Improving Lives. Improving Texas.

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

Through a well-organized network of professional educators and some 100,000 trained volunteers, Extension delivers practical research-based knowledge to Texans in all 254 counties. Our expertise and educational outreach pertain to the food and fiber industry, natural resources, family and consumer sciences, nutrition and health, and community economic development. Among those served are the hundreds of thousands of young people who benefit annually from Extension’s 4-H and youth development programs.

Texans turn to Extension for solutions. Its agents and specialists respond not only with answers, but also with resources and services that result in significant returns on investment to boost the Texas economy. The agency custom-designs its programs to each region of the state, relying on residents for input and for help with program delivery. Here are just a few highlights of Extension’s impacts on this county and its people:

### Tarrant County – Summary of 2012 Educational Contacts

<table>
<thead>
<tr>
<th>Category</th>
<th>Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Educational Programs Conducted</td>
<td>2,260</td>
</tr>
<tr>
<td>Total Participants</td>
<td>74,148</td>
</tr>
<tr>
<td>Contact Hours</td>
<td>111,706</td>
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<td>837</td>
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<td>Site Contacts</td>
<td>2,180</td>
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<td>Newsletters / Mail / Email Contacts</td>
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<table>
<thead>
<tr>
<th>Category</th>
<th>Volunteers</th>
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<tr>
<td>Master Gardeners</td>
<td>400</td>
</tr>
<tr>
<td>Program Area Committee Members</td>
<td>119</td>
</tr>
<tr>
<td>4-H Adult Leaders</td>
<td>113</td>
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<tr>
<td>Texas Extension Education Association</td>
<td>26</td>
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<tr>
<td>Master Wellness Volunteers</td>
<td>13</td>
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<tr>
<td>Other Volunteers</td>
<td>213</td>
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</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-H &amp; Youth Development</td>
<td>23</td>
</tr>
<tr>
<td>Community Clubs</td>
<td>610</td>
</tr>
<tr>
<td>Club Members</td>
<td>610</td>
</tr>
<tr>
<td>Enrichment Curriculum &amp; Short Term Project Members</td>
<td>15,947</td>
</tr>
</tbody>
</table>
Relevance
A basic appreciation for and a lack of knowledge by the consumer on the value of agriculture to their everyday lives is evident by a survey of fourth graders who did not understand the importance of agriculture or the basic concept of agricultural production. The time tested saying, “If you eat, you’re involved in Agriculture” is as true today as it ever was. Pizza Ranch 2012 attempted to educate consumers, youth and adult, about the value of agriculture in their daily lives. Obviously, the food we eat is a direct result of production agriculture, but many consumers do not recognize the benefit we derive from the various by-products of agricultural production and processing, and the economic benefit associated with all the aspects of the food chain.

Response
The Tarrant Area Food and Fiber Committee sponsored Pizza Ranch, a two-day event attended by 3,278 youth and 192 adults, where the attendees learned about the origins of the ingredients which comprise a pizza. An eight-module, 156 page, Teacher/Leader Curriculum was used by classroom teachers and/or adult volunteers either in preparation for or after attending Pizza Ranch to re-enforce the concepts taught during the event. The initial module addresses the Agribusiness Industry detailing the circular flow of economic activity and the percentage amount of a dollar spent on production versus process in the Ag industry. The module also explores various careers related to agribusiness. The next module is Food and Fiber which further details the importance of this industry on the economic well-being of the State of Texas. The third module focuses on our Dairy industry and all the components derived from harvesting and processing milk. Wheat is the next module and it ties in well with the processing of grains which go into making flour which in turn is used to make pizza dough. There are also instructions for the youth to make “bread in a bag” as a classroom activity. The Horticulture module covers vegetable and herb production and shows where in the state various horticultural products are produced and their impact on the state’s economy. Beef and Pork are the next two modules and they explain the need for production, processing and consumption of red meat products which benefit each of us in our daily lives. Last but not least is the Food and Nutrition module which utilizes concepts drawn from “My Plate” to teach the youth about healthy eating habits and other positive lifestyle choices.

Results
Teachers report that the curriculum guide is useful in preparing the youth for attendance of the Pizza Ranch event as it allows them classroom time to develop some of the key points which will be addressed at Pizza Ranch. Youth participating in the program have shown an increase in attitude and knowledge as it relates to the importance of agriculture in their daily lives.

Two hundred and seventy (270) youth were randomly selected to participate in a retrospective post evaluation. Evaluations for the 2012 Pizza Ranch have shown 67% of the surveyed youth understood the importance of using “My Plate” as a guideline in deciding what foods to eat. Eighty-six percent understood the concept that Texas farmers and ranchers strive to ensure we have a safe, affordable food supply. Over 92% realized that vegetables and fruits are an important part of healthy and balanced diet. Eighty-four percent correctly identified wheat as the source of the flour making up the main component of pizza crust. Seventy-five percent noted the additional benefit of clothing being made from both plants and animals in addition to food products. When asked about the economic benefit of agriculture to our economy, over 85% agreed or strongly agreed that it was vitally important.

Conclusion
The continued use of the Pizza Ranch Teacher/Leader Guide in conjunction with attendance at the event will be a valuable tool in re-enforcing the key concepts identified by the Tarrant Area Food and Fiber Committee to deliver the message of agriculture’s importance to everyone’s daily life.

Acknowledgements
The Tarrant Area Food and Fiber Committee thanks the following collaborators supporting the 2012 Tarrant County Pizza Ranch: Mark of Excellence Pizza (Domino’s Pizza), Southwestern Dairy Museum, Southwestern Exposition and Livestock Show, Ag Workers Mutual Auto Insurance, Lone Star Ag Credit, Fort Worth Farm and Ranch Club, Cargill – Horizon Milling, Burly Corporation – Sheffield Fence, Oak Farms Milk, Borden’s Milk, Blue Bell Ice Cream, Tarrant Area Food Bank, Silver Creek Materials, Fort Worth Fire Department, Fort Worth ISD, and Better Living for Texans.
Small Acreage Landowner Seminar
Ken Johnson, County Extension Agent - Agriculture

Relevance
Small scale producers (under 50 acres) typically have a negative net cash farm income. The goals for small farm operations may or may not be economically driven to the extent that traditional farming and ranching operation as primary sources of income may be. The availability of educational activities in small scale farming and ranching enterprises in Texas with diversified goals incorporating possible labor limitations, quality of life goals, and environmental goals balanced by community development concerns are currently available only as piecemeal segments. The small farmer is a producer group that is continuing to grow based on Ag census figures.

TheLeadership Advisory Board Validation of Stakeholder Input Summary documents New/Small Farm Education as one of the most frequent educational programs for both ongoing and new issues programming for the state of Texas (all disciplines) and one of the top six identified for Ag and Natural Resources. New/Small Farm Education is also the 2nd Ag and Natural Issue issue/program designated for the East Region for ongoing programs and third behind youth and water programs for newly identified issues/programs.

Response
Some of the identified needs of this audience were that they had limited land resources, time was valuable, their knowledge base of available enterprises and production practices was lacking, and they wanted to enjoy the “Ag production lifestyle”. It was determined to offer a basic Small Acreage Seminar in order to meet the educational needs of the target audience. Broad identified topics included beef cattle production, forage identification, establishment and management, hair sheep and meat goat production, resource inventory and economics of these agricultural enterprises.

In the beef cattle section the participants learned of various production cycles they could utilize on their property. This included both cow-calf production and summer stockers. They also received instruction on breed identification and selection, bull selection, the production cycle, marketing, supplemental feeding and the economics associated with both enterprises. Topics covered within the forage session mainly focused on forage production associated with beef cattle and included how to conduct an inventory of existing forages on their property, establishment and management of improved warm season forages, economics of production, and determining a stocking rate.

The sheep and goat session covered a historical look at the sheep and goat industry in Texas, the rationale behind hair sheep and meat goat production as a viable enterprise for small acreages, marketing opportunities due to the increase in number of ethnic communities and their close proximity to urban areas, economics of production, disease and parasite prevention and control, nutrition and facilities, and determining a stocking rate.

Results
A retrospective post evaluation was given to the participants of both sessions, however only the sheep and goat data was available at the time of this document’s printing. After the program these were the identified results of the participants after having attended the Small Acreage Seminar.

Eighty-nine percent (16 of 18) had a better understanding of how to determine a sustainable stocking rate for sheep and goats, along with a positive change in their understanding of basic nutrition and health practices. Additionally 89%, the largest increase in knowledge was demonstrated when all 18 (100%) responded they had increased their level of understanding as it applied to marketing opportunities with hair sheep and meat goats. When asked about their change in knowledge associated with their understanding of breeding stock selection eighty-nine percent (16 of 18) said it had significantly increased. On intentions to adopt the recommended practices fifty percent (9 of 18) said they probably or definitely would implement an internal parasite control program. Eighty-three percent (15 of 18) reported they had a better understanding of the advantages associated with raising hair sheep. Seventy-eight percent of the respondents anticipate benefiting economically as a direct result of what they learned. As to the understanding and the ability to identify the facilities needed for sheep and goat production, 67% had an increase. Fifty percent will definitely adopt recordkeeping in order to increase their profitability.

Conclusion
Further sessions and topics have been identified as needs for this target audience which include poultry production – both layers and broilers, rabbit production, small scale vegetable production and more in-depth coverage of the three previous broad topics.

Acknowledgements
Thanks go to Clay Wright, Rural Life Program Manager, and Chad Ellis, Pasture and Range consultant with the Noble Foundation of Ardmore Oklahoma for their assistance with the Beef Cattle Production and Forage Management portions of the seminar. Also to Dr. Frank Craddock, Texas A&M AgriLife Extension Sheep and Goat Specialist, San Angelo, Texas for his input and educational assistance with the Hair Sheep and Meat Goat sessions.

