Hello, I’m Cathy Martinez. I’m the Family, Consumer, and Health Sciences Agent with Cooperative Extension in Pinal County, and also the new County Extension Director. Rick Gibson is still here and serving as our Ag and Natural Resources Agent, while also serving as the Interim Director for Extension in Gila and Pima Counties.

Each quarter we strive to create a newsletter that is informative and provides information that can help you, our readers, to address issues and challenges that you’re encountering. We encourage you to let us know of topics you would like to have addressed in future issues.

Our mission in Cooperative Extension is to bring science to bear on practical problems, whether they are in agriculture, youth development, family relationships, child development and health, etc. Please feel free to call, email, or stop by our office to request information or learn more about the programs we have to offer.

Salads were recently in the news – and off America’s dinner tables – when romaine lettuce was recalled nationwide. You can read more about E. Coli and how UA researchers are involved in helping keep our food supply safe to eat here:

https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1767-2018.pdf

Our weather is starting to warm up and when that happens in the desert we have to be more vigilant about staying hydrated. We have a new Extension publication to help explain hydration and its role in keeping our children healthy:


Spring is also the time of year when we start seeing and interacting more with insects in our environment. Another new publication produced in the past year deals with mosquito and tick repellants, which we use to repel or discourage insects from feeding on us! You can find this new fact sheet here:


I hope you find these items, as well as the rest of this newsletter, to be relevant and useful. Please do let us know of other areas you would like us to address in future issues. Thanks!
Ten Signs a Tree is Planted in the Wrong Place

Submitted by Rick Gibson, Extension Agent, Agriculture

Planting a tree in a location where it will fail to thrive, or where it will become a nuisance, can be a costly mistake. Unfortunately, many trees must be eventually removed because of mistakes made at planting.

In horticultural terms, it is a mistake to plant a tree where soil or environmental conditions will not favor good growth, where it will eventually need regular and heavy corrective pruning, or where it may need to be completely removed within a few years. Not only is it a huge job to remove a tree, but it can also cost a lot of money. It is a much better idea to select the right tree for the right place, and to plant it correctly, to avoid problems later on.

Here are a few of the more common mistakes. See how many you have seen as you have traveled around.

Sign number one: the tree is growing into a power line. Tree limbs growing into electrical lines strung from power poles can be dangerous hazards to people and property. Maintenance crews regularly trim out branches that grow into and around these lines. Trees that have been trimmed for safety often have their natural form, and their value, either seriously damaged or destroyed. Many times these trees end up being removed completely. When siting a tree, place it in a location where it will grow in its natural form without danger of growing into power lines.

Sign number two: the tree branches grow into the street. Planting a tree too close to the street will cause the tree eventually to spread its branches into a place where bicycle, car, and truck traffic will either hit, or swerve around, the branches. In either case, the tree becomes a safety hazard that will need to be severely pruned or removed.

Sign number three: the tree limbs and branches grow over the fence into the neighbor’s yard. If the neighbor doesn’t mind the tree or the shade that the tree provides, this may not be a problem. More frequently than not, however, the people next door would prefer that a tree not invade their space. The hassles, problems and potential conflicts that could occur are easily avoided by planting the tree in a location where it will not cross property boundaries.

Sign number four: the tree branches rub on the exterior walls or the roof of the house. Branches blowing too and fro in the wind can scrape and damage brick, paneled, or stucco walls. They can also rip asphalt shingles or break tiles on the roof. Plant the tree away from the home to avoid expensive repairs.

Sign number five: the trees grow into each other. Trees planted too close together compete for water, air, nutrients and sunlight. A lack of proper nutrition or sunlight will often stunt plants and weaken their trunks and branches. Branches that cross and rub against each other can easily be damaged and ruined.

Sign number six: the tree is damaging water, sewer, or natural gas lines. Some trees have aggressive, fast-growing roots that can overpower and damage underground utility lines. Sewer pipes are particularly vulnerable, for example, to the invasion of mulberry tree roots. Depending upon the type of line, the damage can range from a mere frustration to one of real danger. It is important to know where the lines are on the property, and avoid them.
Continued from page 2

Sign number seven: the trees shade out lawns and flower beds and make them unproductive. Dense shade from large trees will often prevent lawn grasses, bedding plants, shrubs, vines and other trees from properly growing as they shade out their smaller competitors.

Sign number eight: the tree is in a place where it can heave and buckle sidewalks and fences. The roots of large trees, if they grow too close to the surface of the soil, can push up sidewalks and fences. This type of structural damage can be difficult, as well as expensive, to repair.

