



University of Arizona Cooperative Extension

Cochise County Annual Report 2020 Improving Lives, Communities, & the Economy



THE UNIVERSITY
OF ARIZONA

Cooperative Extension

Cooperative Extension enjoys a rich and proud history in this country. On May 8, 2014, we celebrated our 100th year of the Smith-Lever Act, which established the Agricultural Extension Service, known today as Cooperative Extension. Cooperative Extension is a unique educational partnership between the U.S. Department of Agriculture, the nation's land grant universities, and the county governments that extends research-based knowledge through a state-by-state network of extension educators. Working together, we recognize that we achieve much more than we can alone. While the authors of the enabling legislation for Cooperative Extension could not foresee the future, the mandates implicit within the legislation is as applicable today as in 1914:

- **Serve Agriculture and the Public** - The Smith-Lever Act gave Extension a very broad clientele base—"the people of the United States"—yet also specified that its programs should be concerned with "agriculture and home economics and subjects relating thereto."
- **Define Agriculture Broadly** - The term "agriculture" was used in a comprehensive sense in the Smith-Lever Act and subsequent legislation to include producing, processing, and marketing farm and forest products, plus those businesses and industries concerned with supplying the resources needed in the production and marketing process.
- **Enhance Human Development** - The underlying mandate is to provide educational programs for individuals and families, which will enhance human development and maximize the individual's contribution to society.
- **Meet Local Problems** - Section 8 of the Smith-Lever Act establishes the need for additional assistance in areas faced with special or unusual hardships and

acknowledges Extension's role in working with groups as well as individuals in meeting local problems.

At the heart of Cooperative Extension is the deep-rooted belief that engaging people through applied research and education will improve the quality of their lives, communities, and the economy. This mission is the driving force behind 100 years of Cooperative Extension in Arizona. Our ability to be relevant in the years to come is based on our ability to listen and respond to our "customers"--the people in our communities. We value our partnerships and believe community voices are critical to success.

Today, Cooperative Extension continues its important role, serving communities and families, supporting agriculture, and empowering youth to be leaders. Regardless of the program, Extension expertise meets public needs at the local level through the involvement of volunteers, partners, stakeholders, and advisory committees. Extension would not be what it is today without their dedication and service. We are most grateful for their willingness to be partners in our journey to improve lives, communities, and economies.

We look forward to working with you, as together we create the next chapters of our continuing history!



The University of Arizona Cooperative Extension represents a unique three-way partnership of the federal, state and county government to provide access to the Land Grant University System to local citizens. Partners include the United States Department of Agriculture, the University of Arizona, and Cochise County Government. Regardless of the program, Extension expertise meets public needs at the local level through the involvement of volunteers, stakeholders, and advisory committees. Our roots in communities help us understand local needs and put university expertise and connections where they can make a difference - both in people's lives and in their livelihoods. Increasingly, Extension serves a growing, more diverse constituency with fewer resources, utilizing methods that are timely, relevant, and cost-effective. These Extension-driven programs leverage and multiply each dollar of county and state support with additional outside funding. Included in this report are a few highlights of Extension's impact on this county and its people during 2020.

Cooperative Extension, Cochise County Faculty and Staff (as of 02/19/2021)

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Cooperative Extension, Cochise County Faculty and Staff Continued

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Garden seed project.



Natural resource views in Cochise County.



Be Healthy rocks distribution 2020.



SNAP-Ed and EFNEP provide canning education.



Agent Josh Sherman inspecting wine grapes.