AgriLifeExtension.tamu.edu
Agriculture and Natural Resources

2012 Tarrant County Earth-Kind Program
Steve Chaney, County Extension Agent – Home Horticulture

Relevance
The population of Tarrant County has significantly increased over the years at some 10-15% per year and is currently 1,809,034 (US Census Report 2010). With the increasing population explosion comes an increasing demand on the County Extension Agent with Home Horticulture responsibilities to address clientele needs. We are extremely privileged to have such a large number of Community leaders and other civic-minded individuals who are willing to provide volunteer service to support and provide Extension-sponsored educational programs. We also have seven college campuses located in Tarrant County with several excellent environmental programs that are willing to provide subject matter as well as allow us venues to share the knowledge with the public. The following have been identified as the top Environmental concerns in Texas currently and in the future as well.

Landscape Water Conservation: Landscape irrigation in Texas accounts for up to 40%-60% of total residential water use during peak summer months. Landscaping for Energy Conservation: Conserving energy through the use of EarthKind landscaping principles and practices is critically important to the long term economy and environment of the residents in Tarrant County and the state. This issue is critically important to the residents of Tarrant County due to the ever expanding population in the metro area. Through the issue identification process here in Tarrant County, the following are the results that are tops in the communities for Ag and Natural Resources: water conservation, environmental stewardship, recycling wildlife, locally grown food, pesticide use, preservation of natural resources and native and adaptive plant use.

Response
Pesticide applicators CEU trainings were held with a total of 237 Pesticide Applicators License holders attending for a 5 hour class. These CEU's covered the different EarthKind range of principles from proper plant selection, IPM, organics, turf and weed management, proper fertilization and soil management.

EarthKind principles that encourage water conservation, as well as landscaping for energy conservation, reduction of fertilizer and pesticide use and reduction of yard wastes entering landfills were presented in 52 educational presentations with over 1,830 individual contacts.

In partnership with the Fort Worth Botanic Garden and the City of Fort Worth there were two Yardsmart seminars held this year; one in the spring and one in the fall with 268 people attending a total of 6 hour long classes featuring EarthKind topics such as vegetables, irrigation, herbs, soils, fertilization, mulching, etc. to help reduce water consumption as well as runoff pollution.

A new series of EarthKind Classes were setup for the office on Saturday for 2012, mainly focusing on County Employees. We had 8 classes averaging 17 people over the course of the year.

Through a continuing partnership with the City of Arlington, North Richland Hills and Fort Worth a series of EarthKind Classes were conducted on vegetable gardening, composting, soil amendment, drip irrigation, proper plant selection and mulching. There were a total of four classes on Rainwater Harvesting with a total of 400 barrels made for community members attending. This year one of our largest nurseries, Calloway’s, proclaimed an EarthKind Day with speakers in each of their four stores.

There was a Drought Management EarthKind Leadership Conference that was jointly planned and held in Collin County with over 100 participants attending. Many local decision makers in the cities were there to help see the need for landscaping changes in their communities. Tarrant County Master Gardeners also held an EarthKind Regional Symposium titled “Floods to Drought” with over 118 people attending, featuring local meteorologists discussing the continuing drought.

Results
The Stewardship Program greatly increased number of requests to have speakers on environmentally sound EarthKind principles instead of just organic gardening. People in the community have gone beyond just organic, they are now concerned with the environment and sustainability.

Of the over 40 participants who completed an evaluation instrument for an EarthKind Specialist Class the biggest gain was in managing your irrigation system at a 60.5% gain at the end of the class. Over 68% had an increase in understanding about a proper landscape design; with over 72% answering there was a definite potential economic benefit by reducing water use.

More attention is being diverted to our Resource Connection Demonstration Garden for Rainwater Harvesting tours, sustainable community gardening, drip irrigation, use of herbs for nutrition and the resurgence of growing fruit in your landscape without a lot of excess spraying of chemicals as previously thought!

Future Plans
At the Resource Connection Community/Demonstration Garden, the Cactus and Succulent Garden display will be up and running for a full year for the public to see the beauty of succulents that do not require water or fertilizer to survive. In 2013 we will be implementing the Texas Water Star Program in the seven urban counties. This should make a large impact in water conservation. Media publications, including a revamped website, and monthly newsletters will be just a few of the ways we emphasize EarthKind principles that help preserve and protect our most valuable natural resources.

As 2012 concludes, we feel as a group that EarthKind is the best Environmental Landscape Program in the nation and in fact the EarthKind Team was just awarded a Superior Service Award by Texas A&M University. The testing and research continues to validate this assumption.

AgriLifeExtension.tamu.edu
2012 Tarrant County Master Gardener Program
Steve Chaney, County Extension Agent – Home Horticulture

Relevance
The population of Tarrant County has significantly increased over the years at some 10-15% per year and is currently 1,809,034 (US Census 2010) with over 55% being between the ages of 18-65 years of age! As the population increases it becomes more difficult to reach the public through educational programs. Therefore it is essential that we recruit, train and enable volunteers to assist with education and outreach programs that address pressing horticultural issues. 2012 was an extremely tough year climate wise and will likely continue for several years. We are extremely privileged to have such a large number of Community leaders and other civic-minded individuals who are willing to provide volunteer service to support and provide Extension-sponsored educational programs. We also have seven college campuses located in Tarrant County with several excellent environmental programs that are willing to provide subject matter as well as allow us venues to share the knowledge with the public. The Tarrant County Master Gardener Program is a venue that allows us the opportunity to provide technical and leadership skills to one of the largest volunteer groups in the state, who in turn provide planning and execution of great Research based Horticulture programs throughout the county. Master Gardeners, as well as other Extension volunteers must be adequately trained and empowered to provide the educational programs for the volunteer effort to achieve maximum effectiveness.

Response
The Tarrant County office of Texas A&M AgriLife Extension Service welcomed the addition of 37 new Master Gardeners from the Intern Class of 2011. They were brought into the Fold in January of 2012 as well as a Master Gardener Training Course starting in January 2012 with 51 new Master Gardener Interns attending. Twenty one classes were conducted from January through the end of March on Tuesdays and Thursdays from 9am-4pm. A wide variety of teaching methodologies were utilized to conduct this program including using lectures, videos, hands-on demonstrations, powerpoint presentations, tours and lab practical’s. Training classes covered the gamut of basic horticulture information including soils and soil fertility, basic botany and horticulture, vegetables, herbs and perennials, plant pathology, proper pruning, entomology, container gardening, turf management, plant propagation, fruit and nuts, rainwater harvesting, trees and shrubs, native and ornamental grasses. Volunteer development and leadership were also emphasized along with the great feeling you have when you give back to your community.

V A L U E
Water Conservation Education
Texas A&M AgriLife Extension programs that teach farmers, homeowners, and business administrators to conserve water are helping reduce demand on the state’s limited water resources. Texans benefit from a safer, more reliable water supply at no additional cost.

Results
Direct feedback was utilized at the conclusion of each class to assess program quality and to identify areas that can be enhanced. Upon completion of the class, the interns were given a fifty question exam that required a reference to where each answer was found. The interns were required to answer all questions correctly to pass the course. At six months after beginning the Master Gardener Training course, all participants were invited to complete an extensive program evaluation.

<table>
<thead>
<tr>
<th>MG Class Met Expectations</th>
<th>Intern Hours Beneficial</th>
<th>Intern Advisors Helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>56% Excellent</td>
<td>100% Yes</td>
<td>37% Excellent</td>
</tr>
<tr>
<td>44% Good</td>
<td>63% Good</td>
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<table>
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<tr>
<th>Experience at Extension Office</th>
<th>Would You Recommend to the Public</th>
<th>Economic Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>43% Excellent</td>
<td>57% Good</td>
<td>57% Yes</td>
</tr>
<tr>
<td>57% Good</td>
<td>100% Yes</td>
<td>43% No</td>
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</tbody>
</table>

After completion of the training course, the Master Gardener intern’s evidence of volunteer efforts were monitored and recorded through the use of volunteer hour record sheets. The information is then gathered and included in Commissioners Court reports, monthly reports and annual reports on a county and statewide basis. This information also provided evidence of the benefit of the Master Gardeners ability to assist Extension personnel to educate the citizens of Tarrant County as well as surrounding counties. One of the requirements of the training class is each intern must volunteer a minimum of 72 volunteer hours. As of December 1, 2012 the interns have collectively provided 7998 volunteer hours (average of 166 hours per intern).

The total volunteer hours for 2012 are expected to exceed the 2011 total of 55,586 hours turned in. The 2011 hours turned in were #1 in the State of Texas and are the equivalent of $1,125,616.50 based on the nationwide (after-tax hourly wage rate for volunteers of $20.25) or 26.72 FTE positions.

In addition the Tarrant County Master Gardeners manned and answered the MG phone line at the office for a total of over 4000 horticulture calls, the Speakers bureau did over 365 talks reaching some 14,000+ people in the community while maintaining 20+ community based horticultural projects throughout Tarrant County. They also maintained an award winning web site TCMGA.org with over 501,143 hits during 2012 and sent out a multiple award winning monthly newsletter the Sharecropper to over 400 people each month. In answer to the increasing Social Media craze the Master Gardeners started a Facebook page titled Tarrant County Master Gardener Association. At the end of November there were 35,542 fans—52.4% women and 15% men. The program had over 376 active volunteers during 2012.

