Extension Education in Bexar County

Making a difference 2009

Educational programs of the Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.
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 Bexar County and its people:

**Bexar County – Summary of Educational Contacts**

- Total Educational Programs Conducted – 4,626
- Total Participants – 402,638
- Contact Hours via Educational Programs – 9,804,893
- Educational Contacts by Volunteers – 213,593
- 4-H Members –
- 4-H Leaders –
- 4-H Clubs –
- Curriculum Enrichment Participants –
- Individual Contact Methods – 131,162
- Newsletter/Mail/E-Mail Contacts – 18,217
- Web Contacts – 58,786
Environmental Stewardship & Rainwater Collection

Relevance: The San Antonio area faces major challenges because of the need to reduce dependence on the Edwards Aquifer in order to protect spring flows at Comal and San Marcos Springs and associated endangered and threatened species. Bexar County is presently one of the largest growing counties in the state adding 100,000 residents a year to its population. With this development, Bexar County is seeing greater demand on water supplies and resources. Even with this growth, San Antonio has been able to lower its water consumption to 139 GPCD. Water conservation is working, and this issue will continue to be one of the driving forces in Bexar County decision-making. Extension has been asked by elected officials and residents to assist in continued education for water conservation.

Response: Texas AgriLife Extension in Bexar County developed the following activities and implemented a yearlong educational program with six workshops to concentrate on the needs of environmental stewardship and rainwater collection. The program implementation was created to be conducted in the spring and fall with outdoor, hands-on training activities that emphasize:

- Rainwater Collection for Landscape (03/21/2009)
- Lawn Management 101 (03/24/2009)
- Rain Barrel Workshop (08/15/2009)
- Rainwater Collection for Home (10/26/2009)
- Rainwater Collection for Landscape and Wildlife (10/27/2009)
- Rainwater Harvesting Workshop for Master Volunteers (11/17/2009)
- Bexar County Natural Resources and Agricultural newsletters addressing water conservation, wildlife, livestock and range management practices (throughout the 2009 year)

Results: To determine programmatic results of the environmental stewardship and rainwater collection series for Bexar County, customer satisfaction evaluations were used with a retrospective post evaluation administered to participants. A total of 265 homeowners participated in the six workshops during 2009, for an average of 44 participants per workshop. One-hundred percent of participating landowners completing the evaluation indicated that the information provided in the workshops would help them make better management decisions. Respondents indicated the following change in knowledge after program completion:

- 83% increase in knowledge and understanding of Rain Gardens/Passive collection of rainwater.
- 86% increase in knowledge and understanding of roof types, gutters and storage tanks.
- 93% increase in knowledge and understanding in first flush systems and improving water quality.
- 87% – increase in knowledge and understanding of sanitation methods and control.
- 97% – increase in knowledge and understanding of system maintenance techniques.
- 96% – increase in knowledge and understanding of rainwater.
- 83% – increase in knowledge and understanding of surface area and the volume of water that can be collected from a surface.
Anticipated Changes & Economic Impact:
- 89% of respondents plan to take actions or make changes based on the information from this activity.
- 76% of respondents anticipate benefiting economically as a direct result of what they learned from this Extension activity.

Overall Customer Satisfaction (Texas AgriLife Extension Survey)
- 100% - mostly or completely satisfied with: program, quality of materials, location of the activities, accuracy of information, information being easy to understand, range of topics covered, completeness of information on each topic, & knowledge level of instructors.
- 94% - mostly or completely satisfied with: helpfulness of the information.
- 94% - mostly or completely satisfied with: timeliness of the information.
- 94% - mostly of completely satisfied with: information being new.
- 94% - mostly of completely satisfied with: quality of course materials.

