

Crop Production - Row crops & rice production continue to play a vital role in Fort Bend county with 13,500 acres of corn, 29,000 acres of grain sorghum, 31,000 acres of upland cotton, 2,400 acres of soybeans, and 4,800 acres of rice. AgriLife Extension developed and implemented the following programs to address the relevant issues in crop production: Fort Bend Row Crops Tour on June 19 (26 attended) and the Rice Tech Field Day on August 21 (19 attended). On average there was a 77.1% increase in an understanding of effective insecticide use, life-cycle of southern rust of corn, causes of Aflatoxin on corn, proper variety selections, and the legalities of moving farm equipment on public highways. Evaluations indicate that local farmers are concerned about population encroachment and issues that threaten local farming practices.



Beef & Forage Production - Fort Bend is a diversified agricultural county with beef cattle as one of the leading Ag commodities with cotton production being first. Agricultural production continues to struggle with repercussion from the drought of 2011—not so much related to drought, but restocking costs. To assist beef producers in making the best management decisions Texas AgriLife conducted three major events: 1) Upper Gulf Coast Ranch Expo was implemented with 120 participants, 2) Commercial Heifer Clinic at the FBC Fair with 16 participants, and 3) Commercial Heifer Sale at the Houston Livestock & Rodeo with 34 participants.

Enhancing Our Horticulture

Backyard Basics – These half-day workshops, offered at a nominal charge, were conducted throughout the year to support healthy living through home-based food production, preparation, and preservation. The programs were a great way for people to reconnect with nature and to save money by recycling or conserving resources, including the water they use for their gardens and landscapes. By growing their own vegetables, people not only get enjoyment from the healthful outdoor activity of gardening, they also know where their food came from and how it was produced. The calendar series included: Vegetable Production, Fruit Production, Culinary Herbs, Aquaponics, Poultry, Vermicomposting, Grilling, Freezing & Dehydration, Canning, and Jams & Jellies. Over 93% of participants indicated the valuable info will be utilized.

Master Gardener Training Program - Many homeowners in FBC are unaware of the consequences of improper plant selection, cultural techniques, and pest control. In response, Texas AgriLife again hosted the MG program to help educate volunteers on sound horticultural practices, with the intent of creating good environmental stewards and outreach educators. The 34 individuals enrolled in the 50-hour Fall 2014 MG class joined more than 260 others to gain the knowledge and skills to help them serve as localized stewards in their neighborhoods and help AgriLife Extension expand capacity. If all remain active, it would contribute an additional minimum of 997 hours of volunteer service. WOW!

Water Conservation – For the past 15 years, Fort Bend has been ranked in the top 3% of the nation's fastest growing counties and one of the ten largest counties in Texas. Our population is projected to top 1,000,000 by 2020 – and that is a lot of water! With water being a diminishing natural resource, it is extremely important that we teach water conservation and collection when and where possible. As a result, the Horticulture unit in Fort Bend continued to put forth major emphasis on water education in 2014. Activities included: 1) Water education programs reached 20,000+ contacts through mass media; 2) 3-hour water conservation topic for 2014 Master Gardener training class (34 contacts); 3) Regional Irrigators Symposium in partnership with Sugar Land educated 60 water professionals; 4) Seven Home Water Conservation Workshops held throughout Fort Bend reached 332; 5) Two EarthKind programs reached 68 clientele.; 6) Three commercial-related water events were held for 152 contacts; 7) Portable rain-water harvesting display at the Fort Bend County Fair (995 school students, 161 teacher/parent volunteers and the ~100,000 fair attendees reached); and 8) N. FB Water Authority to demonstration unit (995 school students, 161 teacher/parent volunteers).

Contact Fort Bend County

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Extension Education in Fort Bend County

Making a Difference
2014

Fort Bend, founded in 1837, is one of the fastest growing and most diverse counties in the state and nation with a population increase of 11.5% since 2010, from 585,375 to 652,365. Currently, our population represents with 35.6% white, 24.0% Hispanic, 21.2% black, 18.4% Asian, and 0.8% other.

The Extension program in Fort Bend County is part of the statewide Texas A&M AgriLife Extension Service and the Cooperative Extension Program at Prairie View A&M University. It is linked with Texas county governments and the national Cooperative Extension System. Extension values and promotes citizen and community involvement, scientifically-based education, lifelong learning, and volunteerism. We are pleased to provide you with this 2014 annual report of our educational activities in Fort Bend County.