Future Plans
We will continue to conduct our programming efforts to develop and enhance the technical and leadership skills of our Master Gardener volunteers in Tarrant County. Master Gardener projects, programs, expertise and cooperation significantly multiplied the educational outreach of the Tarrant County office of Texas A&M AgriLife Extension Service in meeting the increasing demand for horticultural and environmental research based information. We will be building a new covered pavilion at the Resource Connection for classes.
Results

determine program effectiveness, retrospective post surveys with intentions to adopt were administered at each session of the Pros in Parks series in Arlington and Fort Worth, the Pesticide Applicator Training classes, the North Central Urban Forestry Conference, and the Rainwater Harvesting Program and Tour. A total of 658 individual participants were surveyed. These programs continue to reach new and diverse audiences. 41% (270 of 658) of participants in these educational events were attending their first Texas A&M AgriLife Extension Service program. 37% of the Pros in Parks program participants were either Hispanic/Latino (23%) or Black (14%).

Behavior Changes: Participants who definitely will adopt these practices:

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Identify pests before choosing a control method</td>
<td>39%</td>
</tr>
<tr>
<td>Maintain a 2-4&quot; layer of mulch in landscape plantings</td>
<td>41%</td>
</tr>
<tr>
<td>Construct rainwater capture systems</td>
<td>100%</td>
</tr>
</tbody>
</table>

Knowledge Gained: Participants who increased their understanding of these concepts:

<table>
<thead>
<tr>
<th>Concept</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessing fire risk in parks</td>
<td>67%</td>
</tr>
<tr>
<td>Site inventories and evaluation</td>
<td>71%</td>
</tr>
<tr>
<td>The relationship of drought and tree pests</td>
<td>83%</td>
</tr>
<tr>
<td>Planting and pruning techniques</td>
<td>90%</td>
</tr>
</tbody>
</table>

Participant Comments:

This was a good class, and I was wide awake the whole time, good speakers! Awesome teaching! Thank you.

Interesting, opened my eyes to new information/ideas.

Satisfaction: 95% of the participants in these programs (625 of 658) were mostly or completely satisfied with the activity they attended. 94% (619 of 658) said that they would recommend the activity to others. Participant promoters are extremely important in marketing AgriLife Extension programming.

Economic Benefit: 73% of the participants who were asked (480 of 658) said they anticipated benefiting economically as a direct result of what they learned. When asked to quantify that benefit at a pesticide CEU program, 32% estimated a benefit of over $1000 per year. Applied to all participants (238) in each of the 3 pesticide CEU granting educational events offered in this program, this would create an economic benefit of $76,160.

In summary, results indicate that this program has prompted changed behaviors for many individuals and increased knowledge among most participants. In addition to the environmental benefits of this programming, the majority of participants expect to benefit economically from what they have learned. The drought has increased awareness of the importance of landscape water conservation and this will continue to be an important part of Earth-Kind programming. There is still great potential for increased adoption of desired practices and outreach to this target audience.

Value Earth-Kind® Landscaping

The Earth-Kind® program teaches participants how to care for gardens and landscapes with environmentally friendly, research-proven techniques. Instructional topics include water conservation, responsible fertilizer application, and no-chemical options for controlling pests. Use of Earth-Kind® practices benefits Texas by saving water and protecting surface and groundwater resources from potential contaminants.
Small Acreage Horticultural Crops
Laura Miller, County Extension Agent – Commercial Horticulture

Relevance
Demand for locally produced fruits and vegetables is growing and consumers who value local farms are willing to pay more for high quality foods produced with low environmental impact. (Local Food Systems: Concepts, Impacts, and Issues, USDA Economic Research Report 97, May 2010.) Production of locally marketed food is most likely to occur on small farms near metropolitan areas. This program’s goal is to enable small-scale agricultural operators and commercial producers in urban, suburban and rural areas in and near Tarrant County to become more knowledgeable in effectively identifying and evaluating horticultural diversification strategies for risk mitigation and improved economic sustainability based on total management goals and optimal resource base use. Emphasis was also placed upon education about effective direct marketing options, especially Farmers’ Markets and on-farm direct marketing on sales. Education for this target audience was identified as a priority by the Tarrant County Commercial Horticulture Program Advisory Committee.

Response
Texas A&M AgriLife Extension Service and the Tarrant County Commercial Horticulture Program Advisory Committee in collaboration with the North Central Texas Farmers’ Market Association, Tarrant County Public Health Department and the Samuel Roberts Noble Foundation developed the following activities to address these issues:
• North Central Texas Farmers’ Market Association Annual Meeting and Educational Program (January 7, 2012)
• Sixteen site visits to eleven farms and three farmers’ markets (January-December, 2012)
• Basic Ag Field Day at Henrietta Creek Orchard (April 20, 2012)
• Farmers Market and Community Garden Festival (June 23, 2012)
• Series of four technology assisted Soil Fertility Seminars featuring Dr. Sam Feagley via Lync
  • Nitrogen (September 4, 2012)
  • Phosphorus (September 11, 2012)
  • Potassium, Calcium, Magnesium, and Sulfur (September 18, 2012)
  • Micronutrients (September 25, 2012)

Results
To determine program effectiveness, retrospective post surveys with intentions to adopt were administered to the participants at the field day and during the four soils seminars. A total of 46 people participated in one or more of these activities and completed a survey.

Knowledge Gained:
In a retrospective post survey, 3.5% of participants (1 of 28) rated his or her knowledge of the 12 concepts taught as good or excellent before participating in the field day. After the program, 78.6% of participants (22 of 28) rated their knowledge of 9 of the 12 topics as good or excellent. In a retrospective post survey, 100% of participants (18 of 18) indicated an increased level of understanding of one or more of the concepts taught. The largest percentage gains in knowledge were of plant uptake of potassium (90.9% change) and the movement of potassium in the soil (81.8% change.)

Intentions to Adopt:
96.4% of participants (27 of 28) in the field day said that they definitely will adopt one or more practices taught. Formal evaluation of resources and utilization of low volume irrigation were the practices most likely to be adopted.

100% of participants (18 of 18) in the soil series planned to adopt one or more practices taught. Getting a soil test and amending soil before planting were the practices most likely to be adopted.

Participant Comments from field day:
Wonderful seminar—thank you very much. Very helpful. An excellent program that gave vast information, I would love to have more in-depth classes on these topics. The information was fabulous, informative and helpful. I can hardly wait to put it into practice.
Great way to spend a Friday! Learned a lot and would like to see hands on classes that focus on a single thing. Sustainable farming.
Day seemed short but really enjoyed the setting and the variety of subjects covered.
Definitely, I’m willing to take the next course. I liked being able to walk and see orchard close—diversity of farm was the best.

Satisfaction: 95% of the participants in these programs (44 of 46) were mostly or completely satisfied with the activity they attended. 95% said that they would recommend the program to others.

Economic Benefit: 88% of participants in the field day stated that they would benefit economically as a direct result of what they learned in this activity. Participants in the soils series reported an anticipated economic impact of $12,780 based upon management of 420 acres and a combination of increased production, decreased costs, and more effective management.

In summary, results indicate that this program has prompted changed behaviors for many individuals and increased knowledge among most participants.

In addition, the majority of participants expect to benefit economically from what they learned in these programs.

The target audience for these programs is small, but these producers can benefit from both technical and marketing expertise provided by AgriLife Extension and from networking opportunities.
Dollar Decisions was taught at the City of Fort Worth and W.T. Francisco Elementary School with 22 individuals completing evaluations with 100% stating that they would do the following: set financial goals; determine the amount of monthly household income; use a spending and savings plan; know ways to decrease my expenses; know ways to increase income and will save money for emergencies.

Something new learned in the class: “I learned to set goals for short term and long term; How to budget and save for emergencies; How to make a spending and savings plan; How to set goals and how to increase income; About paying credit cards off and keeping a zero balance is ok.”

Spending Plan Program taught at Habitat for Humanity, Midcities Workforce and the YWCA had 55 completed evaluations with the following results:

Before the workshop 65% did not use a spending plan; after the workshop 96% learned the benefits of a spending plan; As a result of the workshop 93% will develop a spending plan; 94% will track monthly expenses; 91% will set aside money for emergencies; 84% will reduce expenses and 67% will add a “fudge factor” to their spending plan.

Spending plan tips they are going to try: Buy only survival things and cut back on utilities/spending, start a savings account and don’t touch it; Spend less, buy only needed items and not wants; Keep an occasional expense. Encouraging individuals, married or single, to be able to write and use a spending plan tailored to their personal situation, reducing debt and increase savings is the ultimate goal of all the workshops, seminars or lesson series that are taught. The participants will be introduced to basic money management tools to increase their understanding and how to apply to their current and future financial situation.

Continued partnerships with several organizations have helped extend financially literacy to individuals and families: Domestic Relations Office (DRO); MidCities Workforce Solutions; Habitat for Humanity; YWCA; City of Fort Worth and CWJC. In addition to these groups, the opportunity to work with a few new schools in Birdville Independent School District opened the door to new audiences, which in turn also helped with Better Living for Texans.

Domestic Relations Office (DRO), monthly classes for non-custodial parents in arrears with child support who are on probation for failure to pay. In 2012, 189 individuals participated in the monthly classes on how to write and use a spending plan. From the evaluations, 93% found the information helpful; 51% did not use a spending plan before the class, after the class 93% stated that they will begin using a spending plan. After the class, 95% know how to include child support payments in their spending plan and plan for their current situation.

Money Tips they will try: “no eating out; allowing for ‘fudge factor’; changing light bulbs; expect the worse and plan for it; Don’t buy drinks and snacks when I buy gas, every little bit helps; Start to write down everything I spend and what its on; Had a good time learning new information; I found this very useful and intend on using the information immediately. Excited to see how it goes; Very helpful and I have more knowledge about saving money; Everybody needs a budget class in life so glad I was able to finally take one; Thank you; Great Job!”

