



**Extension Education in Parker County**  
*Making a Difference*

The Texas A&M AgriLife Extension Service has long been dedicated to educating Texans. Extension education evolved nationwide under the 1914 federal Smith-Lever Act, which sought to extend university knowledge and agricultural research findings directly to the people. Ever since, Extension programs have addressed the emerging issues of the day, reaching diverse rural and urban populations.

In Texas, all 254 counties are served by a well-organized network of professional Extension educators and some 100,000 trained volunteers. Extension expertise and educational outreach pertain to the food and fiber industry, natural resources, family and consumer sciences, nutrition and health, and community economic development.

## **EXTENDING KNOWLEDGE** *Providing Solutions*

Among those served are hundreds of thousands of young people who benefit annually from Extension's 4-H and youth development programs.

Texans turn to Extension education for solutions. Extension agents and specialists respond not only with answers, but also with resources and services that result in significant returns on the public's investment. Extension programs are custom-designed for each region of the state, with residents providing input and help with program delivery. Here are just a few highlights of Extension impacts on this county and its people.

## **Parker County – Summary of 2013 Educational Contacts**

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### **2013 Contact Summary (YTD)**

<b>Total Education Programs Conducted</b>	<b>417</b>
<b>Total Group Participants</b>	<b>6,994</b>
<b>Contact hours via educational programs</b>	<b>23,503 (includes 4-H School Enrichment)</b>
<b>Office Contacts</b>	<b>2,455</b>
<b>Site Visits</b>	<b>1,044</b>
<b>Phone Calls</b>	<b>6,685</b>
<b>Newsletter/Mail/Email Contacts</b>	<b>14,771</b>
<b>News Releases</b>	<b>125</b>
<b>Volunteer service value to Parker County</b>	<b>\$428,326.03</b>

**Agriculture and Natural Resources**

***Forage Management - Outcome***

*Jon Green, CEA-Ag/NR, Parker County*

**Relevance.** Profitability of forage production and management in Parker County as it relates to the cattle and horse industries continues to be important for producers who are making their living doing this and also for producers who are part time. A majority of the livestock and forage producers in this county are now part time but represent a large amount of the hay and livestock produced/raised. The County Extension Ag Committee has recognized that the management of forage/pastures in Parker County could be improved for many and indicated that educational efforts in this area were needed.

**Response.** The Ag Committee identified the program needs and assisted in planning this programming effort. A goal of 50 livestock/forage producers was set to participate in the program. The educational events offered were as follows: 1) 5 CEU Ag. Conference focusing on forages and pasture; 2) Pasture Management Program with Dr. Redmond; 3) Pasture Walk; and 4) Cross Timbers Landowners Workshop at White Rock Ranch. Forage newsletters were mailed to over 800 area producers which not only promoted programs but contained information on CEU Ag. Conference, BIG Conference to feature cattle herd rebuilding strategies, Cattle Traceability Rule – tags available, Pasture Management & Watershed Program, Texoma Bee Keepers Conference, and USDA 2012 Census of Agriculture. Mass media and program flyers delivered to agribusinesses were utilized also. Also individual farm and ranch visits were made to assist producers with management decisions. A retrospective post evaluation was emailed in December using the online Qualtrics program to those producers who had attended two or more of the major educational events and had received the forage newsletter.

**Results.** All total, after eliminating duplicates, 277 producers attended the four major educational events mentioned above. Thirty-four of those attended two or more events but only 24 of those have email and thus were emailed a retrospective post evaluation survey. Of the twenty-four emailed, nine (38%) were returned by the deadline. Participants were asked to measure knowledge or level of understanding concerning the various management practices before the programs as compared to after the programs they attended. Overall, combining all topics on the survey, the average increase in knowledge/understanding was 30% with a range from 12% to 50%. Following is a table showing these changes.

Table 1: Change in level of knowledge or understanding. Mean score differences using Likert scale<sup>1</sup> to reveal knowledge changes using a retrospective post evaluation (n=9.)

Topics	Before Programs Mean	After Programs Mean	Mean Change <sup>2</sup>	Percent Change <sup>3</sup>
Knowledge of grassbur control in pastures and hay fields	2.00	3.00	+1.00	50%
Identification skills of weeds, grasses, and woody plants	2.00	2.89	+0.89	45%
Knowledge of weed control in permanent pastures and hay fields	2.11	2.89	+0.78	37%
Knowledge of bacterial contamination of Texas waterways as an important and growing concern	2.11	2.89	+0.78	37%
Understand the benefits of rotation & limited grazing on native pastures	2.78	3.44	+0.66	24%
Understand the three elements necessary for forage recovery: Water, Fertility, and Protection for the forage	2.78	3.22	+0.44	16%
Understand the value of and benefit of soil testing	3.00	3.44	+0.44	15%
Knowledge of maintaining the proper stocking rate that is essential to forage recovery and soil protection	2.89	3.22	+0.33	12%

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<sup>1</sup> Likert Scale: 1 = Poor, 2 = Fair, 3 = Good, 4 = Excellent

<sup>2</sup> Change indicates the mean value difference between the before and after measurements.

<sup>3</sup> Red indicates change of 50% or greater, orange indicates 40% to 49%, yellow indicates change of 20% to 39%, white indicates Below 20%.

The value and benefit of soil testing and maintaining the proper stocking rate did not show substantial increases in knowledge due to “before program” scores being in the good range already which speaks for previous years program efforts.

Next on the evaluation, participants were asked to indicate their intentions to adopt practices taught or if they had adopted the practice as a result of the program. The following table shows the numbers and percentages of those who adopted or indicated probably or definitely will. There were a few undecided and a few n/a’s but only one indicated that they Definitely Will Not Adopt.

<i>Practices Taught this Year</i>	<i>Probably Will Adopt</i>	<i>Definitely Will Adopt</i>	<i>Adopted</i>
Control of broadleaf weeds in improved pastures	2 of 9 22%	2 of 9 22%	4 of 9 44%
Control of grassy weeds and grassburs	2 of 9 22%	3 of 9 33%	4 of 9 44%
Fertilizing pasture or hay field according to soil test results	0	5 of 9 56%	4 of 9 44%
Maintaining the proper stocking rate to maximize forage recovery and increase range health	3 of 9 33%	1 of 9 11%	3 of 9 33%
Utilizing the take half, leave half rule on native pastures	3 of 9 33%	4 of 9 44%	0
Identification of grasses, forbs (weeds), and woody plants	3 of 9 33%	4 of 9 44%	1 of 9 11%

It is encouraging to see fertilizing according to soil test results showed 100% definitely will, or have adopted this practice. It was also encouraging to see control of grassy weeds and grassburs having 77% definitely will or adopted and another 22% probably adopting. Also, with most producers currently not identifying grasses, forbs, and woody plants, it’s good to see that 77% probably or definitely will adopt this practice. There is obviously still work to be done concerning the take half, leave half rule.

When asked if they benefitted economically from attending any of the educational programs (9 of 9) 100% indicated yes. One producer showed a \$3,000.00 increase in profit as a result of the programs. Also, 100% felt that what they learned from the programs provided them the ability to analyze their operation and make better land and forage management decisions.

**Summary.** The Forage Management Program survey results show that programming efforts did make a difference in improving the knowledge level of the producers participating. The results also indicate that the adoption rate of most of the practices taught was excellent which is encouraging. When asked what was the most significant thing(s) you learned as a result of the program, several indicated: general knowledge and practices, identifying specific weeds and native plants and learning their benefits and negatives, soil testing, weed control on native pastures, and recognizing and controlling weeds and land fertility. Other comments included importance of becoming better land stewards and knowing new products that are on the market, as well as the importance of knowing the right practices year in/year out for success in

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tough drought conditions. With room to improve, more educational efforts are planned. The participants were asked on the survey what other topics should be added in the future. The major topics mentioned which will be addressed by the Ag. Committee include: specific local case studies, economics for small producers who can only work on weekends, more in-depth study of a complete soil analysis, info on the North Texas water tables, and hay testing specifics.

**Looking ahead.** With the feedback from the surveys, we (ag. committee and I) will make an effort to improve the program by adding to what was offered this year, plus add the topics which were not offered. Also, in 2014 we will start to look even more at economic impact of the practices adopted and start concentrating efforts on beef cattle production for the next outcome effort.

**Interpretation.** Outcome summary shared with elected officials, community leaders, Leadership Advisory Board, Ag. Committee, and Extension administration.