Improving Our Health

One of the challenges we face in Texas and in Fort Bend County is educating our citizens, particularly those with limited resources to learn to make healthy food choices and sound food safety practices. Yes, it's all about food! Our food choices affect our health and well being. In 2014, the following major educational activities were conducted by AgriLife Extension:

Dinner Tonight! - The goal for healthy cooking programs is to help families learn to how to cook quick, nutritious meals for their families in an attempt to achieve good health and cut down on diet-related illnesses. Weekly video demonstrations are sent via e-mail to approximately 3,500 people in Fort Bend County via distribution lists. Two Dinner Tonight Healthy Cooking Schools were conducted reaching 433 individuals. This number includes persons that attended a Dinner Tonight Healthy Cooking School at

the 29th Annual Vegetable Conference and the multi-county ABC Child Care Conference. Evaluations indicate the events were successful in impacting family nutrition. Outcomes were: 87% understood meal planning; 87% understood foods impact our health; 84% understood that meal planning saves time & reduces stress; 75% understood how to modify recipes to reduce calories; 77% understood how to modify



recipes to reduce sodium; and 78% have understood how to modify recipes to reduce the fat.

Better Living for Texans (BLT) - An estimated 1 in 14 households in Fort Bend lives in poverty resulting in diets that are low in fiber, vitamins A and E, folic acid, zinc, calcium, and iron; and higher in total fat, saturated fat, and sodium – ultimately leading to heart disease, cancer, stroke, and diabetes. BLT lessons utilized included the *Get the Facts* series with 124 participants and the *3-Easy Bites* series with 23 participants. In addition, over 6,203 Fort Bend citizens attended various health fairs to gain an awareness of BLT programming efforts. Those surveyed indicated that BLT curriculums were effective in helping to manage weight gain and health problems associated with obesity and chronic diseases.

2014 Educational Outreach

Educational Programs Presented: 736
Total Attendance at Programs: 389,927
Individual Contacts: 127,329
Volunteers Involved: 1,119
Volunteer hours: 53,485
valued at \$1,251,526.00

Combating Obesity - In Texas, an estimated 66.6% of residents are at risk for being overweight or obese according to the 2010 Behavioral Risk Factor Surveillance System (BRFSS). Excess weight has been identified as a risk factor for several chronic diseases including heart disease, diabetes, hypertension, and some forms of cancer. Highlights of Extension programs that combat obesity in 2014 were:

- **Step Up & Scale Down** - 32 of 33 participants completed the program, and recorded a loss of 89.6 pounds: an average of 2.8 pounds lost per participant. The recommended weight loss is 1–2 pounds/week or 8–16 pounds for the 8-week program.
- **Walk Across Texas** – recognized as a “Best Practice Physical Activity” program by the TDSHS, this 8-week program helped people of all ages support one another to establish the habit of regular physical activity and to reduce obesity. Results indicated that the 165 participants could delay the onset of diabetes if they continue their physical activity routine. The Net Present Value for health care cost savings for females is estimated to \$2,626,497 and for males, \$318,504. The total savings of medical costs & lost wages was more than \$2,945,002.

Do Well, Be Well w/ Diabetes - This curriculum covers 4 nutrition & 5 self-care topics to help diabetics manage the disease. In 2014, 22 participants took part, 73% indicated that they have never received any previous diabetes education, 69% were on meds, and 88% felt more confident in managing their diabetes. Net Present Value for health cost savings was \$1,331,446.

Protecting Our Environment

Pesticide Education - Public concerns about the welfare of our environment have caused the need for training, licensing & re-certification opportunities for pesticide applicators. AgriLife Extension offered several training opportunities designed to help increase the knowledge and skills of applicators relating to pest control, laws & regulations, sprayer calibration, integrated pest management, and drift minimizations. Programs included feral hog workshops, vegetable conf., & general pesticide training courses. Nearly 600 applicators (private, commercial, non-comm. & structural) attended classes where CEUs were offered to help applicators stay informed and legal. Evaluation results indicated a 94% average gain in knowledge, 89% gain in skills, and 83% chance that new skills will be adopted. Courses were offered through various subject matter efforts including cattle, crops, and horticulture programming efforts.

