

## **2021 Starr County Annual Report**

The Starr County AgriLife Extension Program is driven by a program development framework that includes various committees that actively work with local Extension Staff to provide meaningful educational programs and activities for the residents of Starr County. Included in this report are some of the highlights of such activities and the impact they had on the community.

### **Water Well Screening**

San Isidro is a rural community of about 1,500 residents in northern Starr County. All the residents in this community rely on private wells for drinking water and daily household use. Unlike residents that use community water systems, homeowners with private wells are not protected by statewide regulations that monitor drinking water. The management of private water wells and the quality of the drinking water is left up to the homeowners. The voluntary management of private water wells is a problem because most health-related pollutants in water are symptomless. As a result, homeowners with private water supplies may be exposed unknowingly to health-related pollutants unless they voluntarily have their water tested for the correct water quality parameters.

A total of 32 water well samples were collected in August of 2021. The presence of fecal coliform bacteria was found in 8 (25%) of these samples. The average nitrate concentration for all samples screened was 8.8 ppm with only eleven (11) samples testing 10 ppm or more (10–50 ppm). All samples were tested for the presence of arsenic. Eleven samples tested positive with an average of 8.8 ppb and a range of 2-50 ppb. The average salinity of all the samples was 3443 ppm with a range of 1296-8990 ppm.

The samples collected provided information that will allow homeowners to make better decisions in managing the quality of their water. In some instances, management decisions can correct the quality of the water. In other instances, homeowners will just have to decide only to use the water for other recommended practices and not for home use.

### **Beef Cattle Management and Profitability**

Despite the wide-spread economic growth in the last decade, Starr County continues to lead with agriculture production. It is estimated that over 50, 000 acres are under production agriculture worth a little over 45 million dollars. The beef cattle industry in Starr County is worth over 30 million dollars followed behind by wildlife with about 10 million dollars.

This year agriculture producers participated in the Bull Gain Test and Heifer Development Program which allows producers to collect valuable information on their breeding cattle. This information is then used to make management decisions that allows producers to increase the weaning weight and quality of their calves.



Producers also participated in Horn Fly Control Demonstration using the Vet Gun. The use of this management practice has the potential to reduce the stress in livestock herds that can lead to reduced weight loss at a time when forage production is at its lowest point due to the weather conditions that exist in the Rio Grande Valley.

The Annual Ranchers Program was held this year in October. The program involved over 45 ranchers and focused on topics such as USDA-EQIP/CSP Application Process, Producing Quality Stocker Calves, Managing Range Resources to Meet Nutritional Needs of Wildlife and Livestock Herd management and Resistance to parasite Control.

### **Starr County 4-H – Making a Difference**

The Starr County 4-H Program witnessed its third year with increased club enrollment! The enrollment increase is attributed to effective volunteer management and increased 4-H project experiences.

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The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating*

Livestock projects continue to be the most popular, followed photography, foods and nutrition, horticulture and community service. Popular 4H Contests include Ag Product ID, Food Show/Challenge, Photography and Fashion Sensation.

Year	Club Members	School Enrichment	Special Interest	Total Enrollment
2019	269	10,792	4,652	15, 971
2020	281	1,189	1,000	2,751
2021	290	0	0	290



**Beef Cattle Production Management Program**

Limited resource agriculture producers have suffered from financial situations due to low market prices, seasonable droughts, and depleting government assistance programs for many years. This may be because of language barriers in communication which has kept these producers from increasing their knowledge. In general, these alternatives and sustainable production practices could enhance profitability of farming and ranching operations and maximize fluctuation in farm income to improve the economic well-being which may improve the quality of life of limited-resource farmers and ranchers. Agent worked with Cooperative Extension Program Advisory Committee as well as program area committee members by identifying county-based issues addressing livestock management programs. Workshops, field days, demonstrations, and one-on-one sessions were designed to increase knowledge gained and attitude of agriculture producers by making them aware of programs that can help them compete in today’s agriculture industry. Producers were identified with interests from previous evaluations that will benefit from services and offer programs that will address their specific production concerns that they will understand.

**“Beef Cattle Luncheon Series Program May 10<sup>th</sup>, 2021, 34 Participants**

**“Livestock Nutrition Program” on June 10<sup>th</sup>, 2021, 20 Participants**

**“RGV Bull Gain Test & Heifer Development Program” on October 6<sup>th</sup>, 2021, 27 consigners**

**Starr County Fall Ranchers Program” held in San Isidro, Texas on October 29<sup>th</sup>, 2021  
60 participants**

**Beef Cattle Production Management Program:  
All participants participated throughout all 4 programs providing collected data showing an increase of knowledge gain of 95 % with-in participants.**

**Better Living for Texans Program**

A Fresh Start to a Healthier You, Growing and Nourishing Healthy Communities, Get the Facts and LGEG. Better Living for Texans (BLT) program offer food and nutrition education to SNAP recipients, applicants, and other low-income audiences that help participants increase their consumption and access to fruits and vegetables, be more physically active, improve food security status, and prevent risk factors for chronic disease such as obesity, diabetes, and cardiovascular disease. BLT programs targeted Senior and youth citizens.

During 2020-2021, 26 Adults graduated in Growing and Nourishing Healthy Communities program. A retrospective survey was conducted to 11 participants and results show that a change in behavior after program was completed. We had a total of 153 lbs. of harvested fruit and vegetables in our community gardens. 396 adults participated, and 202 adults completed A Fresh Start to a Healthier You series, a pre-and post-survey was conducted to measure the adoption of healthy lifestyle behaviors after adults completed the A Fresh Start to a Healthier You series. We also had 6 adults that completed Get the facts series. LGEG was started but not finished due to children taking virtual classes and not attending schools due to COVID-19 pandemic.

**Working On Wellness Environment**

In 2021, the Working on Wellness Environments team completed Community Challenge projects with the Parks and Recreation Department and the Public Library. The team also partnered with Texas Target Communities and the Texas A&M Transportation Institute to start a Comprehensive Master Plan with the City of Rio Grande.



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Providing Solutions**