



## Extension Education in McMullen County

Making a difference  
2009

Improving Lives.  
Improving Texas.

AgriLife Extension has been dedicated to serving Texans for nearly a century. The agency was established in 1915 under the Smith-Lever Act to deliver university knowledge and agricultural research findings directly to the people. AgriLife Extension programs have continued ever since to address the emerging issues of the day, serving diverse rural and urban populations across the state.

Through a well-organized network of program specialists, professional educators, and some 98,000 trained volunteers, the Texas AgriLife Extension Service delivers practical research-based knowledge to Texans in all 254 counties. Our expertise and educational outreach pertain to the food and fiber industry, natural resources, family and consumer sciences, nutrition and health, and community economic development. Among those served are the hundreds of thousands of young people who benefit annually from AgriLife Extension's 4-H and youth development programs.

Texans turn to AgriLife Extension for solutions. Its agents and specialists respond not only with answers, but also with resources and services that result in a significant return on investment to boost the Texas economy. The agency custom-designs its programs to each region of the state, relying on residents for input and for help with program delivery.

These are just a few highlights of AgriLife Extension's impacts on McMullen County and its people:

## **McMullen County – Summary of Educational Contacts**

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**Total Educational Programs Conducted – 163**

**Total Participants – 2235**

**Contact Hours via Educational Programs – 391**

**Office visits – 203**

**Site visits – 324**

**Phone calls – 366**



## Rangeland Management

**Relevance:** There are over 83 million acres of pasturelands in Texas and native rangelands serve as a vital resource in livestock production and for wildlife habitat in the South Texas. Control of noxious weeds and invasive brush species on native rangelands continues to be a challenge for landowners. Brush sculpting allows landowners and wildlife managers to maintain or improve wildlife habitat. Livestock producers should utilize range monitoring and proper stocking rates to improve sustainability and rangeland health. McMullen County's land area consist almost entirely rangeland. Members of the Agriculture and Natural Resource Committee, Soil and Water Conservation District Directors, and EQUIP Working group have expressed concerns that the issue affecting rangeland in McMullen County is invasive species such as mesquite, prickly pear and other brush species.

### Response:

Prescribe Burn Consultations/Implementations [842605] *Occurred : Feb. 18, 2009*

Prescribed Fire Workshop [785828] *Occurred : Feb. 19, 2009*

Rangeland Management -Web Site Information [785579] *Occurred : Apr. 15, 2009*

Range Management Field Day [785586] *Occurred : Apr. 29, 2009*

Rangeland Management Information- News Releases [785590] *Occurred : May. 6, 2009*

Result Demonstration/Applied Research in Range Mgt. [785591] *Occurred : May. 18, 2009*

News Release [861813] *Occurred : Jul. 10, 2009*

Result Demonstration Evaluation [865496] *Occurred : Jul. 16, 2009*

Rangeland Management -Web Site Information [785578] *Occurred : Oct. 7, 2009*

Result Demonstration/Applied Research in Range Mgt. [785585] *Occurred : Oct. 15, 2009*

CEU Recertification Program [785819] *Occurred : Nov. 24, 2009*

**Results:** Evaluation questionnaires reflected an increase in knowledge and skill levels in understanding range management components addressed through an educational series. Participants had a 70 percent increase in understanding prescribe fire as a brush management tool and understanding the difference between cool season versus summer burns. A 61 percent increase was reflected in participants understanding the limitations of managing brush with a prescribe fire. A 48 percent increase in knowledge was reflected in participants understanding of available weather monitoring and communication tools.

A 38 percent increase in knowledge was reflected in the importance of proper application technique and timing factors for effective control of mesquite with foliar applications.

60 percent increase in knowledge was reflected in the use GIS/GPS technology for the use of precision application of herbicides with fixed wing air craft.

A 95 percent increase in knowledge was reflected to prospect of a new chemistry (aminopyralid) for use in foliar application for mesquite control.

Program benefits include the safe and proper use of prescribe fire for meeting landowners objectives such as brush management and enhancing wildlife habitat.



Effective use of herbicides and application techniques is crucial for economic feasibility and environmental stewardship of rangeland.

Prospective herbicides utilized in result demonstrations provided landowners and managers information and preliminary results of another herbicide treatment option for brush management with the potential of 62 percent savings in chemical cost.