**Acknowledgements.** I would like to thank the following for their contributions and/or assistance: Ag. Committee members, all Parker County Feed/Farm & Ranch stores, Gerald Hobson - Dupont, White Rock Ranch, Texas Parks & Wildlife Biologist Jesse Oetgen, Dana Bellenger – cooperater, Kevin Derzapf – NRCS, Ricky Linex – NRCS, Tom B. Sanunders – Cooperator, Dr. Larry Redmon – Extension Forage Specialist, Texas Forest Service, William Hatler - Extension Range Specialist, Dr. Allen Knutson - Extension Entomologist, David Waidler – AgriLife Research, James Jackson- Extension Range Specialist and Parker County Farm Bureau.

***Water Conservation / Quality***

*Jon Green, CEA-Ag/NR, Parker County*

**Relevance.** Water continues to be an issue of concern for the citizens of Parker County. More and more people are moving to the county and living in areas where a private well is the main source of water. Recent studies have shown that the Trinity aquifer is having more water pulled out than is being recharged. It is important for landowners and homeowners with wells to know that conservation of water is important and also the quality of their well water can decline if proper management practices are not applied.

**Response.** Leadership Advisory Board members have continuously agreed that conducting water well screening days is an important educational event and also that recommending rain water harvesting could decrease the use of valuable ground water and even surface water for those living in certain Parker County cities. Also the Ag. Committee recognizes the importance of water conservation in the urban landscape.

- **News articles**, highlighted the Landscape Water Conservation with Drip Irrigation, and Rain Water Harvesting, Fall Landscape Gardening Seminar, Native & Adapted Plants Seminar, FireWise Landscape Seminar, and the Water Well Management Program and accompanying Water Well Screening Event.
- **Drip Irrigation demonstration**, the landscape beds at the County Extension office which are maintained by Master Gardeners are all irrigated with drip irrigation and covered with a 3 inch layer of mulch to demonstrate landscape water conservation.
- **Rainwater Harvesting demonstration**, also at the County Extension office is a 2400 gallon rainwater catchment tank which is utilized to irrigate adjacent landscape beds which demonstrates the set up, use of, and practicality of rainwater harvesting.
- **Drip Irrigation and Rainwater Harvesting presentation**, by the Master Gardeners at their spring plant sale reached over 100 residents who actually stopped to listen and learn about this watering method.
- **Native and Adapted Plants Seminar** was held in April 4, with 18 attending, which focused on low water use plants and perennial plants which will conserve water in urban landscapes.
- **Water Well Management Seminar with Water Well Screening Event**, held October 2<sup>nd</sup> with an outstanding program and 165 attending.
- **Fall Landscape Gardening Seminar** held October 9 with 10 attending which covered conservation of water through the use of mulch, drip irrigation, and plant selection.

**Results.** Results of the Water Well Management Seminar showed that (30 of 114) 27% scored 70 or higher on the pre-test and (76 of 81) 94% scored 70 or higher on the post test which is a 249% increase in knowledge. The Water Well Management program addressed: protection and maintenance of water systems, laws and rules from the state and district level, contaminant levels for nitrate – nitrogen, livestock and pet minimum distances from wells, proper well construction, abnormal wells, drinking water standards, pollutants from fertilizers and manure, coliform bacteria, record keeping of well activity, well water health programs, TCEQ responsibilities, and well depths. Drew Gholson did a great job in helping put this program together and participants were very positive with their comments after the program.

Results of the Native & Adapted Plants Seminar Pre and Post Test and the Fall landscape Gardening Seminar Retro-Post Evaluation averaged a 45.5% increase in knowledge.

**Summary.** The educational efforts in water conservation definitely made a difference in area resident's understanding of water issues.

**Looking ahead.**

Future plans include more programming targeted at water conservation, and water well screenings.

**Interpretation.**

Outcome summary shared with elected officials, community leaders, Leadership Advisory Board, Ag. Committee and Extension administration.

**Acknowledgements.**

I would like to thank the following for their contributions and/or assistance: Parker Count Master Gardeners, Drew Gholson – Extension Water Program Specialist and Network Coordinator, John Smith – Extension Water Specialist, Texas Well Owner Network, Upper Trinity Groundwater Conservation District, Texas Water Resources Institute, and Doss Heritage Center in Weatherford.

***Volunteer Management / Master Gardener Program***

*Jon Green, CEA-Ag/NR, Parker County*

**Relevance.** As Parker County continues to become more urban, the need for education in the area of horticulture continues to grow. Master Gardeners play an important part in the educational outreach in this county. However, they continue to require training and management in order to assist this agent, the office staff, and community in fulfilling their volunteer obligation. Their assistance can be and is utilized to educate area residents in: environmental stewardship and Earth Kind principles, water conservation through drip irrigation and rainwater harvesting, community beautification through projects, and Junior Master Gardener youth programs.

**Response.** Eighty-two (82) Parker Master Gardeners and Interns volunteered their time in 2013 to extend horticulture related education to area citizens. The Master Gardeners Speakers Bureau conducted education classes for Weatherford ISD Community Ed Program, the Spring Plant Sale, Chandor Gardens, Willow Park City Hall, Azle Public Library, Weatherford Public Library, Native Plant Society, Stuart's Nursery, and the Parker County office of Texas A&M AgriLife Extension Service.

Subjects taught by Master Gardeners at the above events included: Landscape Design, Vegetable Gardening, Rainwater Harvesting, Drip Irrigation, Native and Adapted Plants, Firewise Landscaping, and Basic Plant Selection. The speaker's bureau continues to develop programs upon demand annually. The Master Gardeners serve in the Extension office Mondays and Thursdays each week answering phone calls, assisting visitors with horticulture information, and helping staff with office duties as needed.

The Master Gardeners developed gardening calendars again this year (6<sup>th</sup> year) for sale to the public which offer timely horticulture/gardening tips. Their revised 2<sup>nd</sup> edition of "The Real Dirt" (gardening handbook) continued to be sold in 2013 to area residents and gardeners.

Master Gardener Interns who trained in 2012 completed their internship in 2013 and 20 were recognized with completion certificates and full Mast Gardener status.

Also the Master gardeners have educational programs in conjunction with their monthly meetings to keep them updated with internal education. They conducted quarterly field trips and several attended the State Master Gardener Conference this year, where they won 2<sup>nd</sup> place in publications for their Gardening handbook. Jon led one of their field trips where they traveled to College Station and toured the Soil & Water Testing Lab, the Plant Disease Diagnostics Lab, Horticulture Department, Brazos Demo Gardens and the A&M Howdy Farm.

**Results.**

Total 2013 Volunteer hours – 9841.5 (up 1605 from 2012)  
Educational Programs presented – 12

Total residents reached through presentations – 168  
Total phone calls answered and office visits – 225  
Total Junior Master Gardeners - 488

They had 7 Project Demonstration sites which utilize plants suitable for Parker County using Earth Kind principles like composting, mulch and drip irrigation (from rainwater at the Extension office). The number of residents who benefit from these sites is unknown due to the number of visitors on weekends and off hours during the week. This number however is estimated to be well over 1000 residents.

Evaluations were utilized at the above mentioned educational programs using customer satisfaction questions and a retrospective post question using the Likert scale to measure knowledge before and after the program. Results were as follows:

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100% rated the programs either Good or Excellent  
35% was the lowest percent increase in knowledge  
50% was the highest percent increase in knowledge  
42% was the average increase in knowledge

Comments from participants who attended the Master Gardener led programs included: Great job, thanks; Great Information; Very knowledgeable; Very good overview with just the right amount of detail; Liked finding out about Texas native plants; I really enjoyed it; Learned which insects are beneficial.

The Junior Master Gardener Program reached 488 elementary age students in Parker County including: 412 White, 7 Black, 4 American Indian or Alaskan Native, 60 Hispanic, and 5 Asian or Pacific Islander students. Retrospective post evaluations indicated on average an 85% increase in knowledge from before to after the activities taught by Master Gardeners in the schools. Teachers comments after the Junior Master Gardener classes/activities included: Liked the hands on portion of presentation; Kept the attention of all students; Keep doing what you're doing; Great job as always!; Fraction lesson was great; Thanks to all the Master Gardeners for this great experience.

The Plant sale held April 13 had 350 people attend and buy plants suitable for Parker County.

The Parker County Master Gardener 2013 Calendar was sold to over 400 area residents which keeps them abreast of gardening tips each month.

The Master Gardener Intern Class of 2012 had 20 of the 22 interns complete their internship in 2013 and receive full Master Gardner status.

