THE UNIVERSITY OF ARIZONA

Cooperative Extension

Pinal County

PINAL COUNTY

QUARTERLY NEWSLETTER

JANUARY—MARCH 2020 Volume 7, Issue 1

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Cooperative Extension, the outreach arm of the University of Arizona, brings the University to the people.

The faculty and staff in the Pinal County Extension office are part of a non-formal education network bringing research-based information into communities to help people improve their lives.

Cooperative Extension is committed to delivering high-quality, relevant educational programs and information to Pinal County citizens and communities.

In the spirit of thankfulness, I would like to thank all of you who not only read our newsletter, but also share it with family and friends, as well as all of you who act on the information you receive to benefit you and your family. My heartfelt appreciation goes to all of the members of our UArizona Cooperative Extension team who work hard all year to bring quality programming to the citizens of Pinal County.

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As you know, from prior newsletters, one of our newest programs is a year-long series to help keep those at risk of developing Type 2 Diabetes (1 in 3 adults) from becoming diabetic. If your doctor has already told you that you are pre-diabetic, if you have a family history of diabetes, if you had gestational diabetes, or are just overweight and fear that this may be a concern, you can contact our office to find out more about how to join a course. We do have a course starting in January. As I write this, I can tell you that our group which started in September has lost a combined 34 pounds thus far! The Prevent T2 curriculum that we use was developed and tested by the Centers for Disease Control and is highly effective. We have a new publication available for more information titled The Impact of Diabetes in Arizona. Also, you can check out our new website www.preventdiabetesaz.org.

I hope that the New Year brings you and yours lots of new opportunities for personal growth, learning, and joy.

Please follow us on Facebook (<u>facebook.com/PinalCountyCooperativeExtension</u>) to learn about all of our upcoming activities, classes, and events! Happy Holidays!

Cathy Martinez, County Extension Director



GARDEN & LANDSCAPE



SHOULD I WATER IN THE WINTER?

Submitted By Rick Gibson, Cooperative Extension Agent, Agriculture

With the rains that have fallen so far this winter, how often should trees, shrubs and lawns be irrigated? Irrigation frequency is always an important question, because it ties in directly with the challenge faced by desert gardeners as they strive to keep a balance between keeping plants healthy and saving a precious resource. Because every drop of water in the desert has value, it is important to understand and apply the principles of good irrigation management.

Plants of all kind need water to survive. Even plants with a low water requirement, like cacti and agaves, need water from time to time, especially in these times of drought. Trees with lush leaves, like a mulberry, will need more water than the desert-adapted mesquite with its small, well protected leaves. Apples, grapefruit, peaches and other bearing trees carrying a full load of fruit need more water than the same trees at rest. Violate a plant's basic need for water, and they will simply not survive in our harsh environment.

Water is essential to plants in many ways. Plants use water to cool themselves on warm days. They use it for transport; that is, to help move nutrients from the roots to the trees and energy captured in the leaves to the roots. Water also keeps individual plant cells turgid, that is firm enough for the cells to maintain their shape and function. Water moving from the roots to the leaves through the process of transpiration eventually evaporates in the leaves. Water vapor inside the leaf escapes through tiny holes, called stomata, into the atmosphere. This movement of water from the inside to the outside of leaves acts like a miniature evaporative cooler that keeps the plant tissues cool.

Dissolved nutrients, like nitrogen, iron and magnesium, move with water from the roots to the places in the plant where they are used. Likewise, sugars produced through photosynthesis in the green tissues of the leaves and stems are moved from their source of assembly to the various parts of the plant, including the roots, where food supplies are needed. Movement of these sugars is made easy because the sugars are dissolved in water. Individual plant cells, especially those with relatively thin cell walls, such as those found in leaves and other tender tissues, are dependent upon water to help them keep their shape. We are all familiar with plants that wilt because they are short of water.

The demand for water within a plant to carry out its normal life functions is not the only factor that determines plant water use. The environment in which the plant is growing also plays a significant role. Relative humidity, the amount of water vapor in the air, and temperature play key roles. In the desert, times of high temperatures and low humidity like we see in June and early July, mean high plant water demand while in times of cool weather and moderate humidity, the demand is much less.

So, what does all this have to do with how often we irrigate our landscape plants? If we understand the basic water needs of plants and couple that with an evaluation of the weather, we can draw a fairly accurate estimate as to how much water a plant will need at a given time.

GARDEN & LANDSCAPE



During the winter time, with cool temperatures and enough humidity to slow water demand, all plants will need less water than they do during the summer months. If the plants lose their leaves as part of winter dormancy, they will use little water at all. If you are still irrigating the same now as you did in the summer, you are definitely giving your plants more than they need.