Future Program Goals and Opportunities:

- Revitalize the Tarrant County Financial Literacy Coalition
- Offer an online course for family’s to learn how to manage their older family members’ finances
- Offer a new retirement lesson series for partial cost recovery efforts
- Continue to offer the Financial Smart Start newsletter for newly engaged and married couples
- Continue to offer Money Talks: Women’s Financial Education Series
- Continue regular updates on Facebook and weekly blog and the Money 2020 newsletter

Continued partnerships with several organizations have helped extend financially literacy to individuals and families: Domestic Relations Office (DRO); MidCities Workforce Solutions; Habitat for Humanity; YWCA; City of Fort Worth and CWJC. In addition to these groups, the opportunity to work with a few new schools in Birdville Independent School District opened the door to new audiences, which in turn also helped with Better Living for Texans.
Money Smart in Tarrant County 2012
Marian Ross, County Extension Agent – Family & Consumer Sciences

Relevance
The recent economic downturn and resulting recession have heightened consumer awareness of the need for financial literacy education. Growing unemployment, foreclosures, and credit delinquencies have contributed to increased interest among consumers in learning how to manage money and create a workable spending plan, saving money and reducing spending.

Research studies indicate that people of all ages, incomes, and education levels lack the basic financial knowledge and skills to ensure long-term stability for themselves and their families. The audiences that are targeted with the Money Smart program are even at more risk of being financially illiterate because of their current situation and choices that they have made.

Response
The main targeted group for Money Smart in Tarrant County for 2012 is an in-residence substance abuse recovery program called Volunteers of America (VOA). This is a program only for women and many of them have children or are currently pregnant and working through the processes of learning how to live clean and sober. They are in the program for up to 90 days and are required to complete the steps for clean living and attend workshops to improve their lives. These women are very transient due to the fact that they have not had much stability in their life or are surrounded by people who are not willing or wanting to change. For the ones that are married, they are working through repairing marriages, perhaps repairing relationships with children or fighting to get custody of their children, working on job skills and the list goes on for all that they are working on, especially themselves and their future.

By providing these classes, participants are given the opportunity to learn what financial mistakes they have made and ways to improve them. The goals of this lesson series are for participants to increase their knowledge and skills related to: 1. Basic financial management concepts and practices, 2. Credit and borrowing money, 3. Savings, 4. Homeownership and 5. The understanding of financial management services (including checking and savings accounts). Participants will be able to develop a spending plan and open a bank account and keep it in good standing is the long term goal.

Results
Evaluations were collected from 56 participants. Nine (9) participants were able to be paired with pre and post workshop surveys along with end of session evaluations for sessions they attended. Only 2 participants indicated they used a spending plan prior to attending the classes. Of the 7 indicating they did not use a spending plan, 6 responded that at the end of the classes, they were currently using a spending plan. This is a significant result that if continued, can help these participants improve their financial situations over the long-term.

Two participants improved the frequency with which they pay bills on time. Changes in how these participants paid their bills were also reported. One participant now pays bills with money orders rather than cash. Another now pays by personal check/debit card/electronic payment rather than money order. Only one participant indicated on her pre-survey she had reviewed her credit report in the last 12 months. Three of the others participants indicated on their post-surveys that they had requested their credit reports. Given the low income of this group (all but 2 reporting less than $1000 per month), it is not surprising that most participants report saving money never or as often as they can with no improvement over the course of the classes. At the end of the classes, two participants reported feeling more in control of their money and 3 indicated they felt more comfortable doing business with a bank or credit union.

All participants in the classes increased their knowledge of the concepts taught as shown in the following table (numbers in parentheses are the maximum possible score).

<table>
<thead>
<tr>
<th>Module Title</th>
<th>Mean Before</th>
<th>Mean After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check It Out</td>
<td>16 (24)</td>
<td>22.1 (24)</td>
</tr>
<tr>
<td>Keep It Safe</td>
<td>9.8 (16)</td>
<td>15.1 (16)</td>
</tr>
<tr>
<td>Loan to Own</td>
<td>8.9 (20)</td>
<td>16.3 (20)</td>
</tr>
<tr>
<td>Money Matters</td>
<td>8.8 (12)</td>
<td>11.6 (12)</td>
</tr>
<tr>
<td>Pay Yourself First</td>
<td>8.95 (16)</td>
<td>15 (16)</td>
</tr>
<tr>
<td>To Your Credit</td>
<td>10.2 (20)</td>
<td>15 (20)</td>
</tr>
<tr>
<td>Your Own Home</td>
<td>9 (20)</td>
<td>18 (20)</td>
</tr>
</tbody>
</table>

Participants as a group were low income (modal income response was less than $1000 per month), had completed high school, and had a mean age of 30.

Client Responses from classes
As a result of this class, what is one thing you will change about how you manage your money?

“Set up payment plans to try and fix my credit”; “Stop ignoring my credit”; “Take paying off debts more seriously”; “Not to ever co-sign, for anyone”; “it’s better to buy than rent”; “Make smarter decisions”; “direct deposit into savings and not have account attached to debit card”; “use a budget and save my money”
Family Life Education in Tarrant County 2012
Marian Ross, County Extension Agent – Family & Consumer Sciences

Relevance
Parenting and other family life issues are vital to the continuity of care for children in these current times. Providing timely information for the success of families has always been a goal, whether we are speaking of teen families or traditional family design. Parents need to increase their knowledge of developmental milestones in the lives of children. Learning positive skills for discipline, self-esteem and how to communicate with their children are valuable skills that parents need to utilize with raising their children.

Increase knowledge of child care providers in their role as teacher and nurturer. Empowering child care providers to improve the overall impression of their profession by upgrading the training materials and encouraging them to not only make changes both personally and professionally, whether they are family day home providers or work at an established child care center.

Response
Mini-Pride seminars for family members who are going to care for their relatives’ children as foster and/or adoptive parents are required to attend a nine hour seminar. During the class, we discuss many topics related to child development. The topics include: attachment, loss and grief, child sexual abuse, forming family relations, and how to make the new family succeed.

Child care providers are required to have a set amount of hours and a variety of topics taught to keep them current on what they need to know to be successful in their classrooms. A new partnership with CCMS and Workforce Board of Tarrant County was forged to host a conference. The conference gave child care staff the opportunity to earn 5 clock hours. We offered several tracks to have a large variety of teachers there with information that would fit for everyone.

In addition, a very popular topic among child care centers to have for both parents and staff is child abuse and neglect. A state mandate has come that all those involved with Head Start need to have this review of information. Many of the parents are overwhelmed by the discussion, especially the non-English speaking audience members.

The Building Young Families Conference is planned and implemented by the Building Young Families Task Force (BYFC) representing 5 Independent School Districts. There were 197 students, with 25 of them being males, who have identified themselves as a dad to be able to participate. We are fortunate that we have an opportunity to bring pregnant and parenting students together to focus on topics that are specifically related to them. They have the chance to meet other students in their same situation and they are now able to meet with adults from the agency’s that serve teen parents and get some of their questions answered or a step closer to a resolution. This year we added apha on recrusion, how to manage time and study with being a parent and going to school. We also limited the number of exhibitors and had 100% participation. The students all agreed that they enjoyed the sessions or thought they were great. The majority of the students were glad to hear about Tarrant County College (TCC) and the options available to them to continue their education.

Results
A sample was taken from the Mini Pride evaluations of 44 individuals, with approximately half of the participants being female and the remaining 39% were male. The age of the participants ranged from 25 – 69 years of age. Participants were asked about the activities they liked most in the training, not all of them answered, however 75% thought the program was informative and even going as far to say how the information particularly applied to them. Another 36% liked the instructor and the way she presented the material while none of the individuals indicated they liked the time schedule. An additional 30% appreciated the hands on group activities. The items the participants liked the least? The length of the class (32%), some had problems with the materials (9%) and 5% specifically did not like the child sexual abuse section.

Comments from participants:
- “House rules – understanding past events affecting today”;
- “Safe zone for expressing feelings for kids – opportunities for teaching”;
- “Setting boundaries with positive reinforcement instead of consequences relating to feelings and experiences of the girls”;
- “Make a scrapbook”;
- “Learn more about their heritage and find out about their dad’s side of the family”;
- “Separate bedrooms.”

Child Care Conference: 231 evaluations were received with center child care staff – 135; directors – 35 and family day home providers – 7. Of the attendees, 97% agreed or strongly agreed that the training met their expectations; 97% will apply the knowledge learned and share with their co-workers; 98% gained information that will benefit their classroom/home or center.

Comments from participants:
- “How to be an effective manager was very entertaining and will be useful for me”;
- “It was great for getting back in the school frame of mind we are going back rejuvenated”;
- “Dr. Jim was great”;
- “The venue was awesome! It made me feel like this was an important event and that my training was important”;
- “I will cut out and laminate the song cards, hole punch and put on a ring to use for song time in my classroom, thanks a bunch!”

Child abuse prevention and recognition was taught 8 times, however, because of the language barrier all of the classes did not complete a survey, however, from observation, Q&A time and comments made, the participants were able to share that they did learn about child abuse and how they as parents and providers could do a better job at advocating for the safety of the child(ren) that they know and/or care for. A sampling of participants stated this about learning about child abuse: 96% said they learned about the 4 types of abuse; 96% stated that their knowledge had increased; 88% feel more confident in recognizing the signs of child abuse; 96% are willing to listen and respond if a child confides in them that they are or have been abused; 100% know the steps in reporting child abuse!

