s overall productivity. If all it takes is a little training, experience, and vigilant awareness to prevent injury or death, it just makes no sense to ignore safe practices.

The best way to prevent a lot of injuries is to dress correctly for the job. Properly fitting, long or short-sleeved shirts and long pants prevent injury from the sun as well as from scratches and pokes. High-top, lace up boots and shoes with traction soles and steel-reinforced toes provide support and protection to feet, and ankles. Is it really a good idea to run a power mower in sandals, flip-flops, or bare-feet? All it takes is one mistake and a trip to the emergency room is added to the day’s list of things to do. Give yourself a break and cover up those feet.
If you use a string trimmer or other high velocity piece of equipment that could fling pebbles, twigs, or other loose material, think about investing in a face shield or goggles to protect your eyes from dust and flying particles. Yes, this equipment can be a little uncomfortable during the summer heat, but a little temporary heat rash is much better than permanent blindness.

If the conditions are dry and dusty, it is a good idea to use a dust mask or other type of respiratory protection. I use a mask each time I run the blower over the carport, unless the wind is blowing fast enough to keep the air around my face clear.

If you work around trees outdoors, you may want to purchase a plastic “bump” hat. A friend of mine once asked me when the tree in his front yard would “grow up” far enough to give him room to mow his lawn without hitting his head on a low branch. I had to tell him that trees do not grow that way. I suggested that he either prune back that low hanging branch or invest in head protection.

I rarely work outside without a good pair of gloves. I like a pair of inexpensive but sturdy leather gloves for almost all jobs. Mine have a cloth or canvas backing for coolness during the summer, but sturdy leather covering the palms. A good pair of gloves will protect the hands from cuts, scrapes, chemical or thermal burns, and vibrating equipment. In the summer, gloves will also offer protection from scorpion stings or spider bites while you are gathering loose litter or other materials.

Before you use any power equipment, read the directions. The directions will give you suggestions for safe operation of the equipment. This is especially true of power mowers, string trimmers, and hedging shears. Many hand tools also offer suggestions for safe use. It is always in our best interest to learn and follow the recommendations. I still have a scar on the tip of one finger where I got in a hurry, was working without gloves, and nipped the tip of my finger with a pair of hand operated grass shears. It frequently reminds me to remember and practice safety rules.
We often work with a variety of lawn or garden chemicals. Fertilizers, insecticides, weed products, and fuel for power equipment are commonly used by “do-it-yourselfers” as well as professionals. All chemicals present a variety of hazards and must be used correctly. The best source of information to correctly mix, use, and store chemicals is the label. The label is a legal document and will provide key information for safe use. Gasoline and other combustible fuels should be safely stored and carefully used to prevent burns and toxic reactions from inhalation and ingestion. If instructions say to use protective clothing and equipment, use them.

Most outdoor people know the value of getting the chores done early in the summertime. An early start when the air is still relatively cool will go a long way towards preventing heat injuries and dehydration. Plan to be out of the yard or in the pool by the time the temperatures near 100 degrees F. Temperatures over the magic three digit mark will quickly draw the energy right out of you and perhaps lead to heat exhaustion or even worse, heat stroke. Be sure to drink plenty of water during your work session. Staying hydrated will help ward off heat injury.

Don’t even get me started on safety violations while pruning trees and shrubs! Over the years, I have seen a lot of mistakes resulting in some devastating accidents, accidents that could have been avoided by simply following a few basic rules.

A most important rule, and one that is commonly violated, is “use the right tool for the job.” For example, never use a circular saw for pruning large branches out of a tree. One slip and the blade hits the leg. I have heard of too many who made this mistake and have ended up fighting for their lives. When a hand tool is required for pruning, use a pruning saw and not a woodworking saw. Pruning saws always cut on the “pull” stroke and not the “push” stroke as a protection from falls and other injuries. Putting pressure on the pull stroke gives the operator better control and stability on a ladder. If you must use a chain saw, for crying out loud, know what you are doing. Watching people work out of balance on a ladder or hanging precariously in a tree with a chain saw strikes terror in my heart. Let’s be safe out there!