Water availability is one of the most important natural resource and economic issues in Cochise County. Groundwater overdraft threatens to impact the federally protected San Pedro River National Conservation Riparian Area and the headquarters of U.S. Army Intelligence at Fort Huachuca. As the groundwater table lowers, it can impact the San Pedro River (in 2000, ecotourism contributed \$17 to \$28.3 million to the local community) and reduce missions on Ft. Huachuca which contributes an estimated \$2.68 billion to the County (Huachuca 50, 2018). The University of Arizona-Cochise County Cooperative Extension's **Water Wise Program is a key educational water conservation program in the county by providing solutions that empower citizens to conserve groundwater and helps communities and the economy remain strong.**

Here's how Water Wise helps:

- *With educational events teaching citizens about drip irrigation, rainwater systems, low water landscape plants and design, good watering practices, septic care; and annual Rainwater and Off-the-Grid Tours.*
- *With specialized on-site home and business visits providing specific conservation actions and follow-up.*
- *By partnering with Master Gardeners, municipalities, businesses, non-profits, citizens, and schools on conservation projects.*
- *By providing water conservation lessons to youth throughout Cochise County in school classrooms and special presentations for additional youth programs.*
- *Providing water conservation resources through website*
<https://waterwise.arizona.edu/>



Following CDC, Cooperative Extension, and University of Arizona COVID-19 guidelines, in March of 2020, all programming went virtual. While things looked a little bit different with the virtual programming, there was a big focus on increasing social media and digital presence, and many of our offerings were able to be presented in a virtual format.

2020 – COVID COMMUNITY IMPACT

- ▶ Water Wise Community Outreach educators had 909 direct adult contacts
- ▶ Water Wise Youth educators had 2,200 direct youth contacts and streamed 30 live (virtual) youth lessons/storytime presentations
- ▶ Water Wise expanded its digital reach with a new website, social media pages, and YouTube channel to share information and materials
- ▶ Water Wise Youth uploaded 8 Storytime videos (over 4,000 views) and 5 youth lessons (over 75 views) to the Water Wise Program YouTube Channel
- ▶ 2 tours, 1 workshop, and 8 webinar presentations: 75% of participants rated workshops/webinars as highly valuable.
- ▶ Approximately 21,187 gallons of water will be saved per year through grants from the Upper San Pedro Partnership Retail Committee grants in 2019, administered by Water Wise

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Cochise County 4-H Youth Development is an experiential learning youth education program for Cloverbuds (children 5-8 years old) and youth, ages 9-18. Its practical life skills education in science and technology, healthy lifestyles, and citizenship can reach any kid ... anywhere ... any time through 4-H clubs, camps, after-school and summer programs, educational events, and community service. We rely heavily on volunteers to reach more youth, lead educational programs, coordinate activities and manage clubs and groups. Through engaging, hands-on experiences, young people **develop specific skills that are important for jobs and careers such as leadership skills, the ability to organize, lead meetings, set and achieve goals, financial awareness, and social skills.** These skills lead to greater physical and emotional wellbeing, and educational and occupational success.

- *4-H Youth are two times more likely to make healthier choices, three times more likely to make contributions to their communities, two times more likely to graduate from high school and go to college, and two times more likely to pursue a career in science (Tufts University Study, December 2013).*
- *Through engaging, hands-on experiences, young people learn the skills and abilities to become productive adults who contribute back to the health and economic well-being of their communities. Public value: 4-H increases personal responsibility that positively contributes to workplace skills and communities.*

In 2020, we were faced with a very unique set of circumstances with the global pandemic that required 4-H at the state and county level to think outside of the box to build and deliver alternative means of programming to ensure that we continue to offer a high-quality 4-H curriculum for youth in accordance with Cooperative Extension COVID-19 mitigation strategies. We strongly look forward to returning to in-person programming in 2021.



2020 – COVID COMMUNITY IMPACT

- AZ 4-H FALL VIRTUAL SHOWDOWN
- VIRTUAL CLUB MEETINGS
- ENGAGED CITIZENS EVENT
- EMERGING LEADERS EVENT
- VIRTUAL HORSE JUDGING AND HIPPOLOGY CONTESTS
- VIRTUAL 2020 AZ STATE 4-H HORSE SHOW
- AZ 4-H AG AT HOME
- AZ 4-H SCIENCE IN AG WEEK
- AR FLOATING FARM
- AZ 4-H STEM AT HOME
- AZ 4-H VIRTUAL SUMMIT
- AZ 4-H VIRTUAL JOLT LEADERSHIP EXPERIENCE
- DAILY CLOVERBUD READING PROGRAM
- INTERMEDIATE/SENIOR BOOK CLUB
- CHESS CLUB
- ZOOM GUEST SPEAKER SERIES