EarthKind Environmental Stewardship Programs

Relevance: Landscape irrigation in Bexar County can potentially peak to 40%-60% of total residential water consumption, especially during the summer month’s high demands. This ongoing issue has been especially critical from 2008- August of 2009 with the occurrence of one of the worst droughts in recorded history. This issue is not only significant to the 1.6 million plus residents of Bexar County but also millions of residents throughout our great state of Texas. If Bexar County and similar large populous urban areas expect for industries to grow and flourish then a need of understanding and managing this vital natural resource "WATER” must be constantly looked into and supported through public educational awareness which includes but not limited to proper landscape management practices. This issue is identified and ongoing supported by the Bexar County Master Gardeners, Texas Nursery and Landscape Association, Green Industry Alliance and the areas major water purveyor, San Antonio Water Systems (SAWS).

It is estimated that by the year 2030 if not sooner, we will have a water crisis in this region which encompasses the ever-growing Metro area of San Antonio. Irrigation frequency, irrigation design, irrigation timing, soil management and selection of plant species are a few of the practices and principles that have been focused on in 2009 through consumer education both to the general public and ‘Green Industry’ professionals. With out water, “Life can not exist” and an equilibrium of urban water quantities and qualities must be intoned with agricultural wants and needs.

Response: Texas AgriLife Extension Service responded to these environmental challenges by providing an extensive assortment of educational programs, demonstrations and media outlets to create knowledge as well as teach the EarthKind environmental stewardship ideology.
* EarthKind Landscape Series, tours and home audits
* EarthKind Home Gardening Series
* EarthKind news articles appearing in Bexar Counties Thursday’s Prime Time Newspapers, Saturday’s Express Newspaper and Sunday’s La Prensa Newspaper.
Results: Through one to one conversations and the use of the EarthKind evaluation forms (412 respondents) have shown the great importance of water conservation and proper maintenance procedures on lawns and the landscape.

Statistical results from 412 participants:
* 93% were mostly or completely satisfied with the EarthKind Stewardship Program.
* 94% were mostly or completely satisfied on the accuracy of the information presented.
* 94% were mostly are completely satisfied on understanding information.
* 90% were mostly are completely satisfied on topics covered.
* 92% were mostly are completely satisfied on information on each topic.

Percentages of participants with intentions to adopt recommended EarthKind practices that will help conserve water and recycle yard wastes as mulch and compost with the subsequent results.
* 92% probably to definitely will implement turfgrass irrigation practices learned with this program.
* 90% probably to definitely perform an irrigation audit and understand the importance of watering correctly.
* 90% probably to definitely will select turfgrasses based on information learned with the program.
* 90% probably to definitely will implement mowing practices taught during this program.
* 90% probably to definitely will apply fertilizer based on the information learned during this program.
* 90% probably to definitely will not bag their grass clippings and follow the guidelines of the Don’t Bag it Program.
* 92% probably will use mulches appropriately.
* 80% probably will prepare and use compost

Economic importance:
* 80% of participants indicated anticipation of an economic benefit for themselves, due to their involvement in this program with an average savings of $50 or more and conserving up to 10% on personal water usage and consumption.

Summary of Results:
Results have shown that the EarthKind Educational programs in Bexar County met their objective of increasing knowledge of homeowners in environmental stewardship practices which will help in conserving landscape water and recycling yard waste. As well as through the use of drought tolerant plants and the proper maintenance procedures of such plants. Such practices have not only saved individuals money on there monthly water bill, but will hopefully encourage long term and overall concerns on the importance of having sufficient amount of good quality water for the public for many years to come. The average participant on this water conservation issue knows at this time, how important it is to efficiently utilize and manage this important natural resource “WATER” and especially being good stewards of OUR land.
**Beef Cattle Production In Bexar County**

**Relevance:**
As Bexar County increases its urban involvement, there is a stronger need for education dealing with agricultural production and efficiency. Bexar County has approximately 160,000 acres of rangeland available but it is being fragmented and bought up by developers. As the amount of small farms increases and developers purchase the large sections to place housing, the number of large scale producers decreases. Most of these people are not from an agricultural background and inquire about numerous issues. 1) Organic Forage Production 2) Emanate Domain, Liability Issues for Hunting and Insurance Needs 3) Forage Legumes to Replace Some of Your Fertilizer Needs 4) Brush Management in Drought Situation and 5) Beef Cattle Health and Nutrition 6) Livestock Options Best Suited for Small Landowners. Their demand for efficient production is greater than ever in an effort to maintain their current land holdings. Bexar County’s Livestock production is valued at approximately $11,000,000. This shows that livestock and rangeland is still valuable to Bexar County.
The majority of our rangeland is used to graze domestic livestock. Beef cattle still represents the greatest economic income to ranchers

