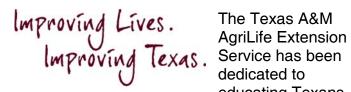


Extension Education in McMullen County
Making a Difference



educating Texans

for nearly a century. In 1915, the agency was established under the federal Smith-Lever Act to deliver university knowledge and agricultural research findings directly to the people. Ever since, AgriLife Extension programs have addressed the emerging issues of the day, serving diverse populations across the state.

Through a well-organized network of professional educators and some 100.000 trained volunteers. Extension 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 Extension's 4-H and youth development programs.

Texans turn to Extension for solutions. Its agents and specialists respond not only with answers, but also with resources and services that result in significant returns 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. Here are just a few highlights of Extension's impacts on this county and its people:

McMullen County – Summary of 2016 Educational Contacts

- Total Educational Programs Conducted 230
- Total Participants 2843
- Contact Hours 2509
- 4-H Members 59
- Curriculum Enrichment Participants- 43



Agriculture and Natural Resources

Range Management in McMullen County

Relevance

There are over 83 million acres of pasturelands in Texas. Native rangelands serve as a vital resource in livestock production and for wildlife habitat. 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. Mastering the art and science of grazing management is critical for successful ranch management. One of the most important steps in ranch planning is to establish the correct stocking rate of the ranch's pasture and range sources, carefully considering the variation in precipitation within seasons and between years. Livestock producers should utilize range monitoring and proper stocking rates to improve sustainability and rangeland health. McMullen County has minimal row crop production with over 730,000 acres in rangeland in which beef cattle production and wildlife resources are vital to the area economy. Members of the Agricultural and Natural Resource Committee, Soil and Water Conservation District Directors, and the EQUIP Working group have expressed concerns that rangeland health in McMullen County is affected by invasive species such as mesquite, prickly pear, and acacia species.

Response

Educational response addressing rangeland management.

- Brush Management Consultations
- Range Webinar Programs
- Blackhouse Ranch Tour
- Agricultural Symposium- Multi-County
- Result Demonstration Effect of Herbicide Tank-mixes on South Texas Wildlife Brush Species

Results

Observations conducted by Extension Agent and NRCS Conservationist reflect 20% increase the adoption native grasses or less invasive introduced grasses such as Kleingrass and Blue panic for re-vegetation of pipeline easements. Landowners and contractors are considering re-vegetation with native grasses versus introduced invasive species for improving wildlife habitat. Consultations focused on the importance proper planting techniques and seeding rates and native species grass adapted to the region. A retrospective post evaluation reflected a 15 % increase in conducting forage inventory to determine or adjust stocking rates.



Making a Difference

Character Education in McMullen County

Relevance

Historically, character education and ethics were taught in the home environment, but this has changed as demographics have changed. Broken families, parents lacking parenting skills, television, music, and social media are few of culprits that impact youth behavior. Our agency is poised to reach youth and has the opportunity to shape ethical young people who will have values as contributing adults. The shift in society's expectation of young people has changed and youth are more disrespectful as a result and lack manners. This problem is widespread among all youth in Texas. The issue of a lack of discipline and respect was identified during the 2004 Texas Community Futures Forum. The Leadership Advisory Board continues to identify teaching moral and ethical behavior through character education as an important issue to address.

Response

In McMullen County, the Texas Building Character curriculum adopted by the Texas A&M AgriLife Extension Service and is utilized to target 3rd and 5th grade students of McMullen County ISD. A weekly lecture and activity series conducted from September through December addresses one of the six virtues of good moral character which includes respect, responsibility, trustworthiness, fairness, caring and citizenship. A pre-test and post-test questionnaire was utilized to measure knowledge gained by students. Statements from the teachers and evaluation questionnaire were utilized to document any behavior changes.

Results

A pre-test and post-test questionnaire was utilized as an evaluation tool to determine the degree of knowledge gained by the students. The questionnaire utilized a variety of types of questions that include matching, true and false questions and defining or describing the different virtues related to good character.

Pre-test and post-test scores reflected 53 % increase in knowledge levels for 3^{rd} grade students and 51% increase in knowledge levels was achieved by the 5^{th} grade level students.