Comments: “You know the program very well – thank you; Well presented; I learned what child abuse means.”
WALK ACROSS TEXAS  
Tarrant County Nutrition & Health

Relevance
According to the Physical Activity Guidelines published by the U.S. Department of Health and Human Services, children and adolescents should do one hour (60 minutes) or more of physical activity every day and adults (ages 18 – 64) should do two hours and 30 minutes of moderate-intensity, or 1 hour and 15 minutes of vigorous intensity aerobic activity a week (in at least 10 minute increments throughout the week). There is strong evidence that supports the health benefits of physical activity and shows a decreased risk of early death and chronic health conditions including, heart disease, stroke, Type 2 diabetes, high blood pressure, and other diseases associated with the conditions of overweight and obesity.

According to the 2009/2010 BRFSS Report completed by Tarrant County Public Health, overall, almost half (47.4%) of Tarrant County residents meet the recommendations for physical activity. The greatest number of residents meeting the physical activity recommendations are adults ages 18 – 24 (62.3%). The adult groups reporting lower percentages of those meeting the recommendations are adults ages 55-64 (40.1%) and adults 65 years and older (38.8%). The area of the county reporting the lowest percentages of those meeting the recommendations included the central portion of the county. In addition the Fort Worth Independent School District (FWISD) reports that 32% of their student population is not in a healthy weight range. This is nearly double the national average.

Response
The Tarrant County Nutrition and Health Committee sponsored Walk Across Texas, an eight week walking program for teams of eight adults or for students in a classroom within a school. The friendly competition of Walk Across Texas motivates individuals to get daily physical activity.

The Walk Across Texas website was utilized by team captains to report weekly mileage for their teams and site managers were able to utilize the website to monitor the progress of the teams at their sites.

Results
Worksites included in the program were: City of Fort Worth, City of Grand Prairie, Dept. of Health & Human Services Commission, Dept. of Family & Protective Services, Dept. of State Health Services and the Special Olympics of Texas.

There were a total of 760 registered participants in Walk Across Texas (WAT), representing 95 teams which reported mileage on the WAT website. Seventy teams surpassed the 830 mile challenge. A total of 125,865.43 miles were reported.

Economic Impact:

<table>
<thead>
<tr>
<th>Potential Economic Impact of Walk Across Texas - 2012</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Female Participants</td>
<td>513</td>
</tr>
<tr>
<td>Average Age of Female Participants</td>
<td>46</td>
</tr>
<tr>
<td>Number of Females that could avoid or delay developing diabetes</td>
<td>115</td>
</tr>
<tr>
<td>Net Present Value per Female</td>
<td>$69,689</td>
</tr>
<tr>
<td>Total Net Present Value for health care cost savings for Females</td>
<td>$7,983,097</td>
</tr>
<tr>
<td>Total Net Present Value for Wages Lost for Females</td>
<td>$521,575</td>
</tr>
<tr>
<td>Total NVP for Females</td>
<td>$8,504,672</td>
</tr>
<tr>
<td>Total Impact</td>
<td>$10,772,051</td>
</tr>
</tbody>
</table>

Acknowledgements:
Partnerships have played a key role in the continued success of Walk Across Texas. With special thanks to Vicki Tieszen, City of Fort Worth and Master Wellness Volunteers of Texas A&M AgriLife Extension Service.
Expanded Food and Nutrition Education Program -- Tarrant County
Youth Outcome Summary Report FY 2011-2012

Darlene Myatt, Extension Agent – Expanded Food & Nutrition Education Program

Relevance
Fort Worth, the city “where the west begins” has over one-half million people with 61% of residents located completely within Interstate Loop 820. While this older, more closely developed area is rich in its racial and ethnic diversity, these inner-city communities have the highest percentage of economically depressed, income poor households that are predominantly single parent families with young children.

Key findings from a Tarrant County Community Health Needs Assessment reveal heart disease, cancer, stroke, chronic obstructive pulmonary disease and diabetes as the leading causes of death. In general, all mortality rates were higher in inner-city Fort Worth than in the suburbs. The central, southeast and western areas of Fort Worth have the highest needs for health education and wellness; diabetes and heart disease prevention, treatment and education programs; nutrition; obesity reduction programs for school-age youngsters – 28.3% of Fort Worth residents are under 18 years of age.

Response
Through effective collaboration with 13 local agency partners, Expanded Food and Nutrition Education Program (EFNEP) activities for limited-resource youth were conducted year-round at locations throughout the inner-city communities of Fort Worth.

During FY12, 2,574 group meetings involved 10,776 youth and 102 volunteer leaders who contributed 930 hours to the Program which represents an investment of $20,376.30 when computed at $21.91 per hour.

Results
A cartoon assessment was used to systematically measure the program’s impact on youth participants. Based on a six lesson nutrition series, data analysis obtained from 22 sample EFNEP-Youth groups indicates:

- 84% (421) of 502 youth have increased knowledge of the essentials of human nutrition
- 72% (361) of the youngsters now eat a variety of foods
- 82% (412) increased their ability to select low-cost, nutritious foods
- 96% (482) enhanced practices in food preparation and safety
- 99% (497) improved physical behaviors/attitudes

Customer Satisfaction
“My kids showed me how large serving sizes should be by using some of the things you had at their last class – a light bulb for broccoli, computer mouse for a baked potato and a DVD as a pancake. They really like your visits and tell me all about what they are learning so I learn too.”
Patricia Saragosa, South Hills Elementary parent

“I have really enjoyed these classes and seeing how the information is geared for the different grades to help students understand the concepts presented. You've even taught me some ways I will use to get my daughter to try new foods. Thank you so much.”
Ms. Coy, North Hi Mount Elementary teacher

“When I had cafeteria duty, I was surprised to see the kids were looking at the Nutrition Facts Label to find the nutrients and daily values we talked about in class. It’s good to see them practice what we are teaching to help them make better choices.”
Coach Peacock, Western Hills Elementary School

“I so greatly appreciate the time spent with you in the EFNEP summer programs! It has definitely been one of the fun parts of my internship.”
Andrea Urquidez, WIC Intern

“I have enjoyed seeing the work you do and the obvious wonderful influence EFNEP has in the community.”
Coach Peacock, Western Hills Elementary School

Georgi Roberts, Director of Health & Physical Education, Fort Worth ISD

Appreciation is expressed to All Church Home; Boys and Girls Clubs of Greater Fort Worth; Broadway Baptist Church; Congresswoman Kay Granger and District staff; Communities In Schools; Fort Worth Independent School District; Fort Worth Parks and Community Services; Girl Scouts of Texas Oklahoma Plains; Tarrant County College Department of Culinary Arts, Dietetics and Hospitality; Tarrant County Public Health Department; Texas Christian University Department of Nutritional Sciences; United Community Centers for their enthusiastic support of these ongoing educational activities.
Family and Consumer Sciences

Expanded Food and Nutrition Education Program -- Tarrant County
Adult Outcome Summary Report FY 2011-2012
Darlene Myatt, Extension Agent – Expanded Food & Nutrition Education Program

Relevance
Poor health disproportionately affects low-income and minority populations. Recent research documented people who are most food insecure are at a greater risk for poor health and obesity than those who are food secure. In fact, research indicates that people who run out of food or miss meals because they cannot afford them are the most obese.

The U.S. Census Bureau estimates that 16% of Texans live in poverty -- a figure above the national average of 13%. 2009 census statistics for Tarrant County suggest a poverty rate of approximately 14.5%.

In Tarrant County, an estimated 223,349 individuals receive benefits from SNAP, the Supplemental Nutrition Assistance Program previously known as food stamps.

Research has shown individuals who live in poverty have dietary intakes that are not consistent with USDA’s MyPlate or current Dietary Guideline recommendations.

Response
The Expanded Food and Nutrition Education Program of Tarrant County provides education to limited-resource adults with children on topics related to dietary quality, food resource management, food safety, and physical activity through a series of at least six nutrition education lessons.

During fiscal year 2011-12, EFNEP Nutrition Education Assistants enrolled 688 program families with 1,540 children.

More than three-fourths (78%) of those families were at or below 100% of the federal poverty level with 488 (71%) of them enrolled in one or more Food Assistance Programs, including SNAP, Head Start, TANF (Temporary Assistance for Needy Families) and WIC (Women, Infants and Children) at entry.

Results
Using “hands-on” experiences, 439 (64% of 688) participants completed the EFNEP lesson series on stretching food dollars, improving eating habits and practicing food safety principles.

Of those graduates, 267 clients were surveyed to determine the following food and nutrition-related behavior changes:
- 87% (232 participants) showed improvement in one or more food resource management practices – plans meals, compares prices, does not run out of food or uses grocery lists
- 92% (246) showed improvement in one or more nutrition practices – makes healthy food choices, prepares foods without adding salt, reads nutrition labels and has children eat breakfast
- 73% (196 participants) showed improvement in one or more of the food safety practices – thawing and storing foods properly
- 98% (261) reported a positive change in any food group at exit from the program. Specifically, EFNEP graduates consumed .8 cups more of fruits and vegetables and .4 additional cups of milk after completing the lesson series as compared to entry
- 38% (101) reported a positive change in physical activity

Appreciation is expressed to Birdville ISD; Castleberry ISD; Catholic Charities; Child Protective Services; Congresswoman Kay Granger, Early Childhood Matters; Fort Worth ISD; Fort Worth Parks & Community Services; John Peter Smith School-based Clinics; Meadowbrook United Methodist Church; Northside Inter-Community Agency; Pregnancy Lifeline Center; Tarrant County College Opportunity Centers; The Parenting Center; White Settlement Family Resource Center for their continued support of these ongoing educational activities.
Better Living for Texans
Melissa Crawford, Extension Agent – Better Living for Texans

Relevance
In Tarrant County, an estimated 223,349 individuals receive benefits from the Supplemental Nutrition Assistance Program (SNAP), historically known as the food stamp program. Studies have shown individuals who live in poverty (including SNAP recipients) have dietary intakes that are not congruent with current recommendations (i.e., Dietary Guidelines or MyPlate). Stretching resources so households don’t run out of food has also proved to be a challenge.