**Response:**
The Texas AgriLife Extension Service in Bexar County and the Bexar Beef Cattle Committee met approximately eight times in 2009 to plan, conduct, evaluate and interpret educational information to producers and the general public. Those concerns were addressed at the educational programs listed below.

- **Beef Cattle Short Course I:** Jan. 8, 2009
- **Beef Cattle Short Course, II:** Jan. 15, 2009
- **Beef Cattle Short Course III:** Jan. 22, 2009
- **Multi-County Beef Cattle Field:** May. 9, 2009
- **Fall Beef Cattle Workshop:** Aug. 20, 2009
- **Fall Wildlife & Livestock Workshop:** Sep. 24, 2009
- **South Texas farm & Ranch tour:** Oct. 30, 2009

**Results:** The Beef Cattle Production Program in Bexar County met its objectives of increasing knowledge of new and small acreage livestock producers. To determine programmatic results of the Beef Cattle Production Program retrospect post surveys were conducted following each programs:

The Retrospect post survey conducted at the **Beef Cattle Shortcourse** indicated a **58 percent** average increase in knowledge by program participants. One hundred forty eight surveys returned indicating producer’s willingness to adopt practices or technology presented at the Beef Cattle Shortcourse.

- 72.5% indicated they will or probably will adopt the practice matching their cow heard to their dollar.
- 97% indicated they will or probably will adopt the practice of using virgin bulls to combat Trichomoniasis.
- 21% indicated they will or probably will adopt the practice of planting forage Legumes to replace some of their fertilizer needs.
- 8% indicated they will or probably will adopt organic forage production in the near future.

**Beef Cattle Field Day surveys** indicate the following:
- 22% indicated they will or probably will change brush management strategies as result of drought situation.
65% indicated they will or probably will adopt suggested health and nutrition management practices during this drought.

Fall Beef Cattle Workshop surveys indicate the following:
- 45% indicated they will or probably will adopt rangeland improvements through chemical brush controls.
- 31% indicated they will or probably will adopt proposed tax planning concepts presented at this conference.
- 25% indicated they adjust cattle marketing strategies as result of information presented on cycles for stockers, cull cattle or replacement heifers.

Results indicate that the Beef Cattle Production Program in Bexar County met its objectives of increasing knowledge of new and small acreage livestock producers. Programming efforts for 2010 will continue to target Beef Cattle producers” to keep them informed of good management practices and abreast of emerging needs as they arise.
“Learn and Share” Knowledge to Strengthen Academic Success

Relevance:
Child poverty rates are over 24%; only 55% of tenth graders passed the Texas Assessment of Knowledge and Skills (TAKS) in Bexar County and the need for skilled workers continues to grow. Southside ISD faces some of the biggest challenges. Southside’s high dropout rate, one of the highest in Bexar County, is at nearly 19 percent for the Class of 2007. Programs that stress parental involvement and teach parents how to be involved with their child’s education are essential.

Response: “Learn and Share” -
The overall Learn and Share program goal was parental empowerment by supporting families, promoting communication, and advocacy for better integration of parents into the school system and their children’s education.

The program consists of monthly lessons on their child’s home campus and one parent conference held at Texas A&M San Antonio. Educational program content was based on parents’ expressed needs and were clustered around:

1) Family literacy
   Helping Your Child w/Vocabulary in English and Spanish, Reading & Learning Every Day in Every Way

2) Advocacy
   Building Self-Esteem in Your Child, Finding Help When You Need It, How to Protect Your Child from Strangers, How to Save Money When You Don’t Have a Dime to Spare, Holiday Traditions Make Families Stronger

3) School, community, and parent partnerships
   Helping Your Child To Succeed in School, Helping with Homework, How to Prepare for Parent/Teacher Conference

Program materials were in both Spanish and English and the program was facilitated by the bilingual Learn and Share Coordinator. Funding was obtained through partnership with Southside Independent School District for a third year. Parents are asked to take the information learned and share it with family, friends, and neighbors. School staffs worked with Extension to correlate lesson information with “No Child Left Behind” requirements.