No matter what the job, working safely outdoors requires training, experience, and vigilant awareness. Whether working with power tools, lifting heavy loads, or working in hot weather, we can be safe from injury if we exercise caution and a little common sense.
Bigger isn’t always better – especially when it comes to serving sizes of food! Whether you are a child or an adult, our bodies don’t need all those extra calories we get from huge portions often served at restaurants. Nutrition professionals agree that serving sizes do count, and a “serving” of food is completely different than a “portion” of food. Here’s the difference . . .

A “serving” is a unit of measure used to describe the amount of food recommended from each food group. It is the amount of food listed on the Nutrition Facts panel on packaged food or the amount of food recommended in the *Dietary Guidelines for Americans*.

A “portion” can be thought of as the amount of a specific food you choose to eat for dinner, snack, or other eating occasion. Portions, of course can be bigger or smaller than the recommended food servings.

### Serving Size Visuals

Keep an eye on your portion sizes!

1 FRUIT serving = ½ cup canned or 1 medium fruit
   (about the size of a tennis ball)

1 MEAT, FISH OR POULTRY serving = 3 ounces
   (about the size of a deck of cards or the palm of your hand)

1 GRAIN serving = 1 slice bread, pre-sliced or
   1/2 cup cooked pasta or rice

1 DAIRY serving = 8 ounces or one cup
   (the size of a container of individual yogurt)

1 VEGETABLE serving = 1/2 cup cooked or canned vegetables
   (about ½ a baseball)
1 FAT serving = 1 teaspoon  
(about the size of 4 stacked dimes)

**Handful = 1-2 ounces**  
Example: 1 ounce nuts = 1 handful or 2 ounces pretzels = 2 handfuls

**Fist = 1 cup**  
Example: Two servings of cooked pasta, rice or oatmeal

**Palm = 3 ounces**  
Example: a cooked serving of meat

**Thumb = 1 ounce**  
Example: piece of cheese, ½ serving of peanut butter

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Here are some steps that may help you control the portions you eat at home, away from home, or at school:

- **Never “up-size” your meal!** Fast food portions are big enough and often contain enough calories for two people.

- **Avoid “meal deals”**. More food does not mean a better value. Is it really worth those extra calories?

- **Good portions come in small packages**. Stay away from family size bags of snack food items.

- **Your plate matters**. Try eating on smaller plates. You will feel like your eating more. Fill half your plate with fruits and vegetables and split the rest of your plate between lean protein and whole-grains. We call this the “Healthy Plate Method”.

- **Learn what a real serving is**. Read food labels to determine what a proper serving size is of your favorite foods.

- **Watch what you are doing at the soda fountain!** When it comes to soda pop, portions really matter. In a 12 ounce can of soda there are 10 ½ teaspoons of sugar and 150 calories. Serve yourself a 32 ounce portion of soda and you now are drinking 27 teaspoons of sugar and 400 calories.

- **You carry your own “measuring cup” with you**. Don’t forget about using your hand, palm, fist and fingers as your own personal measuring cup.
My first article for the Pinal County newsletter was titled “Pinal County has got things growing on! Well let me tell you, we still do. All of the gardens mentioned in our August newsletter, of which there are five, are still on growing. One needs a little tweaking, but it will be back producing in no time. Currently we have two new gardens under construction and three more on the drawing board.

One new garden that is well on its way came about from our very own Esmeralda Castillo. She is the EPNEP Program Coordinator for Pinal County. She contacted me to see if it was possible to install a new garden at the Hope Women’s Center in Coolidge. The center is a non-profit organization dedicated to helping area women who have fallen on challenging times and are needing a boost. It is located in a former model home office building nestled in a small family neighborhood that gives the participants a sense of home and community. Even though the center is only open two days a week, the agenda is packed with all kinds of activities and person to person interaction to help ease the ladies back into a normal routine of interacting positively with others and gives them a sense of security and belonging.