During moist winters, such as the one we are now enjoying, when rainfall events are frequent and drop lots of moisture, we probably could go the entire winter without turning on the irrigation system even one time, provided we successfully filled the soil profile with a previous irrigation. Remember, we want to ensure that the entire root zone is moist, not sloppy wet, but moist. As a contrast, during dry winters it may be necessary to irrigate from time to time to keep the roots of our plants moist. However, in any case, the plants will still not need as much water as they do during the hot, summer months.

Proper irrigation during the winter means that we need to do a balancing act. We always keep an eye on the weather and frequently monitor soil moisture conditions, so that we can make proper irrigation management decisions.

If we continue to receive appreciable rainfall, we might be able to cut back somewhat on our frequency of irrigation, especially in shallow-rooted plants like turf and bedding plants. Even with a good rain, however, I doubt that we will receive enough moisture to help us with our trees and shrubs unless we have previously filled the root zone.

When you irrigate plants, have a plan. Do not just set the automatic irrigation system and forget about it. You have to change the system settings with the seasons. If you are irrigating with a hose, do not irrigate the same way in the winter that you do in the summer, or vice versa. Know when it is in your plant's best interest to irrigate before you start running water.

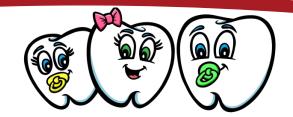
The best way to tell when it is time to irrigate is to dig down into the soil with a shovel, trowel or probe to a depth of about six inches. Take a handful of soil from that depth and squeeze it in the palm of your hand. If the soil feels moist, leaves a wet imprint on your hand and, or remains in a hard ball after you release your grip, do not water. There is plenty there for your plants for the next week or so. If the soil is still slightly moist, but the ball begins to crumble when you let go, it is time to irrigate.

Plants use much less water in the winter time than in the summer, but there remains a small requirement that must be managed correctly. By carefully balancing soil water levels around our landscape plants, we can keep them both healthy and productive all year long.

FIRST SMILES

HOW DOES FLUORIDE WORK?

Submitted By Greeta Mills, RDH Med, Oral Health Professional



We know that daily brushing with fluoride toothpaste makes teeth stronger and better able to fight off cavities. So, how does fluoride work?

Fluoride is naturally found in our soil, rocks, and water as part of fluorine. Fluorine is one of the 20 most common elements in Planet Earth's crust. When it is combined with something like sodium, it is able to help make stronger teeth.

During normal eating and drinking during the day, the bacteria that live in our mouth also are eating and drinking! These bacteria create an acid bath for about 20-30 minutes. This acid strips away the normal calcium and phosphate on the surface of our teeth. Our saliva (spit) comes to the rescue to help replace it. When our saliva (spit) has fluoride from tooth paste or from our drinking water, our teeth can use that fluoride to make a stronger coating on the surface of the tooth. Not only can fluoride help prevent cavities, it can even reverse early signs of cavities.

It is recommended that children under 3 years old have their teeth brushed twice a day with just a "smear" (about the size of a grain of rice) of fluoride tooth paste. For children that are 3 to 6 years old, use a pea-sized amount of fluoride tooth paste twice a day, and remind them to spit the tooth paste out.



VISION & HEARING SCREENING



VISION IS 20/20

Submitted by Shevonda Joyner, Instructional Specialist

It is a new decade and for the first time, everyone is seeing 2020! The Cooperative Extension Sensory/Developmental team is looking forward to making sure your child's vision is screened all year.

Did you know?

- A newborn's vision remains blurred at 1 month
- A newborn's vision becomes progressively more clear at 2 - 3 months, until he/she achieves the clarity of an adult's sight
- A newborn's eyes don't work together; some studies suggest that babies actually see two images of each object, but by the 3rd month, this double vision corrects itself

What can a parent, caregiver...and you do?

- Hold baby's face 8 inches 12 inches from yours, while you talk and play with him/her
- Place mobiles or bright toys 8 inches -12 inches from the newborn's face
- Smile & make silly faces (about 12 inches from their faces)
- Increase distance of objects from the baby as he/she matures

Fun Facts

- When we are born, we are hard-wired to prefer faces; our eyes begin to see by seeking out patterns in the environment
- The human face is one of the first patterns a child discovers
- Although vision is blurred at birth, infants see objects 8 inches 12 inches from their face. This is the distance between an infant's eyes and mother's face as she feeds the infant.
- What we see for the first time and learn for the first time, is a powerful image and is our most important learning as it stays in our memory the longest

Vision Screenings

The Sensory/Developmental team uses multiple methods to conduct vision screenings. Typically, children ages one and two use a SPOT vision screener which is a tool that takes seven different measurements. The screening is used to detect a variety of vision issues. If there is a concern, a referral will be made to the child's Primary Care Physician or an eye care professional. We do not provide a diagnosis but encourage a follow-up with a medical professional.