Result:
309 attended one or more of 46 educational sessions. The following campuses in Southside ISD participated: Heritage Elementary, Losoya Intermediate, Southside Middle, Freedom Elementary, Gallardo Elementary, Matthey Middle and Pearce Primary.

End of session qualitative evaluation was used to obtain intent to change information. 100% of participants indicated intent to change or use the information presented to help their children or family. Parents reported a number of things they intended to do differently as a result of attending the Learn and Share programs including: listening and talking to their children more; improve English skills by assisting their children in homework and reading; setting up homework time for children; having assistance telephone numbers readily available for help.

Parents reported sharing Learn and Share information with family members, friends, and neighbors by explaining handouts, taking to them, and inviting them to future sessions. One parent taught the information to 30 co-workers each month.

Base on overall qualitative responses, the Learn and Share program improved parental involvement through lessons designed to support families, promote communication, and improve advocacy skills.
Eat Better to Live Better

Relevance:
In Bexar County, an estimated 479,995 county residents have incomes that are 185% of poverty or below. Eleven percent of the county population is eligible to receive food stamp benefits. Research has shown that individuals who live in poverty have dietary intakes that are not congruent with current recommendations (i.e. Dietary Guidelines or MyPyramid).

Response: Better Living for Texans
The Better Living for Texans (BLT) Supplemental Nutrition Assistance Program (SNAP-Ed) is offered through the Texas AgriLife Extension Service and funded via the Texas Health and Human Services Commission (HHSC), and the Food and Nutrition Services (FNS) of USDA. The program is offered in every county that is served by a County Extension Agent - Family and Consumer Sciences (CEA-FCS), including Bexar County.

A component of the Supplemental Nutrition Assistance Program (SNAP), BLT provides educational programs to food stamp recipients, applicants, and other approved audiences to help improve their ability to plan and prepare nutritious meals, stretch food dollars, and prepare and store food safely. In addition, BLT incorporates its programs with the Walk Across Texas program to promote physical activity.

BLT is delivered through a variety of teaching methods that reflect audience needs. Teaching methods include: lesson series, single education events, one to one consultations, demonstrations, and tours.

Results:
During 2009, more than 150 Bexar County adults participated in the BLT Eat Better to Live Better series. This program focuses on meal planning, stretching food dollars, and adopting selected behaviors that can reduce the risk of foodborne illness. Additionally, 7000 participated in one time educational session in housing projects, senior nutrition sites, food stamp offices and schools in one of 244 educational sessions.

Evaluation of the Bexar County BLT program was conducted via the use of pre and post surveys. This allowed for the collection of data that reflected current behaviors and behaviors that participants intended to adopt. 12 adults agreed and participated in the phone surveys and completed the pre and post surveys.

<table>
<thead>
<tr>
<th>Behaviors for Always do</th>
<th>Before program</th>
<th>Intent to change after</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Meals</td>
<td>3 (25%)</td>
<td>11 (91%)</td>
</tr>
<tr>
<td>Shop with a list</td>
<td>2 (16%)</td>
<td>10 (83%)</td>
</tr>
<tr>
<td>Compare prices</td>
<td>1 (8.3 %)</td>
<td>8 (66.7%)</td>
</tr>
<tr>
<td>Wash hands properly</td>
<td>4 (33%)</td>
<td>9 (75%)</td>
</tr>
</tbody>
</table>

FRED: Fathers Reading Every Day

Relevance:
Only 30% of 4th graders in Texas are reading at or above the proficiency level. In Bexar County the percentage is lower. Strong relationships exist between children’s literacy skills, academic performance, and future income potential.