Once we were sure the center was SNAP-Ed eligible, Esmeralda and I started to work laying the groundwork for the new Hope Women’s Community Learning Garden. We met at the center where we were introduced to the staff and received a tour of the facility. While there I was pleasantly surprised to see that at some point in time three raised planting beds had been installed. The planters had been filled with straight bark mulch and I knew right away we had to get to work planning.
The next couple of weeks I spent time inside with the center getting to know the ladies, listen to their stories and talk about gardening experiences of their own. As we talked about gardening in Arizona they learned about what a garden is all about, what all goes into building one and the types of gardens for different living situations. Depending on what type of garden to be constructed, whether it being in ground, raised bed or container gardening, the main goal is to grow food and be successful. Prior to moving the class outside to start work, I presented each of them with the University of Arizona Cooperative Extension bulletin No. AZ1435 ‘Ten Steps to a Successful Vegetable Garden’. (For those of you who are avid gardeners, you should acquire this publication). In my opinion, it’s a must.

Fortunately for all of the ladies the main infrastructure of the three raised bed gardens were already there. On our first day of garden preparation, I came prepared with an arsenal of shovels, rakes, hoes and whatever else we could possibly need. I explained that we needed to remove all of the mulch from the raised beds that were filled to the brim. They created three separate piles of mulch to which we began adding fertilizer, manure, organic matter, other amendments and soil acquired from the back portion of the centers property. After creating our soil mixture with some blood, sweat and I believe a few tears, the soil piles were finally ready to reload into the raised garden boxes. We spent the next class session filling the raised beds and constructing individual drip irrigation system for all three raised bed gardens.

By this point, the ladies were extremely enthusiastic about finally getting their garden planted. We used our Ten Steps publication and decided to plant some easy to grow crops to start. Since the weather was starting to turn, we decided to plant different varieties of radishes, carrots and beets. Wow! Success on the first try! Because it was still warm enough, the radishes popped out of the ground like no bodies business. The carrots and beets followed soon behind and were all being harvested by Thanksgiving.

The ladies are already looking to warmer weather and have begun construction on three new in ground garden beds complete with drip irrigation. I will give more of an update as the spring season progresses.
Pinal County Cooperative Extension hosted a ten member AmeriCorps NCCC service team in November and December. The AmeriCorps team had work projects all around the county and one of them was at the Casa Grande Middle School where they gave the garden a jump start prior to the STEM students getting involved. The team members were all assigned different tasks and after a full day’s work it was amazing to see what they had accomplished. As the saying goes, “Many hands make light work”. That is so true because they made the flat empty first quadrant actually look like the beginnings of a garden.

When the STEM students came on board, they came ready to work. For many of them, working the garden was a natural. They picked up were the AmeriCorps team left off and made that first quadrant picture perfect in no time. In the mean time they will continue working on the other three quadrants prior to spring planting. Come planting time, the students will be eager to get their corn in the ground. Their main goal is to grow their first healthy tall crop of corn, but must remember that prior to becoming a garden, the site was a compacted Bermuda grass covered playground. Not only will the STEM students be battling Bermuda grass, they will also have competition with the gophers that have long been inhabitants in the playground. To me, I guess that’s what STEM is all about. Not only do the students have a new garden to care for, they also need to hone their skills at some major problem solving. Keep growing on.
At the beginning of a new year, we naturally tend to look ahead at how we can improve or get organized. One way is to take a look at our health records and start an “All About Me” folder for each family member. You can use any type of folder or binder with pockets and have each family member decorate their own.

Some ideas to include in your “All About Me” folders are:

**All medical papers, including:**
- Birth certificate
- Immunization records
- Health checkups
- Screenings
- Physical exams
- Your notes
- Keep notes on illnesses, symptoms, and medications that were taken, along with age and date
- Documents recording their weight and height charts

**Screening Dates and Results:**
- Some recommended screenings* include:
  - Vision (can be performed starting at 6 months)
  - Hearing (which can be performed at birth and at least once a year)
  - Developmental (which can be performed every 3-6 months)
  - Dental

**Pictures and Milestones:**
- Pictures showing their growth
- A calendar for milestones - For more information about milestones, go to [http://www.cdc.gov/ncbddd/actearly/milestones/index.html](http://www.cdc.gov/ncbddd/actearly/milestones/index.html)

Anything else you would like to document or record for each family member. Be Creative!