Sign number nine: a caliche layer or structural hard spot in the soil causes the roots of trees to grow up close to the surface of the soil. Shallow, improperly rooted trees can more easily blow over in a windstorm. This problem can be avoided by checking the percolation of water through the soil prior to planting and by properly preparing the planting hole.

Sign number ten: the tree cannot be properly irrigated in a timely manner because water on the property is unavailable or is too expensive for the budget of the person paying the water bill. Trees will become seriously damaged, or even die, if they do not receive the proper amount of water during the growing season.

Planting a tree in the wrong location is one of the more obvious and expensive mistakes that is all too commonly made during landscape planning and installation. By taking the time to plan and install trees properly, major landscape mistakes can be avoided. This will result in savings of both time and money.
Tooth brushing is a critical life skill and needs a little help to develop.

Like all good habits, practice and repetition are key.

When your baby is a newborn, even before she has a tooth, gently wiping the mouth with a baby washcloth will not only help remove any residual milk, but it will also get her used to the idea of someone cleaning her mouth. Once teeth appear, brush with a small baby toothbrush with just a smear of toothpaste.

As your child gets a little older, here are a few tips to try to make tooth brushing more enjoyable.

- Have them help you pick out a toothpaste flavor and toothbrush that they like.
- Toddlers love to watch you shave or put on makeup. This is how they learn. Let them see you flossing and brushing your teeth as well. Give them their brush and make brushing teeth a family activity! Children cannot do a thorough job of brushing until they are about 5 or 6 years old, though, so let them do it first, then borrow their brush and finish up the brushing.
- Everyone loves music! Put on their favorite song and have them brush while the entire song plays. Most songs are 2-3 minutes long, so this is long enough to do a fairly good job of team brushing. They can brush first and you can finish up.
- There are also tooth brushing videos that you can find on You Tube. Here are some suggestions:  
  https://www.youtube.com/watch?time_continue=2&v=wxMrtK-kYnE  
  https://www.youtube.com/watch?v=Pd4WnsXwdqw  
  https://www.youtube.com/watch?v=51troJkekSc
- Children love a good game. Turn tooth brushing into a “Sugar-Bug Hunt”. Practice brushing teeth on their favorite stuffed bear or dog. Most plastic toy dinosaurs have teeth that can be brushed as well.
- Ask your child to come to the couch with their bedtime story and toothbrush. This may help avoid a brushing battle in the bathroom. Use just a smear of toothpaste on the brush and they will not need to spit. Have them lay their head in your lap, which will give you great visibility back to the molars, and play the “SugarBug Hunt” game. Then proceed to read the bedtime story.

Remember that the idea is to build a life-long health habit. Just like washing their hands, brushing their teeth will serve them well for years to come.
Proper diaper changing is an important component of a child care facility or home nursery, to prevent the spread of infectious diseases. Listed below is the proper procedure on how to change and dispose of a diaper.

1. Wash hands. Gather needed supplies: gloves, diaper, wipes, clean clothes, diaper cream, etc. Do not place supplies on diapering surface.
2. Put on disposable gloves.
3. Bring child to changing table. If clothing is soiled, remove, place in labeled plastic bag. Unfasten diaper, leaving soiled diaper under child.
4. Clean child’s diaper area. To remove stool and urine, wipe front to back using a fresh disposable wipe each time. Place used wipes inside soiled diaper. Talk to the baby about what you are doing.
5. Remove soiled diaper and wipes, without contaminating any surface, by folding the diaper inward.
6. Place soiled diaper in covered, plastic-lined hands-free cover can. Always keep a hand on the baby.
7. Remove gloves, using proper technique, and place them into the covered can.
8. Use a disposable wipe to clean the caregiver’s hands and another wipe to clean the child’s hands. Put both wipes into the covered can.
9. Note and plan to report (if you’re a child care provider) any skin problems.
10. Put on a clean diaper. Apply diaper cream, if used, with a tissue, paper towel or clean disposable glove.
11. Fasten the clean diaper and redress the baby.
12. Wash the child’s hands with antibacterial soap and warm, running water between 86-110 degrees F. Dry with single-use paper towel from a dispenser. Return child to supervised area.
13. Clean diaper changing area with soap and water and dry off with a paper towel.
14. Sanitize diaper changing area with bleach & water solution (or equivalent) and let air dry. Two minutes is best practice.
15. Wash your hands and, if you’re a child care provider, record in the diaper changing log.
16. Gather supplies for the next child.
GROWING TIRES IN PINAL COUNTY
Submitted by Blase Evancho, Assistant in Extension, Field Crops Systems

Guayule (*Parthenium argentatum*) is a woody shrub that is native to the Chihuahuan Desert and has been periodically utilized for its natural rubber production for over 100 years. Large scale rubber extraction from guayule began in the late 1800’s and has continued to be utilized when rubber from the Hevea rubber tree is in short supply. Two important examples of this were WWII and the OPEC oil embargo. These shortages demanded the research and production of a secondary source of rubber, which largely fell on guayule.