### **Summary**

Overall the Parker County Master Gardener Program is meeting the need of delivering horticulture education to area residents in an outstanding way with an estimated 1,331 contacts in 2013. As shown in the results section, their efforts are bringing about change by increasing knowledge of Parker County residents.

With an average of 120 volunteer hours per member, their assistance is worth \$214,446.28 in monetary value and covers what would take several Extension agent positions to accomplish. I personally thank them for all they do.

***Friend to Friend***

*Kathy Smith, CEA-Family & Consumer Sciences*

The *Friend to Friend* program's purpose is to encourage women to get regular mammograms and Pap tests for the early detection of breast and cervical cancer, when the disease is most curable.

**Relevance**

- Regular screening significantly increases the likelihood of finding cancer early, when treatment is more often successful.
- Women living in rural areas of Texas are less likely than their urban counterparts to have had a mammogram or Pap test within the past two years.
- Mortality is higher for rural women because of later diagnosis.

**Response**

The goal of *Friend to Friend* was to decrease breast and cervical cancer morbidity and mortality for women living in rural Texas Counties by improving screening rates and early detections.

Funding was applied for and awarded by the Cancer Prevention and Research Institute of Texas (CPRIT) to fund screenings and transportation of uninsured and underserved women in need of screening services.

The Parker County *Friend to Friend* Taskforce was organized that included the following groups represented: Carity Foundation, Weatherford Regional Hospital, Moncrief Cancer Center, Solis, Texas Oncology, Weatherford OBGYN, American Cancer Society, Susan G. Komen, Family and Consumer Sciences Committee members, Extension Education Club members, and other people from Parker County. The committee targeted the general public with an emphasis on women in underserved populations.

A *Friend to Friend* Party and Educational Event was planned for January 29 and was held in Weatherford at First United Methodist Church's Family Life Center. The event involved speakers that included: Dr. Robyn Young with Center for Cancer and Blood Disorders; Dr. John Parker with Weatherford OBGYN, Annie Presley, Cancer Survivor and Kit Marshall, Mayor of Aledo and Parker County Emergency Management Coordinator and breast cancer survivor who served as the emcee for the event.

Moncrief Cancer Institute Mobile Breast Unit was set up to conduct screenings at the Texas A&M AgriLife Extension Office, on January 31.

**Results**

- *Friend to Friend* was implemented in 40 counties including Parker County in 2013.
- 75 women attended the *Friend to Friend* event on January 29, 2013 at the First United Methodist Church in Weatherford.
- Demographics of women who attended the event included:
  - Median age was: 59
  - Ethnic breakdown:

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- White, Non-Hispanic: 86.9% (66)
  - White, Hispanic: 4.5% (4)
  - African American: 0%
  - Asian: 0%
  - Native American: 0%
  - Other: 3% (2)
  - Multiple: 4.5% (3)
- 17 people were on the taskforce and 31 total volunteers assisted at the party.
  - Dr. John Parker, M.D. (OB/GYN), Dr. Robyn Young (Breast Oncologist), Annie Presley a Cancer Survivor, and Health Educator, Cheryl Brewer urged women to obtain a mammogram/Pap screening at the event.
  - At the end of the event 89.8% (68 of 75) of the women correctly identified the need for a mammogram screening every year.
  - 6 Women requested help to navigate screening and diagnostic services.
  - Clinical sites for screenings, diagnostics, radiological and lab services has contracts with Texas Department of State Health Services or Texas Women's Health Program and the Moncrief Cancer Institute Mobile Breast Unit.
  - 6 Mammogram screenings and diagnostics and 6 Pap screenings and diagnostics were paid for through Texas Women's Healthy funds or Texas Department of State Health Services Breast and Cervical Cancer Services.

### Interpretation

Interpretations were conducted through a presentation made to the Parker County Commissioners Court meeting in March. Also interpretations were conducted through news articles and monthly reports.

### Future Programming

The second *Friend to Friend* Party and Educational Event will be held in Parker County on January 28. There will be a major effort to target the Hispanic population and to reach more underserved audiences.

### Acknowledgement

Thanks and appreciation is given to Dr. Rice, Cheryl Brewer and Leesa Wood Calvi, and Diana Duarte for their expertise and help with implementing this program.

Thanks to taskforce members; Brandi Adams, Melanie Belcher, Beverly Branch, Kathleen Durham, Mae Fowler, Kathy Hardin, Johnnie Kelly, LaRaye Lester, Emily Lewis, Judy McAnally, Tracy McClenan, Melissa Mills, Georgia Orr, Antoinette Reed, Shirley Riebe, Lynd Walsh and Deb Williford.

Thanks to the following partners in making the event a success: American Cancer Society, Moncrief Cancer Institute, Solis, Weatherford OB/GYN, Cancer Care Services, Susan G. Komen, Weatherford Regional Hospital, Healthy Women, Parker County Hospital District and First United Methodist Church.

***Mastering Your Memory***

*Kathy Smith, CEA-Family & Consumer Sciences*

**Relevance**

Studies show that 80% of the older adult population worries about memory loss. As the people get older, there is an increase in memory related health issues. Alzheimer’s and dementia can affect as much as 30 percent of the people ages 65 and older and increases to over 60 percent for people over the age of 80. With concerns for memory it was determined that programs on memory should be offered.

**Response**

Master of Memory was a six lesson class offered. The six lessons covered the topics of identification of the types of memory, how things are remembered, and methods to remember, medication and illness related to memory and nutrition and exercise. The two hour sessions included power point presentations, activities and discussion. This was a cost recovery program.

A program was presented on Mastering of Memory for the Daughters of the American Revolution group. The program focused on the causes of memory loss and ways to help remember things.

News articles included articles on memory and promoting of the Mastering of Memory Workshop.

**Results**

Eleven participated in Mastering of Memory with all completing the six lesson series. As a result of attending the educational series, participants demonstrated higher confident levels in their ability to take steps to improve their memory functioning. Similarly, respondents indicated a reduction in negative attitudes related to memory and aging. Data also indicated that respondents had a significant increase in their understanding of risk factors that may be controlled to help memory function including diabetes, depression, hearing loss and vision loss. Lastly respondents indicated an improved understanding of proactive steps they could take to improve their memory. Regarding selected concepts presented in the lessons, attendees were asked whether or not they learned a new memory strategy. Respondents indicated that they learned a new memory strategy. Most respondents indicated they felt more confident with their ability to remember or improve their memory. The participated completed all of the pre and post series evaluation. Retrospective-post evaluation was used to garner understanding of essential concepts presented in each lesson including losing memory is normal for growing old; there are things I can do to slow my memory loss; physical activity can improve memory; hearing loss could have a negative effect on memory; and playing puzzles and games can improve memory.

Participants also participated in a Customer Service Satisfaction survey. The survey was completed by 100 percent of the respondents.

100 %	Mostly or completely satisfied with information being what they expected.
100 %	Mostly or completely satisfied with the timeliness of the information given on each topic.
91 %	Mostly or completely satisfied with easy to understand
91 %	Mostly or completely satisfied with the relevance of the examples used.

**Interpretations**

Interpretations were presented through monthly reports and a presentation to the Parker County Commissioners Courts.

**Future Programming**

Master of Memory will be offered as a series in the fall of 2014. There will be an effort to make it a mini conference that will cover several topics at once related to memory.

**Acknowledgement**

Acknowledgement to the Family and Consumer Science Committee: Dave Goodrich, Marsha Johnson, Jim Morrow; Jacqueline Ivy, Julia Moseley; and Carol Wilhelm.

**Food Safety**

*Kathy Smith, CEA-Family & Consumer Sciences*

**Relevance**

Each year, an estimated 1 in 6 people become ill from the food they eat. Common symptoms of foodborne disease include nausea, vomiting, diarrhea, abdominal cramping, fever, and headache. While some people may view this as a mere case of “food poisoning” foodborne illness has serious health and economic consequences. In fact, foodborne illnesses from five pathogens alone (Campylobacter, Salmonella, Listeria monocytogenes, E. coli O157:H7, and E. coli non-O157:H7 STEC) cost more than \$6.9 billion in medical expenses, lost productivity, and even death. All of us are at risk for foodborne illness, but older adults, pregnant women, young children, individuals with chronic disease, and those with a compromised immune system are at an increased risk. Because nearly half of our food dollars are spent on foods eaten away from home, it is imperative that employees who work in retail food service handle food safely.

