

2019 Agriculture & Natural Resources

Urban Horticulture

RGV Small Acreage

Over **318 participants** attended the RGV Small Acreage Workshop series.

Programs Included:

- Grapevine Workshop
- Chicken Egg Production
- Goat Production
- Beef Cattle
- Aquaponic Gardening
- Canning Workshop

Based on the data obtained and analyzed from the 2019 evaluations by Economist Dr. Samuel Zapata it was determined that each educational workshop generated an economic benefit of **\$1,027** per participant if those expectations are achieved.



Master Gardeners

For the 2018-2019 class, **15 Master Gardener Interns** completed the volunteer training course work and **50 hours** of volunteer service hours and became certified Texas Master Gardeners. In 2019, the Master Gardener Interns, and the Master Gardener volunteers contributed over **3,100 volunteer service hours**.



This year **18 Master Gardener Interns** completed the class training and will continue to work on volunteer hours needed to complete course work. **63%** of the Interns indicated an economical benefit from the program ranging from \$50-500.

Earth-Kind



Educational programs on composting, three series propagation, fairy garden, rainwater harvesting, drip irrigation, natives, palm trees, nature writing, and citrus were provided throughout the county. The Master Gardeners reached over **500 youth** on gardening programs. Presentations were conducted at schools, garden clubs and the Master Gardener Education Garden. Educational publications were distributed at **4 community outreach events**.

Agriculture

Pesticide Waste Disposal Event

County Extension Agents from the Rio Grande Valley hosted a pesticide waste disposal event on November 6th. Farmers came from throughout the Rio Grande Valley, as far away as Refugio, in order to properly dispose of their leftover farm chemicals. Over **3,000 gallons** of agricultural waste chemicals were collected for proper disposal at this event. This is the first pesticide waste collection program that has occurred here in the Rio Grande Valley in over 10 years.



Grain Sorghum Demonstration Plot

Cameron County Agriculture Extension Agent harvested a grain sorghum result demonstration plot. This research plot contained several different seed varieties grown by farmers in the Rio Grande Valley. Agents measured the weight in pounds, the bushel weight, and the moisture content of each variety. Information gathered at the conclusion of these result demonstration plots will help farmers make informed decisions as to which varieties perform best under our weather and soil conditions.



Cotton Demonstration Plot

Agriculture Agents from Cameron and Hidalgo Counties harvested a cotton result demonstration plot. This replicated trial contained several varieties of cotton that were represented by several different seed companies. During the cotton harvest, Agents weighed each variety utilizing a cotton weigh wagon. Agents then secured samples of each variety in order to test cotton fiber quality in terms of grade, strength, staple, and micronaire. Results of this demonstration plot were compiled so that local agricultural producers can make informed decisions as to which variety of cotton to plant in the coming year.



Cameron County Irrigation Conference

An Irrigation Conference for agricultural producers was held at the Cameron County Extension Office on September 25. Irrigation Specialists from Texas A&M AgriLife Extension service discussed topics ranging from economic impact that irrigation water has for the lower Rio Grande Valley to the many issues that affect water quality and quantity here in Cameron County. Presenters also spoke on the importance of preserving this extremely important natural resource and the current technologies being utilized today that help conserve water.



Coastal & Marine

Primary focus in 2019 for Coastal & Marine Resources was the shrimp fishery, hurricane preparation, Texas Master Naturalists, red tide training and recreational fisheries.

Recreational Fishing

Marine Agent Tony Reisinger (not pictured) served on staff of the 2019 4-H Fishing Camp in Brownwood last summer training youth in recreational fishing methods. Over **1300 anglers** were demonstrated fish identification, weighing and measuring methods by trainees of our certified weigh master program at two major RGV Fishing tournaments this year. **Seven trainees** participated in the program.



Invasive Species

Asian tiger shrimp have established a small population in the Gulf of Mexico and have not affected our native shrimp population to our knowledge. Our Cameron County shrimp fleet encounters this species in their offshore catches occasionally and they remain a concern for potential harm to our native stocks. We encourage fishermen to record and report any of this species they encounter to monitor any changes in the population.



Texas Master Naturalists

In 2019, our South Texas Border and Rio Grande Valley Master Naturalists chapters, comprised of over **400 members**, conducted **13,953 hours of volunteer service** to our community valued at **\$354,825**. These chapters conducted educational programs for **13,747 adults** and **17,223 youth**! Three intern classes had ten weeks of 12 classes and 10 field trips for each chapter graduating **75 Master Naturalists** in 2019. Class results from pre-tests and post-tests indicated an average of **14.2%** increase in knowledge for the interns. The post-test results indicated: a **92%** attitude change, **100%** increase in skills, and **89%** change in behavior.