This research provided us with improved genetic lines of guayule, as well as a wealth of knowledge on the agronomic demands of this plant. But, in both cases, when the US regained access to Hevea rubber, guayule research and production was halted.

In the last decade guayule rubber has once again increased in popularity. However, this time it is being driven by the private tire industry, because of the recent increase in global tire demand. As global demand for natural rubber is increasing, global natural rubber production is remaining the same or even decreasing. This is creating a market gap that tire industry drivers are hoping to close with rubber from guayule.

The research to fill this gap is happening right here in Pinal County where there is a guayule research facility focused on “growing tires in the desert.” In collaboration with the private tire industry, the University of Arizona has created the Sustainable Bioeconomy for Arid Regions (SBAR) to aid in crop production research and increase the potential to create valuable products from the remaining components of the guayule plant after rubber extraction.

The first component being looked at is the resin that is removed from guayule during the rubber extraction process, which has potential as a commercial adhesive. The second product is bagasse or ground up remains of the plant which can be used for biofuel production. The goal of this project is to create valuable products from all parts of the guayule plant to create a vital source of income for the farming regions of central Arizona.

While there is still a long road ahead, the steps that are being made today to grow guayule as efficiently as possible and to economically utilize the entire plant and have the potential for long term returns in Pinal County and throughout central Arizona.
Pinal County 4-H celebrated the month of March by showcasing their skills in different events around the county. They started with the inaugural 4-H Expo on March 2nd, where members competed in Family Consumer Sciences (FCS) skill-a-thons, public speaking, demonstration, fashion review, performing arts and a “chopped” style cooking contest.

After the Expo, our horse project members held their third horse competition for the year, competing for belt buckles in the horse skill-a-thon.

On March 9th, some of our members competed in a 4-H shooting sports competition, held in Eloy. Members showed off their archery, air rifle and shotgun skills and then competed in air pistol while at the Pinal County Fair.

We all spent a week at Pinal County Fair March 18-24th, showing animals such as rabbit, poultry, dairy goat, dog, swine, beef, veal, lamb, goat, and steers. In addition, we had over 250 building exhibits showcasing sewing projects, cooking, canning, metal work, ceramics and rocketry, just to name a few!

In the next few months, committees will be judging 4-H record books and youth scholarship applications. County camp will have two sessions this year, one for juniors and one for seniors. Both to be held in June, 4-H never stops working for you!
SUMMER LUNCH BUDDIES: HELPING KIDS EAT HEALTHY
Submitted by Connie Lorenz, Program Coordinator

When school is out, Summer Lunch Buddies in! All summer long, we are serving up no-cost meals and fun to kids 18 years and younger. No application or proof of income is required.

What is Summer Lunch Buddies? Summer Lunch Buddies is Arizona’s campaign for the Summer Food Service Program (SFSP). The SFSP is a federally-funded child nutrition program that ensures free nutritious meals are available for children and teens ages 18 and younger while school is out of session. Use the mapping tool above to find a site near you.

Use the interactive map (https://www.azhealthzone.org/summerfood) to find locations and times or text FOOD to 877877. Click on the location name for contact information and meal times.

To file a complaint about the interactive map (https://www.azhealthzone.org/summerfood), please email sfsp@azed.gov or call 602-542-8700.
Shift to Healthier Food & Beverage Choices
Submitted by Connie Lorenz, Instructional Specialist

Here's some good news: Eating healthier doesn't mean you have to give up all the foods you love. It doesn't have to be confusing or complicated either. The 2015–2020 Dietary Guidelines has a better approach—make small shifts in the foods you eat. Here's how to do it.

What Are Healthy Shifts?
It's simple. When you can, swap out a food or ingredient for a healthier option. For example, you could:

- **Shift from whole milk to low-fat milk in your breakfast cereal**
- **Shift from soda with added sugars to water during lunch**
- **Shift from a cream-based pasta dish to one with a lighter sauce and more vegetables for dinner**

How Will Making Shifts Help?
- Healthy eating patterns can help prevent chronic diseases like obesity, heart disease, high blood pressure, and Type 2 diabetes.
- Shifting to healthier choices doesn't mean you have to change your whole eating pattern. Shifts can be easier to stick with over time—you're just making small changes to the way you're already eating.