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Rangelands are important to society for the goods and services they produce and for the ecological services they provide. There is a need to balance livestock grazing with natural resources. This is especially important as **livestock producers have been reducing and managing herds as a result of drought conditions for the last two decades**. Workshops are held that teach various subjects relating to rangeland management, monitoring, livestock nutrition, and other identified needs requested by clientele. Work is done collaboratively at both the local and state levels in partnership with ranchers, US Forest Service (USFS), and Natural Resources Conservation Service. Ranches are monitored for long-term soil and vegetation trends.

- *Ranchers and land management agency personnel have a better understanding of rangeland management and monitoring.*
- *Long-term rangeland monitoring data is available for USFS permittees and private/state land lessees to use in management decisions, and for federal employees to use in resource analysis.*
- *Healthy rangelands support livestock production, wildlife habitat, and other natural resource benefits for society.*



2020 – COVID COMMUNITY IMPACT

- ▶ 106 sites on 31 USFS allotments were monitored. An additional 11 sites on 3 private/state ranches were monitored. Monitoring reports were prepared for each allotment and given to agencies and ranchers.
- ▶ An additional \$50,000 was obtained in a grant to support the monitoring program.
- ▶ 6 field trials were continued to look at the cost-effectiveness of mesquite control using herbicides and mechanical treatments.
- ▶ Forage nutrition samples were collected and precipitation measured at 5 different ecological sites in the county.

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Commercial beef extension programs equip cattle producers to make informed decisions regarding herd health and management, cattle nutrition, genetics, and stock selection, food and product safety, the economics of profitability, sustainability, and the well-being of animals, and public perception of the beef industry as a whole. Commercial beef production in Cochise County is primarily composed of cow-calf operations (ranches) that utilize a variety of federal, state, and private lands for grazing cattle, several feed yards, and a livestock auction yard. There are approximately 335 cattle operations in the county raising 57,000 head of cattle. As a whole, the **Cochise County beef industry contributes \$34.5 million in sales to the economy**. In addition to the economic contributions, ranches maintain working landscapes and healthy rangelands that also benefit wildlife and public recreation.

- *Ranchers are better equipped to make decisions that improve herd health, develop cattle that match their forage resources, increase pounds of healthy calves produced, and enhance the value of their livestock.*
- *Properly managed livestock grazing supports healthy rangelands and wildlife habitat.*
- *Public perceptions of the livestock industry are improved by increased numbers of ranchers utilizing low-stress animal handling and consumer-driven guidelines from the Beef Quality Assurance program.*



Following CDC, Cooperative Extension, and University of Arizona COVID-19 guidelines, all programming went virtual in March of 2020. Rural internet access made virtual programming a challenge, but several webinars focusing on important emerging topics were well attended.

2020 – COVID COMMUNITY IMPACT

- ▶ Conducted the 2020 Range Livestock Nutrition Workshop in the southeast region, and collaborated with the Southeastern Arizona Farm and Ranch Trade Show committee to provide educational opportunities and ranch-related demonstrations using live animals at the 2020 event.
- ▶ Certified 34 new producers and renewed 15 certifications in Beef Quality Assurance, a national program that emphasizes producer commitments to best management practices.
- ▶ Conducted two webinars for beef producers highlighting emerging issues: Navigating the Beef Industry Amongst COVID-19, and 2020 Climate and Drought Outlook for Beef Producers.
- ▶ Contributed three educational articles to the Arizona Cattlelog
- ▶ Three issues of "Arizona Range and Livestock News" were distributed to 464 readers per issue across Southeastern Arizona.