Post test scores reflected 71% of the students increased their knowledge in identifying the six pillars of character that were addressed through lessons and teaching activities compared to 0% on the pre-test. 60% increase was reflected in the post-test for 5^{th} grade students compared to 0% on pre-test.

Post-test scores reflected a 56 % of the students in the 3rd grader were able to define the "Golden Rule" as it relates to respect. Less than 0% of students could define the "Golden Rule" on the pre-test.



Agriculture and Natural Resources

53% of the 3^{rd} grade students were able to describe a trustworthy person compared to 0% in the pre-test. 35% of the 5^{th} grade students answered the question correctly on the post-test compared to less than 12% on the pre-test.

Statements taken from teachers reflected a change in attitude from students. Students are more respectful and tolerant with each other.

Students recall many of the lessons and activities when misbehavior or incidents occur. Students will utilize quotes or statements from lessons to make students aware of their misbehavior.

Future program efforts include interjecting Take A Stand curriculum with Texas Building Character to assist teachers in addressing the issue of bullying.



4-H and Youth Development

Jr. Master Gardner Program in McMullen County

Relevance

The JMG program is currently used through community clubs, after school and school based programs. The JMG program has had documented success in schools validated by research studies indicating an increase in science achievement scores, increased parental involvement, improved leadership/community service, and increase knowledge and consumption of fruits and vegetables for children participating in the Junior Master Gardener Program. The purpose of the Junior Master Gardener program is to grow good kids through igniting a passion for learning, success, and service through a unique gardening education experience.

Response

A spring garden was established at McMullen County ISD targeting 5th grade students. The school garden serves as an outdoor classroom to teach students about soils, seeds, plant classification, plant identification, weeds, insect identification, plant diseases, nutrition, soil fertility and water conservation. Teaching activities are conducted twice per month from the middle of February through May.

Results

A pre-test and post-test questionnaire was utilized as an evaluation instrument to determine the level of knowledge gained from the teaching activities involving soils, soil fertility, and plant science.

Average scores comparing the pre-test to post-test scores reflected a 38 % average score on pre-test compared to 81% on the post-test reflecting 113 % increase in the average test scores.

An 85 % increase in knowledge was reflected in the student's ability to classify garden vegetables as monocots vs. dicots in learning to observe plant structures for plant classification.

A 250% increase in knowledge was reflected in the plant processes section of the questionnaire. Students were able to answer questions related to photosynthesis and plant transpiration.

75 % of the students answered soil fertility related question in being able to list what the 3 numbers on a bag of fertilizer represent.0 % of the students were able to answer that question correctly on the pre-test.

All students learned the value of utilizing mulch to help conserve water, prevent soil erosion and manage weeds.



4-H and Youth Development

One Day 4-H

Relevance

One Day 4-H is a grass roots community service effort for 4-H youth to identify, plan, and implement a community service project that serves the needs of their particular community and/or county. Modeled after the Texas A&M University's Big Event, one day 4-H teaches 4-H members the importance of giving back to their communities based on issues they see are affecting the lifestyles of the citizens. Throughout this process, youth have the opportunity to develop a partnership with adult volunteers as they plan and implement their service project. One day 4-H helps develop the core life skills of communication, responsible citizenship, contribution to group effort, teamwork, self-motivation, problem solving, service learning, planning/organizing, and social skills.

Response

4-H members volunteered to assist the Double Rafter H Clay Shoot raise funds for graduating high school seniors. 4-H members assisted with assembling gift bags, setup of tables and chairs, and serving as trap operators and score keepers. A total of 10 4-H members and parents assisted with the sporting clays shoot that has well over 300 participants. Landscaping Service project for St. Joseph Catholic Church involved 6 4-H members and 3 adult volunteers contributing 5 hours of labor planting trees, shrubs, and adding soil and mulch to flower beds. Over \$2500 of plants and landscape materials were involved in the landscaping project.

Results

16 4-H members and 6 volunteers assisted with the two service projects. McMullen 4-H provided volunteers for the Double Rafter H Clay Shoot which took place on two days instead one day as in previous years. The most gratifying result is the expression on the youngster's faces when work as a team to accomplish a task and learn some new skills.



Community Economic Development

Texas A&M AgriLife Extension Service McMullen County

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