**Response**

To meet the need for quality food safety education in Texas retail food establishments, the Food Protection Management (FPM) program was developed. Our two-day certified food manager program prepares food service workers to sit for the state Certified Food Manager exam. Our 2-hour food handler program, which is accredited by the Department of State Health Services, trains front-line food service workers on the basic principles of food safety. Both programs are conducted at the county level by this agent in Parker County.

**Results – Certified Food Managers Program**

During 2013, 26 people in Parker County participated in the FPM program and completed the certified food manager program. Passage of the CFM exam as well as customer satisfaction with the CFM program is presented in this report.

**Certified Food Manager Participant characteristics**

As shown in Table 1, participants (n=25 out of 26) were mostly female and Caucasian and from all age groups. Managers represented the largest group of participants. Among the participants, 64% had completed some college or a college degree; 36% had a high school education or less. Participants came with varying lengths of food service experience but most (84%) had not had any food safety training within the past 12 months.

Sixty percent (n=15) of the 25 participants identified the FPM program as their first exposure to Texas A&M AgriLife Extension.

**Table 1. Participant Characteristics**

	N	%
<b>Gender</b>		
Male	6	24
Female	19	76
No response	0	
<b>Ethnicity</b>		
Black	0	
Hispanic	3	12
Caucasian	21	84
Asian	0	
Other	0	
No response	1	4
<b>Age Category</b>		
18-24 years	3	12

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25-34 years	3	12
35-44 years	3	12
45-54 years	10	40
55 years and older	6	24
No response	0	
<b>Current job title</b>		
Cook	3	12
Manager/supervisor	11	44
Owner	8	32
Other	3	12
No response	0	
<b>Level of Education</b>		
Less than High School	1	4
HS or GED	8	32
Some College	13	52
College graduate	3	12
Graduate degree	0	
No response	0	
<b>Food service experience</b>		
Less than 1 year	7	28
1-5 years	6	24
6-10 years	2	8
11-15 years	2	8
16 or more years	8	32
No response	0	

	N	%
<b>Type of food service facility where they work</b>		
Hospital/nursing home/assisted living	1	4
School, head start or day care	6	24
Grocery store	0	
Restaurant (including fast food)	13	52
Other	5	20
No response	0	
<b>Any food safety training in the past 12 months?</b>		
Yes	4	16
No	21	84
No response	0	
<b>Is the FPM program the first Extension program you have attended?</b>		
Yes	15	60
No	10	40
No response/Don't know	0	
<b>Have you ever had a Certified Food Manager's course?</b>		
Yes	8	32
No	17	68
No response	0	

\* Percentage rounded up to the nearest tenth.

**Client satisfaction with Certified Food Manager Instruction**

	Average score (n=26)
Client satisfaction with instructor's knowledge of the subject.	1.2* ± .37
Client satisfaction with instructor's speaking/presentation abilities.	1.4 ± .57
Client satisfaction with instructor's organization and preparedness.	1.2 ± .59
Client satisfaction with instructor's response to questions.	1.2 ± .46
Overall client satisfaction with instructor performance	1.2 ± .59

\* Percentages rounded up to the nearest tenth and based on participant surveys received and entered as of 10/1/2013. The client satisfaction was given at the end of the training while the survey that assessed client characteristics was given separately (at the beginning). Therefore, it is possible that not everyone completed both surveys.

Instructor satisfaction scores are based on a 5-point Likert Scale (1 = very satisfied to 5 = very dissatisfied). **In other words the lower the number, the more satisfied the participant.** Scores of 0 (not applicable) or 6 (no response) were not included in the analysis.

**Pass rate for Certified Food Manager Exam: 88%**

**Results – Food Handlers Food Safety Course**

During 2013, This agent conducted 13 Food Handlers Food Safety Classes. 108 people in Parker County participated in the FPM program and completed the food handler program. Change in knowledge (pre vs post) was used to evaluate the food handler program. In addition, client (customer) satisfaction surveys were collected from participants.

**Food Handler Course – participant characteristics**

These numbers reflect the results of 38 participants in the Food Handlers Program for 2013. Participants were mainly female (82%; n=31), white (60%; n=23) and from a variety of age groups. More than 80% (n=31) identified English as their primary language. Nearly 64% (n=23) of participants had a high school degree or less; the remaining participants reported completing some college or a college degree. Nearly 68% had foodservice experience and a similar percentage (61%) reported previously receiving food safety education.

*Mean score and % score were both rounded to the nearest whole number.*

There **was** a statistically significant increase in test scores (comparing pre vs post) suggesting an increase in knowledge regarding food safety.

Mean score pre: 76  
 Mean score post: 91

*Percentage of respondents who answered survey questions correctly, pre and post.*

Question	% correct pre*	% correct post
1. Which of the following statements about serving food is true?	71	87
2. Which of the following best describes proper hand and arm washing?	95	100
3. The removal of dirt, soil, food or grease is known as:	68	87
4. Which of the following statements about a hand washing sink is true?	97	100

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5. Which of the following people is most likely to contract a foodborne illness?	34	92
6. Which of the following foods would not be considered potentially hazardous?	74	79
7. Cross contamination happens when safe food comes into contact with:	97	97
8. Which of the following statements best describes the temperature danger zone?	61	87
9. Which of the following is an example of cross contamination?	92	92
10. All of the following are acceptable tools for handling ready-to-eat foods except:	92	100
11. Which of the following food service employees must wear a hair net/restraint?	92	90
12. Which of the following is the best example of maintaining personal hygiene?	66	84
13. A foodservice employee should immediately tell his/her supervisor if he/she has:	66	84
14. Generally speaking a foodborne outbreak involves how many people?	42	97
15. Food can be contaminated by:	90	90

\*Percent rounded to the nearest whole number

### *Client satisfaction with Food Handler course instruction*

		Average Score (n=38)**
Client satisfaction with instructor's knowledge of the subject.		1.1 ± .31
Client satisfaction with instructor's presentation of course material.		1.1 ± .34
Client satisfaction with instructor's response to questions.		1.1 ± .31
Client satisfaction with instructor's involvement in discussion and questions regarding course material.		1.1 ± .31
Overall client satisfaction with instructor performance.		1.1 ± .34
Overall client satisfaction with the program.		1.1 ± .31

\*\* Based on participant surveys received and entered as of 10/1/2013. The client satisfaction survey was given at the end of the training while the survey that assessed client characteristics was given separately (at the beginning).

Instructor satisfaction scores are based on a 5-point Likert Scale (1 = very satisfied to 5 = very dissatisfied). **In other words the lower the number, the more satisfied the participant.** Scores of 0 (not applicable) or 6 (no response) were not included in the analysis.

Summary: The food handlers program was successful in helping participants (foodservice employees) increase their knowledge about food safety as it pertains to the retail setting.

### **Interpretation**

This agent presented information to Parker County Commissioners Court members through a presentation and an information page. Also provided information through monthly reports and through providing information about food safety.

### **Future Programming**

Thank you Rebecca Dittmar and Julie Prouse for the information and support for local Food Safety programming and resources. Thanks to County Extension Agents who supported programming and assisted in teaching.

**Better Living for Texans – Back to Basics**  
*Kathy Smith, CEA-Family & Consumer Sciences*

**Relevance**

In Parker County, an estimated 8,601 individuals receive benefits from the Supplemental Nutrition Assistance Program (SNAP), historically known as food stamps. Studies have shown individuals who live in poverty (including SNAP recipients) have dietary intakes that are not in agreement with current recommendations (i.e. Dietary Guidelines or MyPlate). This audience, like many, may not recognize their risk for foodborne illness. Having enough food to eat is also a challenge; an estimated 1 in 6 households in Texas experience food insecurity.

**Response – Better Living for Texans (BLT)**

The BLT Program is a cooperative endeavor among Texas A&M AgriLife Extension Service, Texas Health and Human Services Commission (HHSC), and the Food and Nutrition Services (FNS) of USDA. A component of the Supplemental Nutrition Assistance Program (SNAP), BLT offers food and nutrition education to SNAP recipients, applicants, and other low-income audiences to help improve their ability to plan and prepare nutritious meals, stretch food dollars, and prepare and store food safely. BLT also incorporates the *Walk Across Texas* program to promote physical activity.

There were three basic types of educational programs that were offered to reach the BLT targeted audiences.

BLT Evaluation Series *Back to Basics* with 26 Parker County adults completed the BLT *Back to Basics* series. This program focuses on meal planning, stretching food dollars, and adopting selected behaviors that can reduce the risk of foodborne illness. This report reflects results of the pre, post, and 30-day follow-up surveys completed by the participants.