*Many of the recommended screenings will be completed at the pediatrician, but in Pinal County - Vision, Hearing, Developmental, and Dental screenings can be completed, at no charge, through other agencies or programs such as the University of Arizona Cooperative Extension. Call and make an appointment, (520) 836-4651. For more information on our program, go to our website at [https://extension.arizona.edu/pinal-developmental-and-sensory-screening](https://extension.arizona.edu/pinal-developmental-and-sensory-screening).
Principles of Home Canning

Questions are often posed at the Pinal County Extension office regarding why anyone would want to can food at home and the process of how to do it. There has been a resurgence of this practice and the reasons are many on why we see this trend. Canning can be a safe and economical way to preserve quality food at home. Canning homegrown food may save you costs of buying commercially canned food and you know exactly what the ingredients are in your home canned product. Canning favorite and special products to be enjoyed by family and friends is a fulfilling experience and source of pride for many people.

How Canning Preserves foods

The USDA Complete Guide to Home Canning states fresh foods often contain a very high percentage of water. This makes it more likely that the food will easily spoil. There are four main reasons why foods spoil or lose their quality for several reasons:

- growth of undesirable microorganisms—bacteria, molds and yeasts,
- activity of food enzymes,
- reactions with oxygen,
- moisture loss

Microorganisms live and multiply quickly on the surfaces of fresh food and on the inside of bruised, insect-damaged and diseased food. Oxygen and enzymes are present throughout fresh food tissues (USDA, 2015).

USDA recommended canning practices include:

- carefully selecting and washing fresh food
- peeling some fresh foods
- hot packing many foods
- adding acids (lemon juice or vinegar) to some foods
- using acceptable jars and self-sealing lids
- processing jars in a boiling water or pressure canner for the correct period of time

Collectively, these practices remove oxygen; destroy enzymes; prevent the growth of undesirable bacteria, yeasts and molds; and help form a high vacuum in jars. Good vacuums form tight seals which keep liquid in and air and microorganisms out (USDA, 2015).
Ensuring safe canned foods

Growth of the bacterium Clostridium botulinum in canned food may cause botulism—a deadly form of food poisoning. These bacteria exist either as spores or as vegetative cells. The spores, which are comparable to plant seeds, can survive harmlessly in soil and water for many years. When ideal conditions exist for growth, the spores produce vegetative cells which multiply rapidly and may produce a deadly toxin within 3 to 4 days of growth. Botulinum spores are on most fresh food surfaces. Because they grow only in the absence of air, they are harmless on fresh foods (USDA, 2015).

Removing bacteria, yeasts and molds from most food surfaces is difficult. There are several things you can do to limit their numbers – washing the fresh food, peeling root crops and tomatoes. You can blanch the food product as well. The vital controls are the method of canning and making sure to use the recommended research-based process times. These times are provided in the USDA Complete Guide to Home Canning or the Ball Blue Book Guide to Preserving.

More information will be forthcoming on the popular topic in future newsletters. Additional resources can be found at the National Center for Home Food Preservation website:  http://nchfp.uga.edu/index.html and by contacting the Pinal County Cooperative Extension, Lori Lieder, Program Coordinator, Sr. (520-836-5221, x 216)

Next topic: Preservation Methods: Water Bath Canning, Pressure Canners, Dehydrating and Freezing
Come One, Come All....to the 2016 Pinal County Fair!

Pinal County 4-H welcomes you and your friends to attend the 2016 Pinal County Fair to support Pinal County 4-H youth and their families during the week of the fair. What can you see? The 4-H still exhibits are located in Building #2, 4-H small stock is located in the Faul 4-H Learning Center Barn and 4-H livestock is located in the Livestock Pavilion. Come and enjoy 4-H exhibits, demonstrations, contests and more!