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 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 including lesson series and single education events. With the presence of BLT in almost every county, AgriLife Extension is poised to reach all areas of Texas, both rural and urban, and increase the likelihood of meeting the nutrition education needs of under-served Texans.

During FY 2012, 16 Tarrant County adults completed the Back to Basics series. The number of graduates was lower than usual due to a vacancy in the BLT program. During the upcoming FY of 2013, we plan to graduate a minimum of 200 adults from the series. The program series focuses on meal planning, stretching food dollars, and adopting selected behaviors that can reduce the risk of foodborne illness. This program was evaluated by the use of pre and post surveys. This report reflects the results of those surveys.

Results
Most participants were female and from different ethnic backgrounds. The percentage of participants that had completed some college or held a college degree was 37.5%; 62.5% had a high school education or less. SNAP benefits were received by 31.25%, while another 31.25% were receiving assistance through food pantry’s or their children were enrolled in the free or reduced lunch program at their school.

Evaluation Results
Intent to change behaviors was examined by evaluating the pre and post-surveys of the 16 individuals who completed the program series.

Meal Planning and Food Resource Management- intent to change behavior
Initially, a majority of the participants reported practicing meal planning, shopping with a list and comparing prices either “always” or “sometimes.” The practice of using unit pricing was also evident with the majority of the participants, but in lesser amounts than the preceding categories. At the end of the program, an increased percentage of the participants reported the intent to practice all four behaviors “always.”

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Current Behavior</th>
<th>Intent to Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Meals in</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Always</td>
<td>12.5</td>
<td>31.25</td>
</tr>
<tr>
<td>Shop for food with a list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>37.5</td>
<td>68.75</td>
</tr>
<tr>
<td>Compare prices when shopping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>56.25</td>
<td>75</td>
</tr>
<tr>
<td>Use unit pricing when shopping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>6.25</td>
<td>37.5</td>
</tr>
</tbody>
</table>

Food Safety- intent to change behavior
At the beginning of the program, nearly 13% of the participants reported that they used the proper food safety practice of never thawing meat at room temperature. At the conclusion of the program this increased to nearly 50% of the participants reporting that they followed the proper food safety practice of never thawing meat at room temperature and they also reported that they were using other safe food practices in their home kitchens.

Other Findings
Out of all the participants 63% reported that BLT was their first exposure to Texas A&M AgriLife Extension Service. This suggests that the program is reaching new audiences who otherwise might not have the opportunity to benefit from AgriLife Extension programs.

Shared quotes from participants:
“After having kids of my own, I thought I knew all there was to know about these topics and didn’t need to attend meetings, but the information was very interesting and I learned something new each time.”
- Christian Women’s Job Corp participant

“This is the kind of information that we need.”
- Fort Worth Parole participant
Balancing Food & Play
Markena Minikon, County Extension Agent – Nutrition & Health
Melissa Crawford, Extension Agent – Better Living for Texans

Relevance
According to the Centers for Disease Control (CDC), approximately 25 million or about 17% of all children in the US are overweight. Experts are concerned that today’s children are likely to be the first generation to live shorter, less healthy lives than their parents. Many children are not getting the 60 minutes of daily physical activity as recommended by MyPlate and the Dietary Guidelines for Americans. Likewise, many children are not consuming the recommended servings of fruits and vegetables. Lifestyle modifications, including the adoption of improved food selection and increasing daily physical activity can improve health and may help to reverse this trend.

Response
The Balancing Food & Play curriculum was designed to improve knowledge and behaviors related to the following four educational constructs:

- Snacking on fruits and vegetables
- Drinking milk with meals and water with snacks
- Encouraging 60 minutes of physical activity each day, and
- Limiting screen time to two hours or less per day

The curriculum contained four elements: 20 lesson plans, 8 take-home reading assignments, 4 parent letters, and a 41 page journal for each student. In addition, parent letters and take home reading assignments are available in Spanish.

In August 2011, Texas A&M AgriLife Extension Service received a generous grant in the amount of $30,000 from Dannon to implement the Balancing Food & Play curriculum with 3rd grade students in Tarrant County. The Nutrition and Health County Extension Agent and BLT Extension Assistant recruited local classroom teachers to participate in the curricula, they received the curricula and the teacher tool kit in order to implement the activities in the classroom. AgriLife Extension staff assisted with the implementation of the pre and post-test and maintained contact with the teachers during the implementation of the project in order to provide assistance when needed.

Results
A pre and post-test evaluation was implemented with each classroom. A total of 338 pre-tests were completed. At the conclusion of the program the post-test was administered and 321 were matched with pre-test for data analysis. Student knowledge gains were noted for 4 of 4 knowledge questions.

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many minutes a day should a child your age be physically active? Physically active means doing exercise like running, jogging, walking fast, bike riding, swimming, dancing, skating, or any other activity that makes you breathe harder and your heart beat faster.</td>
<td>48% (163 of 321)</td>
<td>78% (250 of 321)</td>
</tr>
<tr>
<td>Children your age should have no more than how many hours a day of screen time? Screen time is: watching TV/video, movies, playing video games or on the computer</td>
<td>17% (57 of 321)</td>
<td>61% (195 of 321)</td>
</tr>
<tr>
<td>How much of your dinner plate should be filled with vegetables or fruits and vegetables?</td>
<td>26% (89 of 321)</td>
<td>49% (152 of 321)</td>
</tr>
<tr>
<td>How many teaspoons of sugar are in a can of regular soda (not diet)?</td>
<td>18% (62 of 321)</td>
<td>43% (138 of 321)</td>
</tr>
</tbody>
</table>

- The percentage of students who reported always or almost always drinking regular (non-diet) soda decreased from 17% (57) of 10% (31).
- The percentage of students who reported having 60 minutes or more of physical activity increased from 21% (71) to 35% (113).
- The percentage of students who reported having 1 hour or less of screen time increased from 33% (112) to 50% (162).

I sometimes drink water at home, my sister and I watch less TV than usual, and I tried broccoli and I loved it!

~ student participant
Balancing Food & Play

Acknowledgements:
Dannon Company; Leslie Robinson-Fisher – Fitzgerald Elementary & Susie Springob – Webb Elementary – Arlington ISD; Derek Neely – Liberty Elementary & Stephanie Schwarz – Silver Creek Elementary – Azle ISD; Tanya Anderson – Director of Curriculum – Azle ISD; O.J. Kemp – Director of Athletics – Arlington ISD.
4-H & Youth Development

4-H & Youth Development - Tarrant County
Youth Leadership Development Program Outcome Summary 2012
Cindy Bryant, County Extension Agent – 4-H & Youth Development

**Relevance**
Leadership is a key component of the 4-H Club model, developed by the Texas 4-H and Youth Development program leaders. The skills and qualities of effective leadership are taught and demonstrated in a variety of settings. Awareness of the positive traits and processes associated with productive leadership helps one focus on building those qualities while improving effectiveness in communication, teamwork, and goal-setting. Leadership is a developmental process and the successful progression of competencies builds confidence and capacity in today’s youth.

**Response**
The 4-H faculty and 4-H volunteer leaders in Tarrant County provided a series of trainings and activities for 4-H club youth to learn and develop leadership skills. Trainings were conducted to provide information on leadership qualities, responsibilities, and techniques. Further training was provided through experiential education in the areas of parliamentary procedure, event planning, and teamwork. Participants were encouraged to develop proficiency by utilizing opportunities to implement their newly acquired knowledge and skills.

In an active county, vast numbers of opportunities must be provided in order to accommodate the needs of youth desiring to implement their leadership skills. A total of 55 county-level training opportunities were provided, along with 371 club-level meetings (each providing multiple opportunities to practice and develop skills.) A combined total of 10,437 youth contact hours resulted from these efforts.

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Number of Sessions</th>
<th>Youth Attendance</th>
<th>Youth Contact Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Skills</td>
<td>22</td>
<td>238</td>
<td>487</td>
</tr>
<tr>
<td>Parliamentary Procedure</td>
<td>13</td>
<td>155</td>
<td>153</td>
</tr>
<tr>
<td>General Leadership, Event Planning &amp; Teamwork</td>
<td>20</td>
<td>340</td>
<td>892</td>
</tr>
<tr>
<td>Club Meetings, Events, etc. (Opportunities to Practice Leadership)</td>
<td>371</td>
<td>4,161</td>
<td>8,905</td>
</tr>
<tr>
<td><strong>Totals:</strong>*</td>
<td><strong>426</strong></td>
<td><strong>4,894</strong></td>
<td><strong>10,437</strong></td>
</tr>
</tbody>
</table>

**Results**
Two methods of evaluation were utilized to evaluate the effectiveness of the program.
- **Retrospective post evaluation = n 51**
- **Recordbook data evaluation = n 83**

A comparison of both evaluation methods revealed similar results. 96% (and 94%, respectively) stated that they have adopted best practices by actively engaging in leadership opportunities and participating in multiple leadership roles, representing areas such as **Organizational Leadership, Event Leadership, and Educational Leadership**. Youth reported that, after participating in the program, they became better listeners and speakers, leading to improved communication skills. Respondents stated that the most significant result of the program was increased skills in the areas of confidence, communication, and goal setting.

Overall analysis of the participants’ responses and observable behavior indicates a strong correlation among confidence, communication, and goal setting, with improvements in one area strengthening the other areas. The cumulative effect of a positive environment providing opportunities for growth in these areas provides youth with essential life skills necessary to reach their full potential.