Hurricane Awareness

Before hurricane season, Cameron County Extension exhibited the Arroyo Colorado model to demonstrate the impacts of flooding on the Valley at the 2019 AARP Hurricane Seminar in Brownsville and a hurricane preparation expo in McAllen. Over **800 attended** these events.



Flood Response

This year County Agents Tony Reisinger and Marco Ponce conducted windshield damage assessments with the Texas Division of Emergency Management in Cameron County after a major flood event on June 24. Recently **\$24 million** in federal funds was awarded to Cameron, Willacy and Hidalgo Counties for flood relief.



Climate Science

In 2019, the Rio Grande Valley Chapter Texas Master Naturalists developed and implemented a curriculum to educate naturalists and the public on recent impacts of climate change.



Cameron County Shrimp Industry

The 2019 shrimp season this year has resulted in consistent production with lower prices for the product. Most of our **180 vessel fleet** returned to port for the Christmas Holidays and went back fishing after the break to catch more shrimp. Lower fuel prices and the utilization of super fiber webbing (which we introduced) has contributed to a reduction in the production costs allowing for fleet to continue fishing. We continue to assist the industry with TED (Turtle Excluder Device) and BRD (Bycatch Reduction Device) compliance through dockside inspections aboard vessels. In 2019, an estimated **\$3.5 million** in fuel costs were saved by the Cameron County shrimp fleet utilizing cambered doors, which spread the nets, and super fiber netting which we introduced 30 years ago. Almost **100%** of our vessels use the super fiber nets. We have determined if a vessel uses this netting and doors, they save **25%** on their fuel usage. Our fleet annually produces around **12 million pounds** valued at **\$50 million**. Finally, we are seeing a slow change in our fleet to a new door made from high density polyethylene, replacing the old wooden doors which have been used for over 100 years. We will track this change in 2020.



Texas Red Tide Rangers and Coastal Naturalists

Thankfully red tide did not visit us in 2019. We held a Red Tide Ranger training at the UTRGV Coastal Studies Lab as a refresher on October 7. UTRGV now has a cytotab online in Port Isabel which serves as an early warning for red tide. It continuously monitors ambient plankton species, photographing them under a microscope. Our Texas Red Tide Rangers have been responding to red tides in Cameron County for 28 years, providing information to the public on health, recreational fishing and aerosol impacts during a bloom. Red Tide Rangers are part of the Texas Coastal Naturalist program. In 2019, our Texas Coastal Naturalists assisted in rescuing over **100 brown pelicans** downed at the Highway 48 crossing of Bahia Grande, and **20 cold stunned sea turtles**. Both phenomena occurred during cold northern events during early and late winter.

2019 Cameron County Family & Community Health

Parenting Connections

The Texas A&M AgriLife Extension Service conducted multiple parent education workshop series in Cameron County utilizing the *Parenting Connections* curriculum.

Topics covered included guidance/discipline, parent-child communication, promoting a healthy self-esteem in children and child development. Eighty-four (84) single session parenting evaluations were completed by the participants. Twenty-nine (29) parents and/or other relatives completed the 4-week program.

Anger Management

Participants had time to fill out worksheets where they had time to identify anger triggers and find more effective ways to deal with anger. **14** people attended this program.

Food Handler Program

To respond to repeated program requests, the Texas A&M AgriLife Extension Service conducted different programs. **17 people** in Cameron County participated in the **Food Handler program**. Change in knowledge (pre. vs. post) was used to evaluate the Food Handler Program.

Here are some results from the evaluations

-Which of the following is an example of a situation where cross-contamination can occur?
Before Class **88.9%** After Class **100%**

-Which of the following best describes the Temperature Danger Zone?
Before Class **33.3%** After Class **77.8%**

Multi-County Cameron & Hidalgo Child Care Conference

On April 27, 2019 - The Texas A&M AgriLife Extension Service conducted a multi-county childcare provided training in Weslaco for **90 childcare providers & directors**. A total of **630 clock hours** of training were provided to childcare professionals seeking to meet state mandated training requirements established by the state of Texas.



Hats off to Breast Health

This program discusses how some "hats" women wear (in other words, myths they believe) could affect their chances of surviving breast cancer. **36** women participated in this program



Healthy South Texas

In 2019, the Texas A&M AgriLife Extension Service conducted different programs supported by the Healthy South Texas Coalition, Family & Community Health Members and Volunteers.