There were BLT One Shot Classes. The classes included the series lessons, plus a wide range of topics included: Bon Up on Calcium; Shopping Strategies, Food Safety, such as eating healthy snacks, nutrition for children, an emphasis on handwashing, stretching food dollars. These programs were presented to limited resource individuals a Weatherford I.S.D. ESL program, HeadStart, Sunshine Station, Spring Garden Apartments, Meadow Apartments, Senior Housing, Parkview Apartments,

**Results**

Participants were mostly female (58%) and white (81%). Participants had a mean age of 29 with an average household size of 4.7. More than 65% (n=17) had a high school education or less; 30% (n=8) had completed some college or technical school. Eighty-one percent (n=21) of participants received SNAP benefits and 31% (n=8) participants had children who received free or reduced-price meals.

*Meal Planning and Food Resource Management – adoption of behaviors*

Behavior	Current behavior (pre) Number (%*)	Intent to change Number (%*)	Behavior 30 days later Number (%*)
<b>Plan meals in advance</b>			
Always	7 (27)	13 (50)	6 (23)
Sometimes	18 (69)	12 (46)	20 (77)
Never	1 (4)	0	0
Not Sure	0	1 (4)	0
No response	0	0	0
<b>Shop for food with a list</b>			
Always	9 (35)	19 (73)	11 (42)

## Family and Consumer Sciences

Sometimes	12 (46)	7 (27)	14 (54)
Never	5 (19)	0	1 (4)
Not Sure	0	0	0
No response	0	0	0
<b>Compare prices when shopping</b>			
Always	15 (58)	20 (77)	18 (69)
Sometimes	7 (27)	6 (23)	5 (19)
Never	3 (12)	0	3 (12)
Not Sure	0	0	0
No response	1 (4)	0	0
<b>Use unit pricing when shopping</b>			
Always	9 (35)	14 (54)	9 (35)
Sometimes	7 (27)	8 (31)	12 (46)
Never	6 (23)	0	4 (15)
Not sure	4 (15)	4 (15)	0
No response	0	0	1 (4)
<b>Run out of food before the end of the month?</b>			
Always	2 (8)		1 (4)
Sometimes	11 (42)		8 (31)
Never	11 (42)		17 (65)
Not Sure	2 (8)		0
No response	0		0

\*percentage is rounded up to the nearest whole number

Most participants were using the targeted food resource management practices either “always” or “sometimes” when they entered the BLT program. Immediately after the program ended there was a noted increase in the percentage of participants who intended to practice the behaviors “always”. Thirty days later, the percentage of participants practicing shopping with a list and comparing prices “always” was higher than when the program began.

Immediately after the program ended, 17 (65%) of the participants reported that they felt they could use what they had learned to spend less money at the grocery store. In addition, all participants reported being able to stretch their food resources to last the entire month either “always” or “sometimes” immediately after the program. Thirty days later, the number of participants who ran out of food before the end of the month “always” or “sometimes” had decreased (from 50% pre to 35% at follow-up).

### *Food Safety- adoption of behaviors*

Behavior	Frequency (pre) Number (%*)	Frequency (post) Number (%*) (intent to change)	Adoption of Behavior (30-days later) Number (%*)
<b>How often do you sanitize cutting boards after cutting up raw meat or poultry?</b>			
Always	22 (85)	25 (96)	24 (92)
Sometimes	1 (4)	1 (4)	0
Never	1 (4)	0	0
Not sure	1 (4)	0	2 (8)
No response	1 (4)	0	0
<b>How often do you thaw frozen food at room temperature?</b>			
Always	10 (39)	5 (19)	5 (19)
Sometimes	10 (39)	5 (19)	4 (15)
Never	5 (19)	16 (62)	17 (65)
Not sure	1 (4)	0	0

## Family and Consumer Sciences

No response	0	0	0
<b>How long did you leave your last meal out after it was prepared?</b>			
Eaten/stored immediately	15 (58)	16 (62)	13 (50)
< 1 hour	6 (23)	3 (12)	10 (39)
1 – 2 hours	5 (19)	7 (27)	3 (12)
> 2 hours	0	0	0
Not Sure	0	0	0
No response	0	0	0

\*percentage is rounded up to the nearest whole number

Nearly all participants (85%) reported sanitizing cutting boards after cutting up raw meat or poultry when the program first began. That percentage rose to 96% immediately after the program ended and continued at 92% 30-days later. Also, at the 30-day follow-up survey we found that the percentage of clients who “never” let food thaw at room temperature was higher (65%) compared to when the program began (19%).

### **Other findings:**

69% of the participants identified BLT as their first exposure to AgriLife Extension. This suggests that the program is reaching new audiences who otherwise might not have the opportunity to benefit from Extension programs.

### **Average monthly out-of-pocket food expenses reported by participants\*\*:**

Before BLT: \$ 190.00

After BLT: \$ 159.38

\*\* Based on 16 participants who reported monthly out-of-pocket food expenses at the beginning of BLT and 30-days after the program ended. Changes in out-of-pocket food expenses **were not** significantly different.

23 of the 26 (89%) participants rated the BLT program as “excellent” while another 3 (11%) rated the program as “good.”

### **Interpretation**

Interpretations were conducted through a presentation made by the BLT Assistant for the Parker County Commissioners Court at an interpretation event held in the Spring. She shared results of programs and talked about audiences reached.

Interpretations were also conducted through reaching out to various agencies through contacts and through networking events.

### **Future Programming**

There will be a concentrated effort to offer workshops and series that more targets this food stamp audiences. Workshop series will be conducted at various locations throughout Parker County.

### **Acknowledgement**

A thank you and appreciation to the BLT Taskforce that is made up of various agencies in Parker County. The taskforce meeting three to four times a year to share program concerns and needs.

Thank you to Dr. Jenna Anding, Renda Nelson and Jon Parrot for their support and interest in programming in Parker County.

***Step Up and Scale Down / Maintain No Gain***

*Kathy Smith, CEA –FCS, Parker County*

**Relevance**

Obesity is a growing and complex problem in Texas and Parker County. Almost 66 percent of Parker County residents are estimated to be overweight or obese. Thirty-four point five percent are considered obese. Obesity can have long term consequences. These can include diabetes, heart disease, stroke and cancer. These are the leading causes of death in Parker County.

**Response**

Step Up and Scale Down is a 12 week weight management program that is based on the USDA 2010 Dietary Guidelines which are intended to help Americans choose a healthful eating plan within their requirements to achieve and maintain a healthy weight. The program addressed the following topics:

- Setting Goals
- Healthy Plate
- Reading Labels
- Breakfast and Menu Planning
- Exercise
- Hydration
- Motivation
- Healthy Snacking
- Colorful Plate
- Successful Socializing
- Knowing Your Numbers

The program is targeted towards adults and the program was offered in a group setting that allowed participants to support and encourage each other.

Maintain No Gain was a six week email program conducted from the week of Thanksgiving through the first week in January. The program addressed steps in maintaining weight during the Holidays. The program addressed the following topics:

- Eating Healthy on the Go
- Benefits of Physical Activity
- Holiday Beverages
- Relax & Refresh
- Enjoying Favorite Recipes
- Grazing Vs. Three Meals a Day
- Simply

**Results**

Seventeen people enrolled and 6 completed the Step Up and Scale Down program. The evaluation of the program was conducted using a pre and post survey. A six month follow up survey was also conducted.

Eighteen people including Step Up and Scale Down participants participated in the program. The evaluation of the program was conducted by using a follow up survey.

**Step Up and Scale Down**

**Participant Characteristics**

There were 2 male and 15 female who participated in the series. All were non-Hispanic. Two-thirds indicated they had tried to lose weight in the past using a variety of methods including Weight Watchers, weight management, 17 day diet, portion control, walking and county calories.

The lowest beginning weight and BMI were 154.6 and 32.7%. The highest beginning weight was 269 and 49.7%

Seventy point four pounds were lost. Six participants completed the class losing from .2 to 22.8 pounds. The six who completed the series lost a total of 49.6 pounds.

**Change in targeted behaviors**

Table 1 shows the extent to which targeted diet and physical activity behaviors were being followed at the beginning of the program and immediately after the program ended.