Compilation of data revealed the following:
- 92% indicated they “often” or “always” practice effective communication skills
- 88% indicated they “often” or “always” have confidence
- 95% indicated they have actively engaged in leadership roles

**Acknowledgements**
Special thanks and recognition go to the Tarrant County 4-H Volunteer Leaders who model the qualities of dedication, responsibility, and teamwork which enable our youth to see “leadership in action.” Their dedication to provide countless hours of opportunities are essential to enable our youth to “learn by doing”.

**Future Opportunities**
The 4-H and Youth Development program in Tarrant County will continue to provide leadership training and opportunities for youth in order to enable them to reach their full potential.

*AgriLifeExtension.tamu.edu*
4-H & Youth Development - Tarrant County
Youth Science Outcome Summary 2012
Cindy Bryant, County Extension Agent – 4-H & Youth Development

Relevance
Recent release of the results of the International Student Assessment ranked American students 17th in Science when compared with students in 34 countries. This prompted national concern which is being addressed at local levels. The Tarrant County public education system is comprised of 17 independent school districts plus a number of charter schools. Each of these schools has implemented specific plans to increase student performance. Feedback from classroom teachers indicates a need for engaging activities to reinforce classroom concepts.

Response
In response to the need for relevant science-related activities, the Tarrant County 4-H program offered hands-on, inquiry-based learning opportunities designed to engage youth while improving in knowledge, skills, and abilities. Various program topics were available, with each being aligned with the grade-level appropriate TEKS. Through an effective partnership with classroom teachers at 7 schools (representing 5 school districts) and 4-H volunteers, the program engaged 1,291 youth during 2012.

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Sessions Conducted</th>
<th>Youth Participated</th>
<th>Target Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egg to Chick</td>
<td>140</td>
<td>1,068</td>
<td>Levels K - 3</td>
</tr>
<tr>
<td>Harmonson Farm Days</td>
<td>8</td>
<td>110</td>
<td>Levels K - 3</td>
</tr>
<tr>
<td>Engineering</td>
<td>10</td>
<td>49</td>
<td>Levels 4 - 8</td>
</tr>
<tr>
<td>Science Experience</td>
<td>1</td>
<td>34</td>
<td>Levels 6 - 10</td>
</tr>
<tr>
<td>Total</td>
<td>159</td>
<td>1,261</td>
<td></td>
</tr>
</tbody>
</table>

Results
In order to determine programmatic results of the 4-H Youth Science Program, evaluation instruments were administered to teachers and students. Classroom teachers provided evaluation data on 943 students. Results are as follows:
- 943 of 943 (100%) students increased their general knowledge in science
- 943 of 943 (100%) students increased their vocabulary
- 943 of 943 (100%) students used inquiry-based methods to learn about the world around them
- 803 of 943 (85%) students demonstrated an increased desire to read about science

Benefits/Impacts: Students who participated in the program increased in knowledge, skills, and abilities while conducting investigations using scientific principles. This demonstrated mastery of TEKS concepts serves as a foundation on which critical thinking skills and understanding of advanced scientific concepts can continue to grow.

Comments:
“My students were very engaged in this project. It was all they talked about. They couldn’t wait to come to school on Monday.” N. Carter, classroom teacher
“The students absolutely LOVED this activity. I had to send them out and on to class every morning.” S. Prince, school librarian

Acknowledgements: Special thanks are extended to classroom teachers who reached beyond school requirements to provide additional opportunities for their students and to the 4-H volunteers who generously donated their time and skills to instill the excitement of investigation and discovery in the youth.

AgriLifeExtension.tamu.edu
Cooperative Extension Program – 2012 Photo Essentials
Shannon Johnson-Lackey, Extension Agent – Cooperative Extension Program - 4-H

Relevance
Photography is an expression of one’s inner creativity. In an effort to expand 4-H’s reach within underserved communities and in order to provide an opportunity for youth to be engaged in a visual arts discipline and to acquire marketable and employable skills a comprehensive photography program was established. The program is known as Photo Essentials. Photo Essentials utilizes various curriculums including the 4-H workbooks, Focus on Photography and Controlling the Image, as well as other books, such as A Short Course in Photography by Barbara London and Jim Stone. Photo Essentials addressed the desire of several community partners who wished to instruct younger students on the basics of photography from the identification of each camera part to the appreciation for sound composition. Additionally, these students would gain skills that could eventually be used in the workforce. According to a Bureau of Labor’s job report from May 2012, “Photographers held about 139,500 jobs”. These positions were across a variety of industries, such as newspapers, television, retail or colleges and universities. Also, the job report noted that over 60% of photographers were self-employed. The U.S. Bureau of Labor predicts that jobs for photographers will grow by 13% between the years of 2010-2020. This program operates on a six-lesson series while utilizing Kodak digital cameras and tripods.

Response
Photo Essentials for 2012 operated programs during the summer months for several locations within the City of Fort Worth’s summer programs held at community centers. The community centers that I conducted programs at were: Martin Luther King, Eugene McCray and Handley Meadowbrook. I continued programming into the school year by partnering with 21st Century After-school and Clayton YES. The sites where I conducted Photo Essentials during the school year were at Speer Elementary, Daggett Elementary, I.M. Terrell Elementary, Oakhurst Elementary and Greenbriar Elementary.

Results:
This year, I utilized a Retrospective Post-Survey to measure knowledge gain, behavior change and engagement in learning. These surveys were conducted with each Clayton YES group that I worked with during the school year. During the summer months, I utilized a Post-Survey which measured satisfaction and comprehension. I received some helpful feedback from all of the groups. I was also able to determine the activities and lessons that proved to be most valuable for the students. Some notable findings are as followed:

Knowledge Gain [Based on 24 Respondents]
- 49% of respondents indicated a poor or fair Understanding of Photo Composition before the program.
- 99% of respondents indicated a good or excellent Understanding of Photo Composition after the program.
- 66% of respondents indicated a poor or fair Understanding of Photo Terminology before the program.
- 100% of respondents indicated a good or excellent Understanding of Photo Terminology after the program.
- 58% of respondents indicated a poor or fair Understanding of Photo Lighting Importance before the program.
- 95% of respondents indicated a good or excellent Understanding of Photo Lighting Importance after the program.
- 17% of respondents indicated a poor Understanding of Camera Care and Safety before the program.
- 92% of respondents indicated an excellent Understanding of camera Care and Safety after the program.

Behavior Change [Based on 24 Respondents]
- 91% of respondents indicated that they care how their photos look.
- 83% of respondents indicated that they are more confident.

Engagement in Learning [Based on 24 Respondents]
- 91% of respondents indicated that they agree or strongly agree that adult instructors talked about careers in Photography.
- 100% of respondents indicated that they agree or strongly agree that they get to take their own photos.
- 82% of respondents indicated that they got to choose what to photograph.
In response to several local and national tragedies involving youth and bullying, I continued conducting Anti-Bullying lessons often in conjunction with Character Education to several locations within the county. For these programs, I utilized the Take a Stand curriculum along with the Character Counts curriculum.

Results

Ways to Communicate Activity [Based on 18 respondents]
Customer Satisfaction Survey conducted at Thomas Place Community Center on July 24, 2012

Overall:
- 71% of respondents were mostly or completely satisfied with the activity.

Content:
- 78% of respondents were mostly or completely satisfied with the information being accurate.
- 83% of respondents were mostly or completely satisfied with the information being easy to understand.
- 78% of respondents were mostly or completely satisfied with the range of topics covered.
- 67% of respondents were mostly or completely satisfied with the helpfulness of the information in making good choices.

Instructor:
- 89% of respondents were mostly or completely satisfied with the instructor’s knowledge level on the subject.
- 78% of respondents were mostly or completely satisfied with the instructor responses to student questions.

Value of Activity:
- 78% of respondents would recommend this activity to others.

Take a Stand Program [Based on 45 respondents]
A post-survey evaluation measuring behavior change and satisfaction conducted with groups at Charles Baxter Jr. High, Dunbar Middle, Hurst Jr. High, Midway Park Elementary, Ousley Jr. High and Parkway Elementary. I conducted Teambuilding programs at Andrew Doc Sessions Community Center and Caprock Elementary. I also conducted a Peer Mediation training with 5 students at Forte Jr. High. During the summer months, I developed a Teambuilding / Leadership Development mini-program for summer camps managed by the Girl Scouts and the City of Fort Worth Summer Camps. Within this program, we discussed teamwork and qualities that should be present to make a team work effectively, such as communication. For this part, each group participated in Ways to Communicate which included the Hip to be Square activity from the Yea 4-H Leadership Curriculum and The Right Way to Listen activity.

Value of Program:
- 82% of respondents indicated that the activities were fun.
- 84% of respondents indicated that the information was easy to understand.
Cooperative Extension Program – Youth Citizenship
Cassius McAlister, Extension Agent – Cooperative Extension Program - 4-H

Relevance
In homes across Tarrant County working parents are faced with dilemmas of care for their school-aged children before and after the regular school day. The periods from 6-8 a.m. and 3-6 p.m. are critical times when children may be alone in the home while parents are at work. In communities today 14.3 million children take care of themselves after the school day ends.

It is critical to provide opportunities for positive out of school time for youth. It is equally important to provide training and support to afterschool providers in positive youth development and other areas so that our children have safe afterschool environments and positive experiences while there.

Areas of emerging concern focused on are Character Education, Bullying Prevention and Leadership. Conflicts among youth and bullying have been increasing. House Bill 212 and 283 have mandated that school districts adopt and implement a dating violence and discipline management policy. The White House Conference on Bullying Prevention materials provides the following research statistics:

- 56% of students have personally witnessed some type of bullying at school.
- Bullying takes many forms, with school staff reporting that verbal (59%), social/relational (50%), and physical (39%) forms were of greater concern in their school than cyber-bullying (17%).
- Although school staff reported being very willing to intervene in bullying situations, slightly over half of the survey respondents indicated that there were few formal bullying prevention activities present in their schools, and less than 40 percent were directly involved in these activities.