Reading aloud to children on a frequent basis is one of the most effective ways to promote early literacy development among young children. Children who are read to at least three times a
week by a family member are almost twice as likely to score in the top 25% on tests of reading ability than children who are read to less frequently.

Response:

Fathers Reading Every Day (FRED), a literacy program designed to increase parental involvement in children’s literacy development with a specific focus on fathers, was implemented in partnership with school districts including Northside ISD.

Parents/parental figures were asked to read to their children every day for 4 weeks. Information was provided to parents on choosing developmentally appropriate books and ideas for engaging children in reading activities.

Results:

Two-hundred and fifty-four fathers/father-figures and children participated in some aspect of the FRED program from Bexar County in 2009. Eighty-eight fathers/father-figures and children completed the program.

44 fathers/parents completed pre and post evaluations. Statistically significant differences from pre to post were noted in the following areas:
- the number of books read during a typical week
- the number of fathers who possess a library card

Additionally:
- 70.5% (31 of 44) reported increasing the amount of time spent with their children.
- 65.9% (29 of 44) reported improved quality of time
- 52.3% (23 of 44) reported improvements in their child’s vocabulary
- 77.3% (34 of 44) reported increased satisfaction level as a parent

Participant Quotes:
- “[FRED] increased the time that my children and I spend together and that added to a better relationship.”
- “Made me watch what I say and do around my kids and get more involved.”
- “[FRED] made me more aware of how important it is to be involved in my children’s education.”
- “[I learned] that I really need to connect to my child to be able to teach them meaningful things.”
- “[Participating in FRED] has taught me patience with my children. It also showed me that kids want to read books no matter what.”
- “[FRED] got me more involved in reading to my child on a more frequent basis.”
- “Overall I feel [FRED] is an excellent program. Gets everyone involved in our child’s education.”

Food Protection Management

Relevance:

Each year, foodborne diseases cause an estimated 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths. Populations most vulnerable to foodborne disease include pregnant women, the elderly, the very young, individuals with a chronic disease, and those with weakened immune systems.

Response:

Food Protection Management Certification (FPM) trainings were held in Bexar County. The one day course hands-on food safety equips individuals with the latest in food safety principles and practices and prepares them for the State Certified Food Manager Examination.
“Food Safety: It’s Our Business” curriculum was used. Educational lessons and activities of the program focus on the following areas:

- enhanced use of temperature control measures in food service, such as thermometer use, time and temperature control, safe internal cooking and holding temperatures, thawing procedures, and general storage temperatures;
- increased adoption of proper hygiene and hand washing practices of food service employees and managers;
- increased adoption of practices to avoid cross-contamination, such as proper storage, washing and sanitizing of utensils and equipment between use, and employee hygiene practices;
- increased adoption of pest management practices to keep insects, rodents, and other disease-causing pests under control.

Results:

35 individuals completed the 6 hour course in Bear County in 2009.

27 out of 35 participants completed demographic data. Most participants were female, Hispanic, and 55 years of age or older. More than one-third (n=10) had a high school education or less. A similar percentage had 5 years or less of food service experience and over 40% had not had any food safety education within the past 12 months. Nineteen of the 27 participants who completed the demographic surveys had previously completed a CFM program. For more than one-third of the participants, FPM was their first exposure to Texas AgriLife Extension.

32 out of 35 passed the state certification exam for Certified Food Managers though the State Department of Health Services. Food safety habits participants improved though self report include:

<table>
<thead>
<tr>
<th>Use a thermometer to check doneness of food</th>
<th>Number of participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always or Almost always</td>
<td>24</td>
<td>89%</td>
</tr>
<tr>
<td>Wash hands with soap and warm water before preparing food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>26</td>
<td>96%</td>
</tr>
</tbody>
</table>

**Project DEAP – Diabetes Education**

**Relevance:** An estimated 1.06 million adult Texans have diagnosed with diabetes; another 0.5 million have undiagnosed diabetes, according to the Texas Department of State Health Services in 2001 there were 73,447 people diagnosed with Diabetes (7.34%) in Bexar County. Through the use of Project D.E.A.P. curriculum, Bexar County advisory committees and collaborators, limited resource families and individuals will be enrolled in educational classes, health fairs and food demonstrations to promote healthy lifestyle choices.