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While no one was prepared for the changes that COVID-19 brought, the Expanded Food and Nutrition Program (EFNEP) and SNAP-ED/AZ Health Zone were able to step up programming to meet the needs of the communities in Cochise County. By utilizing online tools to adjust programming, new audiences had access to nutrition and physical education programming, and previous program participants were able to stay connected virtually. Even amidst a pandemic, the nutrition and physical activity education programs offered through the Cochise County Cooperative Extension were able **to promote healthy nutrition and physically active lifestyles and systems change that lead to healthier individuals and families in our communities.**

Our SNAP-Ed (Supplemental Nutrition Assistance Program –Education), or AZ Health Zone, serves community sites, coalitions, schools, families, and individuals that meet SNAP eligibility.

The USDA Expanded Food and Nutrition Education Program (EFNEP) is designed to assist limited-resource audiences to acquire knowledge, skills, attitudes, and to change behaviors necessary for nutritionally sound diets, and to contribute to participant’s development and the improvement of the total family diet and nutritional well-being.



EFNEP used "Dining with Diabetes, Mediterranean Cuisine, and Eating Smart, Being Active for adults, and Choose My Plate and Fight BAC for youth at two community centers, and 3 senior centers in Cochise County, as well as the outreach program for the hospital, Canyon Vista to present adult programming. EFNEP also worked with Willcox, Coronado, and Bisbee schools, as well as with the Boys and Girls Club of Bisbee and the Kids WORLD afterschool program in Sierra Vista.

SNAP-ED/AZ Health Zone partnered with statewide organizations and local farmers market to purchase and deliver locally grown foods to isolated seniors. 50 food bags provided to 25 low-income seniors, 5 volunteers, 5 local vendors, \$750 spent on local produce.

Because of the Cochise County Nutrition programs,

- *people reduced food waste through food preservation*
- *learned skills to shop on a budget*
- *have food safety skills to keep their families safe*
- *understand new ways to prepare food*
- *communities have more access to healthy and affordable foods*
- *people live, work, and learn in environments with increased healthy lifestyle opportunities*



2020 – COVID COMMUNITY IMPACT

- ▶ EFNEP reached 100 adults (with 20 participating in the pre/post assessments) throughout Cochise County and 656 (with 117 k-2 students participating in pre/post assessments and 52 third through fifth-grade students participating in pre/post assessments) students from Willcox, Coronado, Bisbee Elementary Schools.
- ▶ 30 food preparation, safety, and nutrition videos on the University's YouTube site, viewed over 1,600 times as of September 2020.
- ▶ 50 community members participated in EFNEP and BHC collaborative food preservation course
- ▶ SNAP-ED/AZ Health Zone partnered with 28 community organizations
- ▶ SNAP-Ed programming reached 936 adults and 428 youth through Food Systems and Early Childhood direct education, professional development, and events. The total number of participants directly reached is 1,364.
- ▶ 15 School Health Newsletters distributed biweekly to 71 school health contacts

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To improve health outcomes for children in rural Arizona, the Cochise Cooperative Extension has developed and implemented several oral health programs. These programs are designed to educate the community on the importance of oral health, deliver preventative services and improve access to dental care. The First Smiles Oral Health Program provides oral health education, supports in-classroom tooth brushing and preventative dental screenings, and fluoride varnish application for children birth to age seven with coordination referrals and care to a dental home. The Cavity Free AZ Sealant Program, running in eight Arizona Counties, providing oral health education and dental sealants to low-income children in the second and sixth grades, and fluoride varnish for kindergarteners. Cavity Free AZ now offers Silver Diamine Fluoride and another service to encourage healthy smiles. Silver Diamine Fluoride (SDF) is brushed on specific teeth showing decay; the SDF works to arrest decay and stop further growth of bacteria. This program is school-based and operates state-wide to prevent tooth decay. This year ADHS contracted with UACE to conduct the Healthy Smiles Healthy Bodies Survey. Results are delayed due to COVID-19. Fluoride and sealant prevention programs are especially important for un-fluoridated communities such as those in Cochise County. Fluoride varnish **can reduce tooth decay by 37% to 63%¹ and Sealants can reduce decay in school children by more than 70%²**. These programs lay the foundation for a lifetime of oral health through education and prevention. School access due to the COVID-19 pandemic has limited our program reach.