## Character Education McMullen County 2009

**Relevance:** Surveys and studies have shown a moral decline in youth as well as the increase in violence committed by youth. In McMullen County, the moral decline affects the learning environment in the classroom with behavior and discipline problems. Previous generations of parents taught character education and ethics in the home, but this has changed as demographics have changed. Our agency is poised to reach youth and shape them into ethical young people.

**Results:** As a result of the lectures and teaching activities, the pre and post test results of the questionnaire reflect an increase of knowledge of 28 percent for the 3rd grade students and 31 percent for the 5th grade students. 10 percent of the 3rd grade students could define the "Golden Rule" on the pre-test compared to 56 percent on the post-test. 38 percent of the 5th grade students could define the "Golden Rule" on the pre-test compared to 75 percent on the post-test.

In the 3rd grade, students reflected an 88 percent increase in knowledge on being able to identify the six pillars of character. 5th grade students had a 75 percent increase respectively. A 35 percent increase in knowledge was demonstrated in 3rd grade students being able to describe the traits of a trustworthy person; a 75 percent increase was noted with 5th grade students being able to describe the traits of a trustworthy person. 42 percent of the 5th grade students could list 3 traits describing a respectful person compared to 0 percent on the pre-test. Testimonial provided by 5th grade teacher provided evidence of the behavior and attitude change. Observations that were documented included a change in student's attitude and behavior.

Students would police themselves and remind themselves to practice good character.

As stated by the 5th grade teacher, "The character education lessons have been very beneficial in teaching them life skills."

One the most important messages that students will benefit from is "that just because everybody is doing it does not make it a good behavior."



### Quality Counts

**Relevance:** Texas has the highest participation totals in 4-H and FFA livestock projects in the country. In 2006, there were over 89,000 market and breeding entries for cattle, sheep, swine, and goats across the state and (Coufal, 2007). These figures have continually climbed over the last decade and into the new millennium. Thus, Quality Counts in Texas has been developed for 4-H and FFA members who participate in these livestock project areas. Quality Counts in Texas is a new program for 4-H and FFA youth across Texas that exhibit livestock projects. This includes such market and breeding projects as beef cattle, sheep, swine, and goats. The purpose of Quality Counts in Texas is to provide an opportunity for youth across Texas to learn personal character attributes and acceptable livestock management practices associated with these projects. This unique combination of subject matter should result in the exhibition of the highest quality livestock projects by youth with unsurpassed character and ethics. Ultimately, this program will be an integral part of the junior livestock program. This will eventually lead to a safer, more wholesome nutritious product that is fed by responsible youth of Texas who are dedicated to providing the best meat products for consumers.

### Response:

- Lesson 3: Purpose of Livestock Projects
- Lesson 2: Purpose of 4-H/FFA
- Lesson 1: Six Pillars of Character
- Lesson 8: Animal Care and Well-being Lesson 7: Medication Use/Reading and Following Labels Lesson 6: Responsibility of Producing a Safe Product
- Lesson 5: Impact of Livestock Projects on Red Meat Industry

Forty Five 4-H members participated in a lecture series teaching youth about livestock projects and the impact and relationship it has with the meat industry and food safety. Lessons focused on character education coupled with lessons and activities related to quality assurance. One the main focus areas of the lecture series was to emphasize the importance of labeled use of medications and following withdraw times to ensure compliance with food safety issues.

**Results:** A 24 percent increase in knowledge was reflected overall in the combined scores comparing pre-test and post-test results.

95 percent of the participants could define the withdrawal time on a medication to 32 percent on the pre-test.

A 22 percent increase was reflected in participants recognizing that livestock projects are part of the food supply chain.

A 33 percent increase in knowledge was reflected in identifying the feed tag as the main source information on withdrawal times for medicated feeds.



## 4-H and Youth Development

A 20 percent increase was demonstrated on participants being able to identify off label, extra label and label use of medication.

A skillathon utilizing medications was used to measure participant's ability to apply the knowledge they learned. 100 percent of the participants could locate expiration, withdrawal times and label use for 8 medication samples.

The program benefits included educating youth about livestock projects and its relationship with food safety.

Quality Counts increased the knowledge level of the participants about quality assurance thus increasing the compliance with food safety issues and producing a safer meat product.