**Table 1 Change in targeted behaviors**

<b>Behavior</b>	<b>At the beginning of SUSD Number (%)</b>	<b>Immediately after SUSD ended Number (%)</b>	<b>Six Months after SUSD ended Number (%)</b>
Eat breakfast 5-7 days a week	14 (82%)	7 (100%)	5 (100%)
TV / video viewing 2 hours per day or less	1 (5.8%)	1 (4%)	1 (20%)
Use calorie information at fast food restaurants “always or most of the time”	4 (23.5%)	3 (60%)	2 (40%)
Plan meals and snacks “always”	0 (0%)	1 (20%)	4 (80%)
Fill ¼ or less of lunch and dinner plates with fruits and vegetables	4 (23.5%)	1 (20%)	1 (20%)

Physical activity trended upwards during the program. Initially, participants reported being physically active for 30 minutes or longer an average of 3.5 days per week. At the end of the 12 week program, that number had risen from 56 to 83 percent who exercised 3 or more days per week.

**Table 2 Perceptions about health**

<b>Behavior – Past 30 days</b>	<b>At the beginning of SUSD Average number</b>	<b>Immediately after SUSD ended Average Number</b>	<b>Six Months after SUSD ended Average Number</b>
The number of days that one’s physical health was not good	1.6	6	4.4
The number of days that one’s mental health was not good	4.7	2.57	1
The number of days that poor health kept one from doing usual activities	.4	1.47	4.75

## Family and Consumer Sciences

The perceptions about the participant's own health varied. Initially, participants reported that out of the past 30 days, their physical and mental health was not good. That average dropped immediately after the program ended. The number of days that poor health prevented a participant from doing usual activities was also lower at the end of the program.

### Comments on What they Have Learned

- I am more aware of what I am eating or what I am putting on my plate. Also I am eating dairy at each meal.
- I like the new recipes and the information on food preparation.
- I am looking at portions and serving size when comparing calories, fat content, sugar content, etc.
- I have learned to read labels, not just during weight loss.
- I am more active and stay active every day.
- I drink more water and have switched to fat free items such as milk and cream cheese.
- I appreciate the accountability – weigh-ins are what I need most.
- Support and keeping trac are what matters and helps the most.

### Maintain No Gain

1. Before the start of this program how many times a week did you exercise at least 30 minutes a day?			
#	Answer	Response	%
1	None	0	0%
2	1-2	4	80%
3	3-4	1	20%
4	5 or more	0	0%
Total		5	100%

Statistic	Value
Min Value	2
Max Value	3
Mean	2.20
Variance	0.20
Standard Deviation	0.45
Total Responses	5

2. How many times a week do you exercise now?			
#	Answer	Response	%
1	None	0	0%
2	1-2	2	40%
3	3-4	3	60%
4	5 or more	0	0%
Total		5	100%

Statistic	Value
Min Value	2
Max Value	3
Mean	2.60
Variance	0.30
Standard Deviation	0.55
Total Responses	5

**Family and Consumer Sciences**

<b>3. Before the program, how many servings of fruits and vegetables did you eat a day?</b>			
#	Answer	Response	%
1	None	1	20%
2	1-2	4	80%
3	3-4	0	0%
4	5 or more	0	0%
Total		5	100%

Statistic	Value
Min Value	1
Max Value	2
Mean	1.80
Variance	0.20
Standard Deviation	0.45
Total Responses	5

<b>4. How many servings of fruits and vegetables do you now eat a day?</b>			
#	Answer	Response	%
1	None	0	0%
2	1-2	0	0%
3	3-4	5	100%
4	5 or more	0	0%
Total		5	100%

Statistic	Value
Min Value	3
Max Value	3
Mean	3.00
Variance	0.00
Standard Deviation	0.05
Total Responses	5

<b>5. What did you like most about the “Maintain No Gain” program?</b>			
<b>Text Response</b>			
It just kept me aware of what I needed to be doing. It is easy to let it slide.			
The “Maintain No Gain” program really made me feel accountable in my eating/exercise habits. I enjoyed the encouraging words of others. Even though I was able to maintain my weight throughout the holidays, I am still mentally logging my food intake and exercise habits on a weekly basis so that I can continue to maintain. We’re leaving to go on a cruise January 19 <sup>th</sup> so this week is crunch time!!			
It was a way to track the good foods that I ate. Be aware of how much activity I actually do and be aware of the pounds that can be put on during the holidays.			
I really enjoyed knowing that there is a person that I have to be accountable to.			
<b>Information</b>			
Total		5	

Statistic	Value
Total Responses	5

**Family and Consumer Sciences**

**6. Do you have any suggestions for improving “Maintain No Gain” in the future?**

**Text Response**

No – I should have kept a journal, which I didn’t faithfully

As far as I’m concerned, the “Maintain No Gain” program does not need any improvements. I might suggest that you add a few recipes to the program next year.

I would like to track all food that I am eating. Maybe with a calorie or fat gram count added. Plus I feel adding how much water you drink, excluding tea, sodas, etc., would be helpful.

I would love more ideas on what to eat and maybe more recipes

	Total	4	
--	-------	---	--

Statistic	Value
Total Responses	5

**7. Do you have any suggestions for future health and/or nutrition related topics that you would like to see in an on-line educational program or face to face program?**

**Text Response**

My concern is diabetes. That might be an on-line, but is really similar to this one.

	Total	1	
--	-------	---	--

Statistic	Value
Total Responses	1

**8. Please tell us about any health improvements or lifestyle changes you have made since the start of the “Maintain No Gain” program?**

**Text Response**

I’m drinking more water, eating more fruits and vegetables, and more whole grains. I kept a very weak cup of hot tea in my hand most of the day. If I had the urge to nibble, I picked up hot tea. This increased my total water intake.

Even though I was able to maintain my weight throughout the holidays, I am still mentally logging my food intake and exercise habits on a weekly basis so that I can continue to maintain. We’re leaving to go on a cruise January 19<sup>th</sup> so this week is crunch time!

The program has encouraged me to find healthy options. I have also researched diet plans online and have implemented a healthier eating plan based upon my research. I also plan to start walking several times a week.

Have joined Yoga program and helped with TOPS

	Total	4	
--	-------	---	--

Statistic	Value
Total Responses	1

**9. Did you gain, lose, or maintain?**

#	Answer	Response	%
1	Gained	0	0%
2	Lost	2	40%
3	Maintained	3	60%
	Total	5	100%

Statistic	Value
Min Value	2
Max Value	3
Mean	2.60
Variance	0.30
Standard Deviation	0.55

**Family and Consumer Sciences**

Total Responses	5
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<b>10. If you lost weight, please share how much?</b>			
Text Response			
2 lb. – I usually gain about seven during this time			
5 lb.			
	Total	2	

Statistic	Value
Total Responses	2

**Conclusion**

Weight loss is a long and difficult process for most people. While participants who completed the Step Up and Scale Down program didn't lose a significant amount of weight, there is evidence of several habits adopted including eating more fruits and vegetables and increasing physical activity that can lead to more positive health benefits down the road. Most like the accountability in the program and there may need to be a continual program to continue the accountability.

During Maintain No Gain, participants did not gain weight. Sixty percent maintain their weight and 40 percent lost weight.

**Interpretation**

Provided information to the Parker County Commissioners' Court through monthly reports. Also there was an interpretation event for the court in the spring that provided for the opportunity to share information about the Step Up and Scale Down program.

**Future Programming**

Step Up and Scale Down will be offered beginning in February. There will be three sessions offered in Springtown and Weatherford. There is also planning to expand to the schools in providing an in-service so volunteers can take the series to the faculty at the area schools. Also, plans are to offer Walk Across Texas as part of the program.

### *Science of Agriculture – Outcome*

*Kayla Neill, CEA - 4-H*

**Relevance** As today's youth are further removed from farming, many do not understand the importance of agriculture and how it impacts their daily lives. Parker County is growing rapidly in population. According to the US census, Parker County's population has increased more than 25% between the years 2000 to 2010. Much of the growth is coming as a result of having the large and urban counties of Tarrant and Dallas counties to the east, as well as an influx of people relocating from northern and western states to this area. Youth from these urban areas as well as youth that have resided in Parker County for an extended period of time, that attend Parker County Schools, have little knowledge of agriculture and nutrition or how both of these affect their lives on a daily basis. Therefore, the Parker County Leadership Advisory Board felt that it was important to provide these youth with the opportunity to increase their knowledge of agriculture and nutrition and the effects of both on their everyday lives.

This Science of Agriculture program targets the fourth grade students and teachers of Parker County and provides the following educational components: Educational support materials on Science of Agriculture and curriculum for teachers to use in the classroom, ag day/ag fair field trip, pre- and post-tests, teacher evaluation, recognition certificates and information about 4-H opportunities for the participants and parents.

**Response** The Parker County Leadership Advisory Board identified the need to provide education to youth in regards to agriculture that included a segment on nutrition.