- *Children in Cochise County are receiving early prevention and intervention to reduce the incidence and prevalence of tooth decay.*
- *Schools and childcare facilities are receiving education for childcare providers, children, and their families.*
- *Children in the 2nd and 6th grades in low-income schools are receiving dental sealants and SDF to prevent and arrest tooth decay.*
- *100 Children at participating childcare facilities are brushing their teeth daily. Fluoride toothpaste reduces tooth decay among children by 15% - 30%³.*



2020 – COVID COMMUNITY IMPACT

- ▶ 151 Children screened, children receiving sealants-62, Kindergartener and preschoolers receiving Fluoride 248, Silver Diamine Fluoride 17.
- ▶ The number of teeth strengthened by 1,000.
- ▶ The average cost of a filling is approximately \$100 per decay potentially saving our program participants \$100,000.
- ▶ Numbers are significantly lower due to COVID-19

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¹ Mishra P, Fareed N, Battur H, Khanagar S, Bhat MA, Palaniswamy J. Role of fluoride varnish in preventing early childhood caries: A systematic review. Dent Res J (Isfahan). 2017;14(3):169-176.
² Beauchamp, Jean et al. Evidence-Based Clinical Recommendations for the Use of Pit-and-Fissure Sealants. The Journal of the American Dental Association, Volume 139, Issue 3, 257 – 268
³ Fluoride Recommendations Work Group. Recommendations for Using Fluoride to Prevent and Control Dental Caries in the United States. Centers for Disease Control and Prevention (CDC). August 17, 2001 / 50(RR14);1-42

The Cochise Healthy Communities Initiative works to address and change the health issues throughout Cochise County. The opportunity for health begins in our families, neighborhoods, schools, and jobs where we know that health starts long before illnesses. Through county partnerships, leaders have developed community action with support from the "Healthy Communities" groups in each hub of the county who prioritize and resolve disparities related to health through the Collective Impact Model of community change utilizing the social determinants of health. These "Healthy Communities" groups are also connected to the district's School Health Advisory Councils (SHAC) to leverage resources to work together on larger health issues in the schools. Leadership from all these groups meet at the County Healthy Eating Active Living (HEAL) meeting to discuss county-wide initiatives and impacts. A community health assessment was developed with partner financial backing; with this initiative and through a strategic process across the county (2017) three goal areas have been identified as follows:

1. Mental Health & Substance Abuse-Create policy changes to keep people with mental illness out of jails and prisons. Expand mental health wellness and substance abuse resources for everyone in Cochise County.
2. Good Jobs & Healthy Economy-Promote business growth and job opportunities throughout Cochise County. Promote tourism and cross-border partnerships and business activities for all of Cochise County.
3. Healthy Eating, Diabetes & Obesity also known as Healthy Eating Active Living- **Build and strengthen community options for healthy eating and active living.** Change the cultural expectations about the definition of a good and healthy life. This strategy was funded with a two-million-dollar grant from the Legacy Foundation of Southeast Arizona with the Building Healthy Communities Project

- *Leadership is making sustainable changes in their communities collectively.*
- *Leaders are advocating for environmental changes in the community to promote health, mental health/substance abuse to grow a healthy economy.*
- *Higher leadership in the county is informed and can make county decisions based on the identified needs and perspectives of these committees.*



2020 – COVID COMMUNITY IMPACT

- ▶ Each month over 500,000 pounds of food is distributed in Cochise County (partnership with the Community Food Bank of Southeastern Arizona).
- ▶ Healthy Physical Activities were initiated that include Walk with the Wildcats 2.2 mile trail clean up walk, Physical Activity Bingo (developed for COVID-19), Screen Awareness Week-encouragement to get out and move and reduce recreational screen time.
- ▶ Implemented 19 garden towers to pre, elementary, middle, and high schools; Bisbee Science Lab, Huachuca City Community Garden, Chiricahua Community Health Centers as a teaching tool for children and community members to grow their food.
- ▶ Emergency Food Donation and distribution with the collaboration of the Building Healthy Communities Project, Arizona Complete Health, Benson Food Pantry, Douglas food Bank, and Merritt Foods. Distributing turkeys, hams, canned foods, non-perishable foods, school lunch delivery during several months of the COVID-19 Pandemic.