- Myopia (nearsighted) when a person can see near, but has a problem seeing distance
- Hyperopia (farsighted) when a person can see far, but has a problem seeing near
- Astigmatism when focusing is a problem
- Gaze deviation when eye misalignment or vision is not tracking properly
- Anisocoria when pupil size is unequal to each other
- Depth Perception the ability to determine distances between objects and see the world in three dimensions
- Anisometropia when two eyes have unequal refractive power

The other screening method we use for vision is Charting. We have special charts that use shapes instead of letters. As we conduct the screening, we ask your child to tell us the shape they see. This screening checks for visual acuity, which is the clarity of vison. To pass our screenings, the child's visual acuity must be 20/40. This means that a child sees at 20 feet, what a person with normal vision sees at 40 feet. By the time they are in kindergarten, their visual acuity should be at 20/30. Stop by the Pinal County Cooperative Extension Office for any of our screenings, all year!

CHILD CARE HEALTH CONSULTANTS

STAYING HEALTHY DURING COLD & FLU SEASON



Submitted By Shelby Gibson, Child Care Health Consultant

Though Arizona winters are warmer than most parts of the country, it's still necessary to protect you and your family from the adverse effects of cold and flu season. Your health - and the health of your children - is important. Here is an easy-to-follow guide on how to stay healthy this time of year.

- Wash Hands Frequently Being thorough with handwashing will help prevent the spread of nasty cold and flu viruses. Lather your hands with soap, making sure to wash in between your fingers, the back of your hands, and under your nails, while singing "Happy Birthday" twice (or for 20 seconds).
- Get Yearly Flu Shot Yearly flu shots help stimulate your body's immune system to help fight the flu virus.
- Stay Active Exercise is crucial to fighting flu viruses! Regular exercise helps white blood cells (the cells that help
 fight viruses) travel through the body faster. Aim for 30 minutes of exercise a day to help boost your immune
 system.
- Get Plenty of Sleep Sleep is essential in protecting your body from the cold and flu. While you sleep, your body
 produces protective proteins called cytokines that aid in defending against viruses.
- Eat a Balanced Diet Maintaining a healthy diet can improve your immune system and help fight the flu. Eating fruits and vegetables, whole grains, and low-fat dairy, can provide your body with antioxidants and nutrients to boost your immunity to the cold and flu.

Following these tips will help boost your immune system and help you stay healthy during cold and flu season - and throughout the year!



STAFF FEATURES



AZ HEALTH ZONE

Submitted By Taylor Hedges, Program Coordinator



Hello! My name is Taylor Hedges and I am the newest hire to the University of Arizona, Cooperative Extension, Pinal County—AZ Health Zone, SNAP ED team! A little background about myself, I graduated from Illinois State University in August of 2019 with a dual degree in Psychology and Community Health Promotion. On board since September of 2019, I have been a resident of Arizona since May of 2019.

Currently, I am preparing for the renovation of Elliot park by serving on the community advisory board for the project. I am excited to advocate for all Casa Grande citizens to ensure that the park is a clean, fresh, usable space to be enjoyed.

I am looking forward to an amazing 2020 here in Pinal county!

EFNEP

Submitted By Nubia Lara, Health Nutrition Educator



My name is Nubia Lara and I am absolutely thrilled to be part of the University of Arizona, Cooperative Extension EFNEP (Expanded Food & Nutrition Education Program) team in Pinal County.

I currently hold a certification in Coding & Reimbursement, working towards my Associates Degree in Health Information Technology. I am Vice Chair for Head Start Advisory Council, as well as a member of the Health Advisory Committee for Pinal County.

As a Health Nutrition Educator, I can't wait to provide individuals with the tools they need for a healthier new year! I would love to provide a one-on-one session for those individuals interested in learning more about nutrition. You can contact me at (520) 836-5221 / nubia1981@email.arizona.edu.



VISION & HEARING SCREENING



Submitted by Shevonda Joyner, Instructional Specialist



A Valentine's Day activity for you and your loved ones. Heart Stamps Activity

This activity helps children's fine motor skills. Fine motor skills involve a child's coordination between small muscles, like those of the hands and fingers, with the eyes. Children's fine motor skills must be exercised and developed early on, in order for children to meet with success in writing, eating and self-help skills like getting dressed. Here are the steps for the heart stamps activity.