11 Mile Corner Road
March 16 - 20, 2016
Don't miss out!
University of Arizona Pinal County Cooperative Extension

4-H provides educational opportunities for youth to become capable and contributing members of a global community. Children, ages 5-19, learn about healthy lifestyles, animals, plant sciences, and leadership. 4-H Contact: Kimberly Gressley at (520) 836-5221, x.213 or gressley@cals.arizona.edu

Agronomic Field Crops uses research and education efforts to work to improve field crop productivity and global food and fiber supply, farm economic viability, and protecting the environment. Contact: Rick Gibson at (520) 836-5221, x.227 or gibsonrd@cals.arizona.edu

Brain Builders is a 16 hour training for child care providers and parents focusing on early brain and child development for children, ages 0-3. Brain Builders Contact: Sally Peoples at (520) 836-5221, x.224 or speoples@cals.arizona.edu

Child Care Health Consultations (CCHC) develops relationships with childcare facilities to provide training to staff that will improve their knowledge and practice in the childcare setting. CCHC Contact: Janet Jepsen at (520) 836-4651 or janeti@cals.arizona.edu

Choose Health Action Teen (CHAT) is designed to recruit teens to teach younger children the benefits of healthy eating and active living. Teens also participate in community service events. CHAT Contact: Esmeralda Castillo at (520) 836-5221 or ecastill@cals.arizona.edu

Developmental Program reaches out to families with children, ages 0-5, to screen for early developmental milestones such as gross and fine motor skills, communication, personal-social skills, and problem solving capacities. Developmental Contact: Esther Turner at (520) 836-5221, x.211 or eturner@cals.arizona.edu

Expanded Food and Nutrition Education Program (EFNEP) is a nutrition education class designed to assist limited resource families in eating smart and being active and in acquiring the knowledge, skills, and behavioral changes necessary to contribute to their personal development and the improvement of the total family diet, nutritional and physical well-being. EFNEP Contact: Esmeralda Castillo at (520) 836-5221 or ecastill@cals.arizona.edu

Master Gardener Program trains volunteers to provide up-to-date, locally tested practical information to those desiring to improve the quality and effectiveness of desert gardens and landscapes. Master Gardener Contact: Rick Gibson at (520) 836-5221, x.227 or gibsonrd@cals.arizona.edu

Ms Hijos, My Kids Childcare Recruitment is designed to assist applicants in becoming DES certified to provide childcare in their home. Mis Hijos Contact: Sally Peoples at (520) 836-5221, x.224 or speoples@cals.arizona.edu

Project CENTRL prepares highly motivated leaders to be more effective in meeting the growing challenges facing agriculture in rural Arizona. Project CENTRL Contact: Karen Vanderheyden at (520) 316-0909 or kvander@ag.arizona.edu

Project WET (Water Education for Teachers) is a program designed to teach educators how to better integrate water education, water conservation, and best management practices for water use into their curriculums. Project WET Contact: Chuck Dugan at (520) 836-5221, x.210 or cid1@email.arizona.edu

Sensory Program provides free screenings of children, ages 0-5, for vision and hearing impairments that could affect their developmental growth. Sensory Contact: Esther Turner at (520) 836-5221, x.211 or eturner@cals.arizona.edu

Soil Fertility Research and Education is a program that focuses on the development of research and education on soil testing, nutrient management, and fertilizer and animal waste best management practices. Contact: Rick Gibson at (520) 836-5221, x.227 or gibsonrd@cals.arizona.edu

Strengthening Families Program is a parenting and family strengthening program for families with children ages 3-5, that focuses on strengthening parental bonds with their children and learning more effective parenting skills. SFP Contact: Esther Turner at (520) 836-5221, x.211 or eturner@cals.arizona.edu

Teen Outreach Program (TOP) is an evidence-based youth development program that is designed for youth ages 12–17 and focuses on reducing rates of school failure, school suspension, and teen pregnancy. TOP Contact: Ashley Tapia at (520) 836-5221 x217 or ashleytapia@email.arizona.edu

University of Arizona Nutrition Network (UANN) is a program designed to influence healthy eating and active living in a positive way that promotes health and reduces disease among all people living in Arizona. UANN Contact: Jennifer Staples at (520) 836-5221, x.207 or jstaples@cals.arizona.edu

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Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting (Cooperative Extension, Pinal County, 820 East Cottonwood Lane, #C, Casa Grande, AZ 85122, 520.836.5221). Requests should be made as early as possible to allow time to arrange the accommodation.

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