Make Shifts Throughout the Day
You have a chance to make a healthier choice whenever you:

- Open your fridge for a snack
- Shop in the grocery store
- Stand at a vending machine
- Pack a lunch
- Look at a menu in a restaurant
- Cook a favorite recipe

Take advantage of these everyday opportunities to make a shift. Everything you eat and drink matters. Over time, little changes in the foods and drinks you choose can have big health benefits.
Try Out These Shifts

The Dietary Guidelines has key recommendations for how we can all improve our eating patterns. The shifts below will help you stay on track.

How to Eat More Whole Grains:
- Choose whole-wheat bread instead of white
- Have popcorn for a snack instead of potato chips (just leave out the butter)

How to Cut Down on Saturated Fats:
- Twice a week, have seafood instead of fatty cuts of meat for dinner
- When you’re making chili or stew, reduce the amount of meat and add more beans and vegetables

How to Cut Down on Added Sugars:
- Give your kids 100% juice or water instead of fruit punch
- Have a homemade fruit smoothie instead of ice cream

How to Cut Down on Sodium (Salt):
- Switch to unsalted nuts
- Shift from regular canned soups to low-sodium

How to Use Oils Instead of Solid Fats:
- Dip your whole-wheat bread in olive oil instead of spreading on butter
- Choose an oil-based salad dressing instead of cream-based

What Shift Will You Make Today?

Want to learn more about shifts and how to find a healthy eating pattern that works for your family? Check out ChooseMyPlate.gov, which has more information from the Dietary Guidelines, online tools, recipes, and more.
March 10-16, 2019, was AmeriCorps National Week of Service. This week was a celebration of everything AmeriCorps. It was a time to recognize the hard work and dedication of the thousands of AmeriCorps volunteers who donated their time and efforts in service to thousands of communities across the country.

Earlier this month, the Pinal County Board of Supervisors adopted a proclamation declaring March 10-March 16, 2019, 'AmeriCorps Week' in recognition of the outstanding efforts from AmeriCorps volunteers in our community. Additionally, they declared April 2, 2019, to be ‘National Service Recognition Day’.

Many thanks to all of the AmeriCorps volunteers who have contributed to the betterment of our community and all our community members who have worked hand-in-hand with these volunteers, to make this service initiative a success!
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. Contact: Misti Todd at (520) 836-5221, x213 or mtodd@email.arizona.edu

ASPIRE (Achieving Success by Promoting Readiness for Education and Employment) is a program designed to help foster independence in youths with disabilities between the ages of 14-16, and ultimately improve their educational and employment opportunities. Contact: Cathy Martinez at (520) 836-5221, x203 or clmartin@cals.arizona.edu

AZ Health Zone 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. Contact: Kevin Bawden at (520) 836-5221, x216 or kibaw@@email.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. Contact: Janet Jepsen at (520) 836-4651, x234 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. Contact: Esmeralda Castillo at (520) 836-5221, x244 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. Contact: Esther Turner at (520) 836-5221, x238 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. Contact: Esmeralda Castillo at (520) 836-5221, x244 or ecastill@cals.arizona.edu

Field Crops Systems 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: Blase Evancho at (520) 836-5221, x215 or bee1@cals.arizona.edu

First Smiles is an oral health program that provides preventative oral health education, oral screening, referral to dentists for children birth to age five and pregnant women; and fluoride varnishing for children with emergent teeth up to age five. Contact: Greeta Mills at (520) 836-4651, x235 or gmills@email.arizona.edu

MAC (Maricopa Agricultural Center) Farm Ag-Ventures educational programs include a combination of videos, educational presenters, hands-on learning experiences and tractor-trailer rides around their 2,200 acre farm for a close-up view of what makes a working farm operate. Contact: Victor Jimenez at (520) 374-6216 or vicjimenez@yahoo.com

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. Contact: Rick Gibson at (520) 836-5221, x227 or gibsonrd@cals.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. Contact: Chuck Dugan at (520) 836-5221, x210 or cld1@email.arizona.edu

Sensory Program provides free screenings of children, ages 0-5, for vision and hearing impairments that could affect developmental growth. Contact: Esther Turner at (520) 836-5221, x238 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, x227 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. Contact: Esther Turner at (520) 836-5221, x211 or eturner@cals.arizona.edu