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Building Healthy Communities (BHC) addresses health issues throughout Cochise County as identified on the Cochise County Community Health Assessment and Improvement Plan so that our county citizens have the opportunity to make the choices that allow them to live a long, healthy life, regardless of their income, education or ethnic background. **Health begins where we live, learn, work, and play.** This 3-year project obtained grant funding from the Legacy Foundation of Southeastern Arizona to improve health outcomes in the county. With the Cooperative Extension as the lead agency, Cochise County Health Department, Cochise County School Superintendent, and the Community Food Bank of Southeastern Arizona have been working collectively to initiate, fortify, and expand the following:

- Healthy Community Committees-Focuses on the social determinants of health through collective impact with policy, systems, and environmental changes to improve the health of our citizens.
- Cochise Leadership Academy-Develops community leadership change agents using the Everyone Leads and UACE Community Training for Leadership curriculum.
- Cultivate a healthy food system-working with local farmers, ranchers, food banks, food pantries/services, and promoting gardens.
- Strengthen School Health Initiatives-with the local schools, School Health Advisory Councils to leverage resources to work together on larger health issues in the schools and their efforts, nutrition education, and school policy initiatives.

Community members and leadership involved in the BHC:

- *Are working collectively with multiple communities to make the changes in their communities to make Cochise County a healthier place to live.*
- *Are developing food pantries, community, and school gardens.*
- *Are changing school policy.*
- *Are bringing in thousands of pounds of fresh produce to our food deserts.*
- *Are proving sales opportunities for our local farmers.*
- *Are creating an RX Med comparison program so that individuals can afford their prescription drugs.*
- *Are working on affordable housing and inclusive and safe places for children and families to exercise.*



Healthy Community Committee Locations

2020 – COVID COMMUNITY IMPACT

- ▶ During COVID-19 Pandemic -distributed approximately 10,405 pounds of fresh produce to over 115 cars at two rural locations monthly. Additional financial support for food was obtained and information about food access was disseminated throughout the county.
- ▶ Continued the Cochise Leadership Academy, which graduated 17 participants whose projects improved the community through policy, systems, and environmental changes and will continue to do so as projects continue in the Healthy Community Committees.
- ▶ Tri-city transport expansion between Tombstone, Huachuca City, and Sierra Vista.
- ▶ Created a farmer’s market to hospital personnel for local farmers to sell their produce. Hospitals are now purchasing fresh produce from our farmers to use in their cafeteria.

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Tree nuts, fruit trees, and vines contribute over \$200 million to Arizona's economy on an annual basis, and the production, and with that acreage of such crops is steadily rising. More than 35,000 acres are planted in tree nuts and vines (28,000 in pecan, 9,000 in pistachio, 2,000 in grape). To date, less than half of the acreage in pecan and pistachio is in the fruit-bearing age. Therefore, the future economic impact is expected to rise. **Cochise County supports the majority of pecan, pistachio, and wine produced in the state of Arizona.**



In all these perennial crops, fungal or bacterial pathogens, mineral nutrition deficiencies, and salinity toxicity can significantly impact mortality, quality, and yield. One of the most common fungal diseases is the *Phymatotrichum* (a root rot disease indigenous to Southwest soils), affecting most dicot species of plants. In pistachio, *Septoria* leaf spot, and shoot blights, *Phoma* and *Botryosphaeria* have been an issue. *Phoma fungicola* is limited explicitly to Arizona pistachios. The Commercial Horticulture program has collaborated with plant pathology specialists, both nationally and internationally, with multi-state level approaches to research these biotic agents' development and lifecycles, mineral nutrition treatments, rootstock performance, and best treatment options. There are three American Viticulture Areas (AVA) that are federally recognized in the state of Arizona. The designated AVA's include Sonoita/Elgin, Willcox, and now Verde Valley is in the petition. This program is directly responsible for the annual UArizona Viticulture Symposium. More than 70% of the state's total grape production is in Cochise County; therefore, this program seeks grant funding, organizes education, and evaluates the grape producers' viticulture needs annually. With warming trend patterns increasing in the winter months, weather extremes also present a risk for commercial crops in Southeast Arizona. The producers and the community must be informed when an extreme weather event may negatively impact the areas. The demand for learning about horticulture and farm business planning has grown in Cochise, with a specific interest in developing their produce, fruits, and nuts on small acreage farms, focusing on sustainable agriculture and improving soil health the priority. This program is designed to maintain support and resources to protect Cochise County food producers and their investments, large and small alike.