**Response:** The Project D.E.A.P. program was conducted in 5 sites in Bexar County with 285 Adults. The sites were Country Club Adult and Senior Housing Complex, Wilshire Elementary School, Kate Schenk Elementary School, Camelot Elementary School, And Frank J. Tejeda Academy. Agent conducted a series of 6 one hour educational classes at each site. The topic lessons are Understanding Diabetes, Controlling Diabetes through Nutrition, Get Up & Move, Medication Management, Monitoring Your Body, and Complications of Diabetes. Along with educational sessions a monthly newsletter focusing on Diabetes information and topics was distributed monthly to participants. A health fair and walkathon was planned and conducted in partnership with Southwest High School in March 2009; over 300 people were in attendance. In July 2009 a 2 day Train the Trainer workshop was conducted with 20 volunteers. The volunteers were trained to facilitate the Project D.E.A.P. program in the community.
Results: Agent administered a pre test at the beginning of the series and then administered a post test at the end of the series.

- 87.9% increased their knowledge of the risk factors for diabetes
- 63.6% increased their understanding of the disease
- 54.5% reported that they have a better understanding of how often blood glucose should be checked

69.7% reported that they changed their diets and increased their physical activity
Building Character with K.I.T – Kids In Touch

Relevance:
Teen pregnancy, teen crime and dropout rates are all increasing in Bexar County. Many of these teens may be unknowing negative influences on their peers and younger youth. Now more than ever, all teens need information on building character and becoming motivated to support the pillars of character.

Role Education Can Play in Addressing the Issue
By providing a character education program designed to impart basic information on developing positive character traits to teens as facilitators makes them aware of the impact they have on their peers.

Response:
Students at Zachary Middle School and Stacey Middle & High Schools were taught a series of lessons based on the six Pillars of Character: Trustworthiness, Respect, Responsibility, Fairness, Caring, and Citizenship. Those Middle and High School students then taught the concepts to kindergarten students in nearby elementary schools. Program material for K.I.T consisted of teaching requirements, questions for teens to use as conversation starters with "K.I.T Buddies" and coloring sheets. The teens taught eight (8) sessions; introduction, six based on pillars of character and a wrap-up.

Partnerships and Collaborations
Bexar County AgriLife Extension Service would like to recognize the partnership and collaboration of the following:
- Northside Independent School District
- Lackland Independent School District

Results:
The teenaged students that were trained to use K.I.T., knowledge was enhanced and attitudes’ regarding character influenced by teaching the concepts they were learning. The kindergarten students were provided the chance for positive interaction with teenagers.

Evaluation Strategy
The teens were asked to do retrospective evaluations of their probable frequency of use of the positive character traits after teaching them to kindergartens students. The teens’ responses indicate roughly a 46% increase in their always displaying the evaluated character traits and about a 58% increase that they'd often display the evaluated character traits. The kindergarten students were asked as a group to give an example of what they thought each pillar of character meant.

Future Programs
Participating teens and faculty indicated on Customer Satisfaction/Feedback surveys after lesson four and eight that they’d like to be involved in the program next school year.
Texas AgriLife Extension Service
XXXX County

Staff

Guadalupe Landeros – County Extension Director
Jerry Warren – Agriculture and Natural Resources
Gregory Miles – 4-H and Youth Development
Bryan Davis – Natural Resources
Dr. Connie Sheppard – Family and Consumer Sciences
David Rodriguez – Horticulture
Grace Guerra-Gonzales – Family and Consumer Sciences (CEP)
Nelda Speller – Expanded Food and Nutrition Education Program
Molly Keck – Integrated Pest Management

Contact Us

Physical Location:
3355 Cherry Ridge Street, Suite 212
San Antonio, Texas 78230

Phone:
(210)467-6578

E-Mail:
bexar@tamu.edu

Website:
http://bexar-tx.tamu.edu