- Met with Leadership Advisory Board who was involved in planning and implementing the field day (September 2011)
- “Kids and Kows and More” curriculum packets were provided to each participating 4th grade class room and students (April 2012)
- Conducted “Kids and Kows and More” on May 17, 2012

Topics covered include: Mobile Dairy Classroom; sheep and goat; beef; swine; Choose MyPlate; horticulture; horse and wildlife.

**Results** In order to determine programmatic results of the Parker County “Kids, Kows and More” program, pre-test/post-test evaluation instrument was administered to the program participants. A random sampling of 25 surveys were taken from the 337 program participants.

- Satisfaction surveys reflect overall satisfaction with the “Kids and Kows and More” program.
- Teachers expressed that their students benefited from “Kids and Kows and More.”
- Teachers are willing to participate next year.

## 4-H and Youth Development

**Table 1** Results of the pre-test/post-test evaluations to measure knowledge gained pertaining to agriculture from participation in the “Kids and Kows and More” program.

Satisfaction	Pre-test% Correct	Post-test% Correct	%Change	Pre-test% Incorrect	Post-test% Incorrect	%Change	Pre-test% Unsure	Post-test% Unsure	% Change
1. Agriculture touches my life every day	41.00	85.00	107.32	17.00	6.00	64.71	37.00	9.00	75.68
2. Agriculture affects your life if you eat or wear clothes.	37.00	74.00	100.00	30.00	13.00	56.66	33.00	13.00	60.61
3. Texas farmers and ranchers work hard to provide a safe, affordable food supply.	89.00	91.00	2.25	2.00	2.00	0	9.00	7.00	22.22
4. Eating meat is an important part of a healthy and balanced diet.	59.00	73.00	23.73	27.00	14.00	48.14	14.00	12.00	14.29
5. Eating fruits and vegetables is an important part of a healthy and healthy and balanced diet.	94.00	94.00	0	4.00	4.00	0	2.00	2.00	0
6. Agriculture is more than food.	50.00	83.00	66.00	11.00	3.00	72.73	39.00	14.00	64.10
7. Agriculture will be less important as our population gets larger and more people live in the city.	42.00	74.00	76.19	18.00	10.00	44.44	40.00	16.00	60.00
8. If farmers did not raise farm animals or grow crops, I would not be able to eat foods such as pizza and hamburgers.	68.00	75.00	10.29	23.00	14.00	39.13	9.00	11.00	22.22
9. I am going home to tell my parents about the importance of agriculture.	43.00	54.00	25.58	37.00	28.00	24.32	20.00	18.00	10.00
10. Meat from livestock provides a good source of protein.	76.00	84.00	10.53	5.00	4.00	20.00	19.00	12.00	36.84
11. Wool comes from sheep and can be made into clothing like sweaters.	93.00	93.00	0	2.00	4.00	100.00	5.00	3.00	40.00
12. Steaks and hamburgers come from beef cattle.	89.00	91.00	2.25	3.00	4.00	33.33	8.00	5.00	37.50
13. Some breeds of goats are used for meat, another breed is used for mohair.	41.00	63.00	53.66	12.00	9.00	25.00	47.00	28.00	40.43
14. Dairy foods (like milk, cheese and yogurt) help me grow strong bones and teeth.	84.00	96.00	14.29	6.00	2.00	66.67	10.00	3.00	70.00
15. Protein (from foods like meat and eggs) helps build strong muscles.	77.00	90.00	16.88	7.00	5.00	28.57	16.00	5.00	68.75
16. My body gets water by eating foods with water in them and by drinking water.	56.00	63.00	12.50	17.00	26.00	52.94	27.00	11.00	59.26
17. My body get water by eating foods with water in them and by drinking water.	71.00	62.00	14.52	12.00	14.00	16.67	17.00	24.00	41.18
18. Leather comes from the cotton plant.	45.00	54.00	20.00	26.00	26.00	0	29.00	20.00	31.03

% Change = (post-test% - pre-test%) / pre-test% \*100

  indicates an increase in % Correct

  indicates a decrease in % Correct

## 4-H and Youth Development

The Texas A&M AgriLife Extension Service of Parker County would also like to recognize those who were partners and collaborators in our programming efforts.

- Commissioners Court
- Southwest Dairy Farmers
- Texas Parks and Wildlife
- Texas Pork Producers
- Texas 4-H Livestock Ambassadors

**Acknowledgements** A special thanks to the following individuals who provided educational presentations for the program: Todd McCartney, Melton Harms, Keeley Sears, Kodi Sears, Jon Green, Kathy Smith, Johnny Kelly, Dean Marquardt and the Parker County Master Gardner's. We would also like to thank the Parker County Leadership Advisory Board along with the Parker County 4-H'ers and parent leaders that served as group leaders for this event.

**Future Program Actions** "Kids and Kows and More" has proven to be a successful approach to educating the fourth graders of Parker County in the areas of agriculture and nutrition and their affects on individual's daily lives. Texas A&M AgriLife Extension, Parker County will continue to provide agricultural literacy programming in 2013.

### ***Parker County 4-H Youth Development – Output***

*Kayla Neill, CEA-4-H*

#### **Parker County Youth Healthy Lifestyles**

**Relevance.** Youth Healthy Lifestyles programs and related 4-H and Youth Health and Nutrition projects are one of the cornerstone programs of Texas A&M AgriLife Extension Service. Nationally, 19% of children ages 6-11 years are obese (95th percentile for body mass index (BMI) by age/sex). In Texas, 23% of fourth grade children are obese. Childhood obesity is associated with increased risk for diabetes, high blood pressure and adult overweight/obesity. By providing programming related to healthy lifestyles, we expect to see lifestyle changes such as healthy eating habits based on the MyPlate for Kids.

**Response.** County Extension Agents worked with the 4-H Food and Nutrition task force to develop education programs to offer to youth interested in the Food and Nutrition project to expand their knowledge in the Food and Nutrition project.

- **Food Challenge,** The 4-H Food Challenge is a contest that allows 4-H members to demonstrate their culinary knowledge and skills. From a set of predetermined ingredients provided, teams of 3 to 5 4-H members must develop a recipe and prepare the dish within 40 minutes. Teams then make a presentation to a judging panel, explaining the preparation steps, serving size, food safety concerns, nutrition value and cost of the dish. (5 workshops provided, Parker County 4-H Food Challenge – 27 participants, District 3 4-H Food Challenge – 12 participants)
- **Food Show,** The 4-H Food Show gives youth the opportunity for educational and personal development and recognizes members who excel in the 4-H Food and Nutrition Project. The Food Show is an individual contest in which a 4-H member prepares a dish in one of the contest categories and presents it to a panel of judges. During the presentation and interview with the judges, 4-H members exhibit the knowledge and skills gained through the 4-H Food and Nutrition Project, such as preparation steps, nutrients found in the dish, the functions of various ingredients, personal dietary needs, healthy substitutions, and cost analysis. (Parker County 4-H Food Show participants - 17)
- **Nutrition Quiz Bowl,** Quiz Bowl helps 4-H members enhance and demonstrate their knowledge and skills in a competitive setting. The Quiz Bowl involves teams of three or four members. Two teams compete against each other at one time, answering questions related to the subject matter with the use of an electronic buzzer system. (District 3 4-H Nutrition Quiz Bowl participants - 1 Junior/Intermediate teams, 1 Senior team)

**Results.** Parker County 4-H'ers were given the opportunity to participate in 10 county-wide workshops related to the Food and Nutrition. Parker County Extension would like to thank the parents and leaders who encouraged and supported their children in their Food and Nutrition project work. We would also like to thank the Food and Nutrition task force that assisted in the planning and implementation of the County 4-H Food Show and County Food Challenge.

## 4-H and Youth Development

### Parker County 4-H Youth Consumer and Family Sciences

**Relevance.** Today's economic situation has increased the need to raise financially literate young people. A 2007 back to school survey of teens revealed that 52 % of teens are eager to learn more about money management. Only 35% of teens have learned about money management from their parents while even less (14 percent) of teens report that they have taken a course on money management (Capitol One, 1007).

House Bill 492 was implemented to require personal finance in public schools. AgriLife educators can play an important role in helping teachers and school administrators meet the learning needs of youth.

The clothing and textiles program is designed to assist Texans in making sound decisions related to the election, use, and care of clothing and textile products in their daily lives. The clothing and textiles Extension program consists of the following areas: sewing as a business, consumer decision making, and Texas 4-H and Youth Clothing.