- *Plan, implement and evaluate effective outcome-based programs to support identified issues in horticulture crops.*
- *Integrate new science-based knowledge, technologies, decision-support systems, and best management practices for growers and stakeholders.*
- *Optimize efficient, economical, and sustainable production of horticultural crops and strengthen local and regional food supplies.*

2020 – COVID COMMUNITY IMPACT

- ▶ 4 experimental research projects were conducted which focused on local horticultural issues.
- ▶ 179 constituents subscribe for communication and discussion between growers in Southeastern Arizona, the National Weather, and Extension scientists to develop strategies to improve the production and flow of information to manage weather and climate risks.
- ▶ The Arizona Pecan Growers were supplied a virtual annual conference where 10 southwest region experts and specialists presented on critical topics along with live Q & A sessions.
- ▶ Multi-state and University support for a Southwest Viticulture Research Center were confirmed.
- ▶ Over \$350,000 obtained in grants and in-kind gifts since 2015 for program support.
- ▶ Due to the COVID-19 pandemic, multiple projects and regular in-person events supported by this program were postponed in hopes to resume in 2021, including the annual UArizona Viticulture Symposium, Pistachio Growers meeting, Southeast Arizona Ag Day, and Pecan Field Day.

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Master Gardeners are a vital part of consumer horticulture programming and education provided to our community by the Cooperative Extension. Initially conceived at Washington State University in 1973, and arriving in Arizona in 1983, the Extension “Master Gardeners” program are trained volunteers who successfully complete a 16-week class series followed by 50 community volunteer hours to receive certification. They **support the UArizona Cooperative Extension by providing science-based information on environmentally responsible gardening and landscaping practices and skills** to the public. This is possible due to an educational demonstration garden (Discovery Gardens at UArizona Sierra Vista), monthly workshops (the MG Workshops series), by answering countless questions from the public which are received in the Master Gardener office and at Farmers’ Markets Plant Clinics and providing one-on-one consultations or demonstrations. Today, the need for these volunteers continues to grow between the uniqueness of our local desert-adapted plant species, the increasing number of new arrivals, and interest and demand for gardening-related advice.



Cochise County Master Gardeners:

- *Help to improve the natural environment through public education which leads to the wise use of natural resources and efficient gardening practices and skills.*
- *Increase residents’ access to UA Cooperative Extension through their broad and continuous public presence through workshops offered, public questions answered, and referrals to research-based information.*
- *Practice and educate community members with the latest horticultural information from the University of Arizona, about environmentally friendly landscapes which lead to wise water use, reduced pesticide use, and successful desert landscapes.*



2020 – COVID COMMUNITY IMPACT

- ▶ 410 students, K-12 from Cochise County schools attended the 3-hour educational field trip events in the Discovery Gardens at the UA South Campus in Sierra Vista, AZ.
- ▶ 28 Students completed the Master Gardener 16-week class series.
- ▶ 128 people attended Master Gardeners’ workshops.
- ▶ >150 emails and more than 280 phone calls answered regarding landscape/gardening questions.
- ▶ 300 free seed packets were given out from the newly developed Seed Library.
- ▶ >\$27,000 in grant funds secured.
- ▶ ~185 people attended live Zoom continuing education workshops provided monthly.
- ▶ Due to the hardships, COVID-19 presented on everyone in 2020 and the limitations for in-person events, the Spring and Fall Plant Sales were canceled.

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