Response
Agents McAlister and Johnson-Lackey developed a Youth Citizenship program focusing on bullying, character education and leadership utilizing the “Take A Stand!”, “Character Counts”, “Take the Lead” and “Yeah 4-H” curricula, enhanced with additional conflict resolution and leadership activities. The program was marketed to local ISD’s, Community Centers, Boy and Girl Scout Troops, Boys and Girls Clubs, after school program sites and any other community sites where youth congregated. A program marketing piece developed which allowed educators to select the character education, bullying or leadership program needed in their setting.

- Bellaire Elementary conducted a Leadership five lesson series.
- Everman High School conducted Bullying five lesson series.
- Azle Elementary (5th and a 6th grade group).
- Watauga Elementary (Communities in School group and an ASPIRE After school program group).
- Polytechnic High School (CIS group) conducted a Character Education lesson series.

Results
Agent McAlister utilized a Post-Survey to measure knowledge gained for the “Character Education” programs.

- 71.42% (15 of 21 participants) correctly answered the question “CHARACTER is what you do when no one is looking?”
- 95.24% (20 of 21 participants) correctly answered the question “when you push someone out of line, you are showing them RESPECT?”
- 95.24% (20 of 21 participants) correctly answered the question “Making your bed every day is a sign of RESPONSIBILITY?”
- 90.47% (19 of 21 participants) correctly answered the question “It is ok to cheat as long as you don’t get caught?”
- 90.47% (19 of 21 participants) correctly answered the question “While playing a game, if you obey the rules you are demonstrating FAIRNESS?”
- 100% (21 of 21 participants) correctly answered the question “Doing your share to conserve resources by practicing the three R’s: Reduce, Reuse and Recycle is a sign of CITIZENSHIP?”
- 85.71% (18 of 21 participants) correctly answered the question “Lying never hurt anybody?”
- 90.47% (19 of 21 participants) correctly answered the question “If your mom can depend on you to clean your room or feed the dog, you are demonstrating TRUSTWORTHINESS?”
- 90.47% (19 of 21 participants) correctly answered the question “To show concern for others is a sign of CARING?”
- 71.43% (15 of 21 participants) correctly answered the question “Hiding the cookies from your family is ok especially if it is your favorite kind?”

Acknowledgement
City of Fort Worth Community Centers, Clayton YES facilities and local ISD’s – Provided meeting location for the Youth Citizenship lesson series at no cost.

Future Plans
Agents McAlister will continue the Youth Citizenship program for 2013.
**Cooperative Extension Program – Youth Water Education**

**Cassius McAlister, Extension Agent – Cooperative Extension Program - 4-H**

**Relevance**

Water conservation was originally identified as an issue for Tarrant County in 1999 through the TCFF process. This has been repeatedly confirmed through each issue identification process since. The continuing drought trends across the state of Texas have increased the need for our citizens to be educated about water, where it comes from, its uses and how it can be conserved and protected.

Agent McAlister has adopted a model similar to the formation of the Corn Clubs of 1908, “Teach the child. Teach the parent.” The CEP—Youth Water Education program utilizes various curricula including Investigating Water, Wet in the City, as well as other water related resources including the Stream Trailer and EnviroScape Watershed Model to educate youth about conservation and preservation of water. National Youth Science Day Experiments Wired for Wind, Amazing Polymers, and 4-H Hydro serve as enrichment activities.

**Response**

Agent McAlister has developed a multi-tier approach to marketing and conducting the CEP-Youth Water Education program using both one-shot programs and a five lesson series. These activities are marketed to local ISD’s, Community Centers, Boy and Girl Scout Troops, Boys and Girls Clubs and any community sites where youth congregated.

Special marketing pieces were developed to support the CEP-Youth Water Education program. The bookmark promoting both the program and water conservation is always a big hit. It is most commonly distributed to participants of water programs in large venues. A program flier is more commonly distributed to educators focusing on the five lesson series and the Stream Trailer.

**Major demonstrations include:** City of Fort Worth’s Waterama (2 Day event), 2012 DFW Airport Earth Day (2 day event), 2012 Arlington Ecofest, City of Grapevine Hazardous Waste event, 2012 Cowtown Cleanup and Earth Day event, Tarrant County Public Health Department Earth Day, City of Grand Prairie MayFest 2012, Home Depot Earth Day, Tarrant County College Southeast Arbor Day Celebration event, Trinity River Institute (Teacher training), and Walnut Creek Elementary Career Day.

**Number of Youth Participants**

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Number of Session</th>
<th>Youth Participants</th>
<th>Adult Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-H,0</td>
<td>7</td>
<td>213</td>
<td>6</td>
</tr>
<tr>
<td>Stream Trailer</td>
<td>23</td>
<td>2270</td>
<td>1035</td>
</tr>
<tr>
<td>EnviroScape Watershed Model</td>
<td>8</td>
<td>181</td>
<td>50</td>
</tr>
<tr>
<td>Five lesson series</td>
<td>4</td>
<td>133</td>
<td>8</td>
</tr>
</tbody>
</table>

**Results**

A Customer Satisfaction Survey was utilized for evaluating this outcome program.

**Overall:**

- **89.7%** (94.21 of 105) of respondents were mostly or completely satisfied with the activity. This percentage includes responses from youth and adult participants.

**Content:**

- **88.4%** (92.87 of 105) of respondents were mostly or completely satisfied with the information being enjoyable.
- **90.8%** (95.38 of 105) of respondents were mostly or completely satisfied with the information being accurate.
- **87.5%** (91.87 of 105) of respondents were mostly or completely satisfied with the information being easy to understand.
- **89.4%** (93.87 of 105) of respondents were mostly or completely satisfied with the **range** of topics covered.
- **87.4%** (91.76 of 105) of respondents were mostly or completely satisfied with the **timeliness** of information given on each topic.
- **91.87%** (96.47 of 105) of respondents were mostly or completely satisfied with the helpfulness of the information in making good choices.
- **88.2%** (92.62 of 105) of respondents were mostly or completely satisfied with the relevance of the examples used.

**Anticipated Changes & Economic Impact:**

- **48.76%** (51.2 of 105) of respondents plan to take actions or make changes based on the information from this activity.
- **56.38%** (47.92 of 85) of respondents think what they learned from this Extension activity will help them make more money or reduce their expenses in the future.
- **42%** (10.08 of 24) of respondents anticipate benefiting economically as a direct result of what they learned from this Extension activity.

**Sample of feedback received from educators and clientele:**

- “The kids are very engaged! They not only learn science but life skills! I would love for this program to be extended to all my students.”
- “Great presentation the scholars really enjoyed this hands-on experience.”
- “Students loved this! Great presentation w/visuals. Really kept students attention.”
- “Students were very interested and engaged in the activity.”
- “I love this demonstration! It really shows the power of water erosion.”

**Acknowledgement**

- City of Fort Worth Community Centers, Clayton YES facilities and local ISD’s – Provided the meeting location for the Water lesson series at no cost.
- Urban Solutions Center’s Department of Water Education – Provided programmatic lesson support.
- City of Fort Worth, City of Arlington and City of Azle Memorial Library, City of Grand Prairie and DFW International Airport for providing events where one-shot water programs were conducted.
- Tarrant County College Southeast Campus, City of Grapevine, Texas A&M AgriLife Extension Service, City of Azle’s Memorial Library and the Joint Naval Base Library-provided the location for one-shot programs.
- Tarrant Regional Water District Maintenance facility for storage of Stream Trailer.

**Future Plans**

Agent McAlister will continue to educate youth in regards to water issues.
Texas A&M AgriLife Extension Service
Tarrant County

Staff

Dana Tarter  County Extension Director
Ken Johnson  County Extension Agent, Agriculture & Natural Resources
Marian Ross  County Extension Agent, Family & Consumer Sciences
Markena Minikon  County Extension Agent, Nutrition & Health
Melissa Crawford  Extension Assistant, Better Living for Texans
Darlene Myatt  Extension Agent, Expanded Food & Nutrition Education Program
Alba Serrano  Extension Assistant, Expanded Food & Nutrition Education Program
Cindy Bryant  County Extension Agent, 4-H & Youth Development
Steve Chaney  County Extension Agent, Home Horticulture
Laura Miller  County Extension Agent, Commercial Horticulture
Tiffany Traylor  Extension Agent – Cooperative Extension Program – FCS
Shannon Johnson-Lackey  Extension Agent – Cooperative Extension Program – 4-H
Cassius McAlister  Extension Agent – Cooperative Extension Program – 4-H
Sonnaya Gomij  Nutrition Education Assistant - Adult
Melissa Hernandez  Nutrition Education Assistant - Adult
Mary Oviedo  Office Manager
Veronica Cabral  Receptionist
Tania Bell  Administrative Assistant – Family & Consumer Sciences
Nanci Swindle  Administrative Assistant – 4-H
Sonia Benavides  Administrative Assistant – Agriculture & Community Development
Billie Hammack  Administrative Assistant - Horticulture
Linda Chazarreta  Lead Office Assistant – Expanded Food & Nutrition Education Program

Contact Us:

Physical:  Texas A&M AgriLife Extension Service –
Tarrant County
200 Taylor St., Suite 500
Fort Worth, Texas 76196-0123

Mailing:  P.O. Box 1540
Fort Worth, Texas 76101-1540

Phone:  817.884.1945
Fax:  817.884.1941