**Response.** County Extension Agents along with the 4-H Consumer and Family Sciences Task Force developed county-wide programming to specifically address the Clothing and Textiles project and the Consumer Education project.

- **Fabric and Fashion Design,** The 4-H Fashion Show is designed to recognize 4-H members who have completed a Clothing and Textiles project. The following objectives are taught in the Clothing and Textiles project: knowledge of fibers and fabrics, wardrobe selection, clothing construction, comparison shopping, fashion interpretation, understanding of style, good grooming, poise in front of others and personal presentation skills. (3 camps, 4 workshops, County Fashion Show 4 participants, District Fashion Show 3 participants)
- **Consumer Decision Making,** Through the 4-H Consumer Education Project, 4-H members learn to make wise decisions when shopping. Project activities also focus on the economy, money management, consumer rights and responsibilities, and the environment. (District Consumer Decision Making contest 10 participants)

**Results.** Parker County 4-H'ers were given the opportunity to participate in a number of Fabric and Fashion Design activities at the county and district level. Youth also increased consumer knowledge through participation in the Fashion Buying categories and Consumer Decision Making activities. Parker County 4-H'ers participated in both county and district contests, with one senior team advancing on to the State 4-H Roundup in Consumer Decision Making. Parker County Extension would like to thank the parents and leaders who encouraged and supported their children in their Clothing and Textile project work and Consumer Decision Making. We would also like to thank the Family Living Division task force that assisted in the planning and implementation of the county workshops and camps.

### Parker County 4-H Youth Livestock

**Relevance.** In 2000 there were over 75,000 county livestock show entries for cattle, swine, meat goats and sheep (Coufal, 2006). One half of those entries were 4-H. There have been six major benefits identified as a result of exhibiting livestock: 1. Social relations; 2. Character; 3. Family; 4. Competition; 5. Learning new cultures and environments; 6. Helping finance the youth's higher education. Parents of youth suggest that life skills are enhanced by raising a 4-H livestock project. The longer youth are engaged in the project they are more likely to develop life skills (Boleman, 2003).

**Response.** County Extension Agents worked with the Parker County 4-H Livestock Committee, the Parker County Livestock Improvement Association and volunteer project leaders to develop educational opportunities and competitive events for those involved in livestock and horse projects.

## 4-H and Youth Development

- **Livestock Shows** Youth exhibit their livestock projects at local, county, state and national livestock shows. Youth learn animal husbandry, feeds and feeding, proper selection and showmanship skill throughout the Livestock project. More than 300 livestock projects were exhibited in 2013 from Parker County 4-H.
- **Species Clinic** Parker County 4-H'ers interested in the livestock project take part in an annual species clinic to learn Quality Counts, animal selection, feeds and feeding, proper drug administration and general animal husbandry. Clinicians provide detailed presentations for each species. (1 poultry and 2 Lamb & Goat clinics)

**Results.** Parker County 4-H was represented nationally in youth exhibiting their livestock projects. Boleman (2003) evaluated parents' perceptions of what youth gain from raising and exhibiting livestock projects. Parents of youth participating in 4-H livestock projects suggested that life skills are being enhanced. According to parents of these youth, the seven life skills that revealed the highest levels of enhancement were accepting responsibility, setting goals, develop self-discipline, self-motivation, knowledge of the livestock industry, building positive self-esteem, and decision making. They also indicated that there is indeed a low to moderate, positive relationship between years of participation and life skill development. This suggests that the longer children actively engage in the project, the more likely they are developing life skills that will hopefully make them more productive as adults.

### Curriculum Enrichment

**Relevance.** Youth need a variety of projects and activities to help them develop into contributing members of society. Parker County 4-H provides a number of curriculum enrichment programs for local schools that meet teks requirements and assist teachers in building their own curriculum.

**Response.** Parker County 4-H Programming Assistant and Agents work with local school districts, private schools and home school associations to provide research based educational programming and curriculum to teachers.

- **Emergency Preparedness** This program is provided during National Fire Safety and Prevention month. It is presented in conjunction with the local Emergency Management Office and County Fire Marshall. It teaches students how to react in dangerous situations as well as how to be prepared for disasters such as floods, tornados, fires and health risks such as H1N1. (198 students participated)
- **Hand Washing** This program is designed to teach children about the importance of washing their hands to create healthier homes and schools. The program teaches when to wash your hands, how long to wash your hands, appropriate ways to cough and sneeze to prevent the spread of germs and places where germs live. There is also an activity so the students can actually see if they are washing their hands properly by placing glo-germ in their hands and having them wash to see if they get all of the "germs" off. (373 students participated)
- **Toothfully Speaking** This program is presented to students during Children's Dental Health Awareness month. It is designed to help children learn the importance of taking care of their teeth, fluoride, and what to expect when visiting the dentist. A dental professional will be scheduled to speak to the students during this program. Each student is given a new toothbrush and other dental items when available. (1,068 students participated)
- **Egg-To-Chick** Also known as Hatching in the Classroom, this is one of the most popular programs among teachers and students. The incubators, equipment and fertilized eggs are provided to each teacher who wishes to participate. Teachers are provided curriculum and posters to help teach the youth about the life cycle. (780 students participated)
- **Plant Pals** This program is designed to teach students the fundamentals of plant growth and the importance of American farmers. Each student is given a container to plant rye grass. The rye grass grows in a short period of time and then the students are given the opportunity to give their "Pal" a haircut. Students enjoy planning and watching their plant grow. (207 students participated)

## 4-H and Youth Development

- **Mobile Dairy Classroom** This program is designed to teach students of all ages how milk is produced and processed and then how it moves from farms to our refrigerators. A representative from Southwest Dairy Farmers brings a live cow and complete dairy setup for students to see the actual milking process. Students are also taught the nutritional value of milk and other dairy products. (832 students participated)

**Results.** Teacher evaluations reflect overall satisfaction with the curriculum enrichment programming efforts. All teachers involved have expressed interest in continuing programming for the 2013 year.

### Parker County 4-H Youth and Adult Leadership

**Relevance.** Youth and adult leadership is a fundamental component of every county 4-H program. Youth learn and serve through leadership to develop valuable knowledge, attitudes, skills and behaviors. Providing learning opportunities as well as application opportunities supports the continued development of these valuable skills in both youth and adults to lead the 4-H program at the local and county level. They may also benefit from similar activities at multi-county, district, regional, state and national levels. Our goal is to expand the knowledge, attitudes, skills and behaviors of youth and adults that are engaged in the 4-H and youth development program.

### Response.

- **Parker County 4-H Parent Leader Association** This association is composed of volunteer 4-H leaders who meet and work together to support the youth of Parker County 4-H. The Parent Leader Association works in conjunction with the County 4-H Council to plan and coordinate county-wide 4-H activities. They work to financially assist the 4-H youth through fund raising projects. The Parent Leader Association is also useful as a meeting forum in which leaders may exchange ideas. Meetings of the Parker County 4-H Parent Leaders Association are held every other month.
- **Parker County 4-H Council** Members of the Parker County 4-H Council plan and coordinate 4-H activities in the county. The 4-H Council also promotes county, district and state level 4-H activities. County Council is comprised of 4-H members from each of the various 4-H clubs in the County. Clubs are encouraged to have two to three council delegates who will attend the County 4-H Council meetings. Typically, a 4-H member is elected into the position of council delegate and represents his or her club at the County 4-H Council meetings. In most cases, the President of the 4-H club also serves as a delegate to the County 4-H Council. In addition to the club council delegates and presidents, membership to the council is open to all 4-H'ers of Parker County. The Parker County 4-H Council serves as a communication channel. Council delegates represent their club and relay information and ideas from their club to the council. The council delegates also relay information from the council to their club to keep the members up to date on county-wide activities and events.
- **Parker County 4-H Clubs** Parker County 4-H has 9 community 4-H clubs in which youth may be involved. These club meetings are conducted by 4-H'ers who have been elected into officer positions. 4-H adult volunteer leaders help 4-H members plan and run the meetings. Each club has adult volunteer leaders who act as club managers. The 4-H club managers oversee the meetings and activities of his or her respective club.
- **Parker County 4-H Connection Newsletter** The Parker County 4-H Connection is a monthly newsletter developed to provide upcoming events, and education information to the member of Parker County 4-H. Members receive the monthly newsletter at the beginning of each month via email.

**Results.** The partnership between the Parent Leader Association, 4-H Council and the Parker County 4-H clubs and backed by communication through the Parker County 4-H Connection has resulted in positive programming efforts at both the club and county level.

# Texas A&M AgriLife Extension Service Parker County

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