Dinner Tonight

Total participants **292** and only **212** participants completed the surveys.

Evaluation Results:

Overall satisfaction with this program:
Completely Satisfied: **44.6%**
Mostly Satisfied **30.4%**



On the Road to Healthy Living: Mobile Cooking School

In 2019, **10 classes** were conducted (consisting of three class) with a total attendance of **149** and only **137** participants completed the surveys.

Level of confidence in meal planning to prepare healthy meals -
before **2.82%** after **3.32%** percent change **16.7%**



2019 Cooperative Extension Cameron County Family & Community Health



Parenting & Life Skills

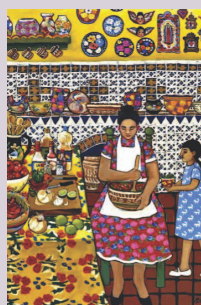
Throughout the **2019 year**, over **830** Parent & Student participants from the Harlingen Consistent School District/Harlingen Boys and Girls Club's Family P.L.U.S. program attended presentations wherein they learned tips on how to communicate better with one another, and how to manage their money



Taste of Latin American Heritage

Oldways' A Taste of Latin American Heritage is:

- A six-part lesson plan designed to bring the Latin American Diet Pyramid to life, allowing participants to discover the major foods of the pyramid and to learn how to easily prepare them.
- An introduction to the vibrant history, culture, and nutrition of Latin American heritage foods.
- An experiential guide to easily adapting Latin American eating patterns to modern life.
- A plant-based curriculum that purposefully teaches about the foods and preparation of them-recommended most by the Latin American Diet Pyramid.



Taste of Latin American Heritage Total: 41 graduates
Classes were held at various schools in the Harlingen CISD and the San Benito CISD & City of Combes Community Wellness Center



2019

TEXAS A&M
AGRI LIFE
EXTENSION



4-H & Youth Development

Kids, Kows & More

On October 29th & 30th we had our multi-county agricultural literacy program for 4th graders in Hidalgo and Cameron County where they are introduced and taught about their local food and fiber commodities. The kids rotate as groups every 10-15 minutes to the different educational AG literacy subjects such as a mobile dairy, grain, cotton, water, 4-H, wildlife, bees, bugs and drones. The presentations are visual and are a close-up learning experience for the kids. The goal of this program is for the kids to understand and appreciate where their food/fiber comes from and not just bought in the store. We had a great turn out of students from both counties and we are excited for next year.



Community Service

This year our Cameron County 4-H Council were able to participate in two major community service projects in our county. The first community service project that I was able to be apart of was our Thanksgiving Holiday Help, where we donated **10** Thanksgiving meals to **10 families** in need in Harlingen. We partnered with the Parental Involvement Center where they contacted the families that they felt would benefit the most from the donation and we were able to meet and help load meals into their vehicle. The next one was the "Gift for Teens" gift drive that we participated in with the RGV Credit Union where they gather gifts that are for teenagers in need in our community since they are often overlooked due to their age. It is very important that we show our 4-H kids the importance of giving back to our community and those in need.



2019

PRAIRIE VIEW
A&M UNIVERSITY
COLLEGE OF AGRICULTURE
AND HUMAN SCIENCES
Cooperative Extension Program



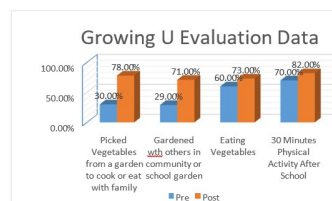
CEP 4-H & Youth Development

Heroes 4 Health

- 590 participants** were reached and **365 Heroes 4-Health** participants were surveys
- 87%** of participants reported an increase in knowledge. Due to this program they learned why it's important to eat a healthy diet.
 - 85%** of participants reported adopting a behavioral change by eating fruit each day
 - 85%** of participants reported adopting a behavioral change drinking more water each day
 - 80%** of participants reported an increase in knowledge by learning about healthy food choices



Growing U Program



There were increase changes in behavior in eating vegetables, increase physical activity, and increase in gardening with family and community



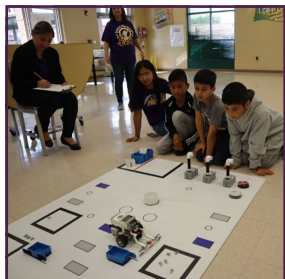
35 - Third, Fourth & Fifth grade students participated in the Growing U program in Sullivan Elementary



4-H STEM Program

267 students that were reached through the robotics program. **80** were evaluated using the 4-H Robotics post evaluation.