Flatten a cardboard tube.



Push one crease inward to make a heart. Tape to hold shape.



Pour choice of paint of a little plate (red, purple, pink, and blue). Dip one end in paint.



Give your child some paper, and let them stamp away!

http://www.rustandsunshine.com/2012/01/heart-stamps.html?ref=pcrorganicgglunkwn&prid=pcseogglunkwn





ABOUT THE STRENGTHENING FAMILIES PROGRAM

The Strengthening Families Program (SFP) consist of three skills courses: Parenting, Children's Life Skills, and Family Skills. Skills Building Program for children ages 3-5 and their parents (14 sessions). Parents and children have fun while learning valuable bonding techniques. Family style dinner at each class and Family Graduation Celebration. All parents or primary caregivers must register and attend classes. Child care available for children whose families are participants of the program.



LOCATIONS & TIMES OF THE NEXT SF PROGRAM

Classes will be held every Mondays—Starting January 13, 2020 at 5:30pm & continues through mid-May 2020

Classes will be held at Eloy Head Start, 114 East 3rd Street, Eloy, AZ



FOR MORE INFORMATION ABOUT THE SF PROGRAM

University of Arizona, Cooperative Extension, Pinal County 820 East Cottonwood Lane, #C, Casa Grande, AZ 85122 (520) 836-5221, x211 / eturner@cals.arizona.edu

FIRST THINGS FIRST





ABOUT THE STRENGTHENING FAMILIES PROGRAM

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LOCATIONS & TIMES OF THE NEXT SF PROGRAM

Classes will be held every Tuesday—Starting January 14, 2020 at 5:30pm & continues through mid-May 2020

Casa Grande Methodist Church, 1515 North Trekell Road, Casa Grande, AZ



FOR MORE INFORMATION ABOUT THE SF PROGRAM

University of Arizona, Cooperative Extension, Pinal County 820 East Cottonwood Lane, #C, Casa Grande, AZ 85122 (520) 836-5221, x211 / eturner@cals.arizona.edu

FIRST THINGS FIRST

4-H YOUTH DEVELOPMENT



4-H YOUTH DEVELOPMENT PROGRAM

Submitted by Maria Melendez, Administrative Assistant

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Let's Socialize! Be the first one to know what is happening with The University of Arizona, Cooperative Extension, Pinal County 4-H. Join our online community, stay in the know and get exclusive news/updates! Help us spread the word, you are just a scan away!



Website:

http://extension.arizona.edu/4h/pinal



Instagram: pinalcounty4h



Twitter:

@Pinal County 4H



Facebook: @pinalcounty4h

4-H YD PROGRAM SCHOLARSHIPS

Eligible 4-H members who would like to apply for scholarships must turn in applications by February 7th at 5:00 pm.

Please submit the original plus 5 copies if you would like to be considered for state and county awards.

Applications are available online at https://extension.arizona.edu/4hfoundation/sites/ https://extension.arizona.edu/4hfoundation/sites/ extension.arizona.edu/4hfoundation/sites/ extension.arizona.edu/4hfoundation/sites/ extension.arizona.edu/4hfoundation/sites/ https://extension.arizona.edu/4hfoundation/sites/ extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/https://extension.arizona.edu/4hfoundation/sites/<a href="https://extension.arizona.edu/4hfoundation/sites

And more information can be found at https:// extension.arizona.edu/4hfoundation/scholarships-grants

Double check that you have followed all the requirements and have the appropriate signatures.

If you have any questions please let us know.





Webpage: <u>CALS, Pinal County</u>
Twitter: <u>@RickGibson4</u>
Blog: <u>ricksgardenspot.blogspot.com</u>

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Facebook Pages:

Pinal County Garden and Landscape Program
Maricopa Master Gardeners
Pinal County 4-H
Child Care Health Consultation for Pinal County, AZ
Sensory & Developmental Screening

Cathy L. Martinez, Cooperative Extension County Director Richard D. Gibson, Regional Director Blase Evancho, Field Crops Systems Assistant in Extension Victor Jimenez, 4-H Youth Development Agent

clmartin@cals.arizona.edu gibsonrd@cals.arizona.edu bee1@cals.arizona.edu vicjimenez@yahoo.com

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: 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 kbawden@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 janetj@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 Screening 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 qmills@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: Miriam Aleman at (520) 836-5221, x210 or mia1@email.arizona.edu

Sensory Screening 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*