- 95%** reported an increase in knowledge by showing an interested in science and STEM
- 92%** reported a change in behavior in communicating better with team members, friends, and family
- 92%** reported an increase ability to test the robot to make sure it works
- 92%** reported a change in behavior in being a better teammate due to the robotics program
- 91%** reported change in behavior. Due to the program they want to know more about science



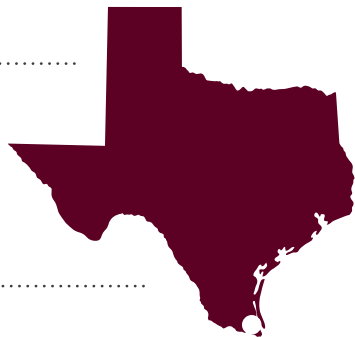
EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM

Educating Families since 1969

2019 // Cameron County Outreach

1,487
participants

5,461
families



95%

made a positive
change in one or
more food groups



182 volunteers

4,411 hours
equals
\$110,716
in-kind
contribution



Adult Outreach

68% increased
physical activity behaviors



\$17
saved on
family's
monthly food
expenses



72%
practice better
food resource
management

MyPlate Practices



88%
changed diet
quality
behaviors



35%
increased
vegetable intake



67%
improved
food safety
practices

Youth Outreach



14,576
Kinder - 12th

89%

improved ability
to choose
healthy food

64%

improved safe
food handling
practices

55%

improved
physical activity
behaviors



Expanded Food and Nutrition Education Program Cameron County

SUPPORTING TEXAS FAMILIES WITH GREATEST NEED SINCE 1969

The Expanded Food and Nutrition Education Program (EFNEP) helps young families and youth with limited resources – those most at risk to suffer from hunger, food insecurity and the inability to connect with available support systems. EFNEP offers practical lessons in basic nutrition, food preparation, food budget management and food safety in settings convenient for the participants. Program graduates reflect significant, lasting improvement in eating behaviors and healthy food habits. Texas has a need for EFNEP – 2016 data show that 19% of Texas families with children under the age of 18 were living below poverty level, compared to 17% of U.S. families.

EFNEP REACHES DIVERSE AUDIENCES

In Cameron County, ethnically diverse EFNEP nutrition assistants reach youth and adult groups whose principal language may be English or Spanish.

In 2019,

- 1,487 families enrolled in EFNEP
- 14,576 youth contacts were made through the EFNEP youth program
- 58% of EFNEP participants have children under the age of 19
- 30% of families were at or below 100% of federal poverty level
- 55% of families enrolled in one or more food assistance programs



EFNEP MAKES A REAL DIFFERENCE

Adult Program

Using “hands-on” experiences, EFNEP adult participants complete at least a six-lesson series on stretching food dollars, improving eating habits, and practicing food safety principles. As a result of participation in EFNEP participants will learn to: prepare more meals and snacks at home, be more active, control portion size and have more energy.

Youth Program

The EFNEP – Youth program is directed toward low-income school-age youth. These students participate in a series of fun and educational lessons on good nutrition and food safety as part of summer programs, classroom and after-school activities. Through fun and engaging activities youth learn to: build a healthy plate, set limits on sugar, fats and sodium, be active, food safety and to practice healthy behaviors.



COST-BENEFIT OF EFNEP

Studies have shown that for every \$1 spent on EFNEP, \$10 were estimated to be saved in health care costs and \$2 saved in food costs by participants. For Cameron County, this is \$3 million in estimated health care cost savings and almost \$616,986 in food costs.

VOLUNTEERS STRENGTHEN EFNEP

In 2019, 182 volunteers donated 4,411 hours of work to EFNEP in Cameron County. At the Texas rate of \$25.10/hr, this volunteerism has a minimum dollar value of \$110,716. Volunteers make a difference in their own communities, and contribute to EFNEP's continued success.

For more information visit efnep.tamu.edu.



TexasEFNEP



TX_EFNEP



Texas EFNEP

Work is supported by the Expanded Food and Nutrition Education Program from the USDA National Institute of Food and Agriculture.

The Texas A&M AgriLife Extension Service provides equal opportunities in its programs and employment to all persons, regardless of race, color, sex, religion, national origin, disability, age, genetic information, veteran status, sexual orientation, or gender identity.