Emergency Management - Texas is subject to numerous disasters whether they are natural, accidental or intentional with most being unpredictable. Emergency Management is an organized analysis, planning, decision making, and assignment of available resources to prepare for, mitigate, respond to, and recover from the effects of all hazards. In Fort Bend, there were two major avenues of providing outreach information to our citizens: 1) 8th Annual Emergency Preparedness Workshop held in May with 68 participants; and 2) 2014 Fort Bend County Fair educational exhibit. Results from the face-to-face evaluations still indicate that 100% believe the information provided by AgriLife Extension is valuable, although most have never experienced a disaster with major impact to their lives; and, 84% will have an emergency kit on standby.

Strengthening Our Families

2014 Child Care Provider Conferences - Over 60% of children from birth through age six receive some form of child care on a regular basis from persons other than their parents that may not be well educated enough, nor caring & sensitive enough. It is essential for AgriLife Extension to help educate a workforce to provide the high quality child care that children need to develop physically, socially, emotionally, and cognitively. In 2014, 295 providers that care for 2,220+ children through 53 centers gained nearly 1,670 clock hours by attending one of several full-day workshops to gain needed skills.



Cooking Camps for Youth - Obesity is a major risk factor for many chronic diseases and is increasing among all ages, particularly our youth. The prevalence of obesity among children aged 6 to 11 more than doubled in the past 20 years and tripled for adolescents aged 12 to 19. Poor eating habits and lack of physical fitness seems to be the main cause. As a result, Agrilife Extension implemented two programs in 2014: 1) Pantry-to-Plate, a 3-day camp for 8 - 12 years of age with 15 participants; and 2) Teen Chef, a 2-day cooking school for 13 - 16 years of age with 10 participants (due to space constraints). Each group learned the nutritive values of healthy foods vs. the empty calories of others; food safety; and MyPlate. Results indicated an average increase in knowledge of MyPlate was 67%, 79.5% indicated that they would change eating habits, and 76.7% indicated that the camps were valuable and not just an entertainment venue.

Developing Our Youth

4-H Veterinary Science Project/Certificate Program

-This project deals with techniques and procedures involved in caring for animals. The program consists of 100 lessons and 50 activities with 500 hours of on-the-job training in which participants have five years to complete. Three clubs were established and chartered in 2012, four in 2013 and another in 2014 bringing our total number of Vet Science project clubs to eight with a total active membership of over 100. Members within each club are in some phase of the 5-year curriculum. Club names include: Animaniacs; Blue Jay Vet Science; Katy Tigers Vet Science; Paws for a Purpose; Animal Doctors; Ready-Set-Vet; 4-H Home-School Vet Assistants; and Hearts to Tails.



ONE DAY 4-H! was started in 2009 with a purpose of allowing Texas 4-H'ers to thank their communities, counties, and state for more than 100 years of support for 4-H and its members. Conducted by Texas 4-H, this event has become the largest organized day of community service by 4-H in the nation. Here in Fort Bend County for the fourth year in a row, One Day 4-H was held. This year One Day 4-H occurred on Saturday, October 11, 2014 with 30 youth and 10 adult leaders taking part. For One Day 4-H, our County Council held a Highway Cleanup and a Food Drive. We had help from Fort Bend Road and Bridge and the Needville Police Department with the safety measures that were needed. The event started at 4pm and ended when the sun started to go down around 7 pm. We were able to clean five miles of road with one group on each side. The event was a great success, the 4-H'ers had fun, and a lot of cool items were discovered during the clean up.



4-H and Youth Development—Club Statistics

4-H Clubs in Fort Bend County - 25
 4-H Club Members - 585
 4-H Adult Leaders—110
 Youth Leaders - 94
 Curr. Enrichment Participants - 892
 4-H Special Interest/Short Term - 94,417

2014 Take A Stand - Conflicts among youth and bullying have been increasing dramatically over the last 10 years. School districts across the state have been mandated by the Texas Legislature through two bills (House Bill 212 and 283) to adopt and implement a dating violence and a discipline management policy. Both bills require training for teachers/staff as well as training/curriculum for youth to address these issues. In response to this action, Texas A&M AgriLife Extension Service in Fort Bend developed and implemented educational programming for youth to address Bullying to satisfy the expectations of the Urban X 7 initiative. Lessons from the curriculum were taught at Wessendorff Middle School – Lamar CISD. We had a total of 423 students go through the lessons that were taught. Fort Bend County had 335 respondents to the post survey; a total 79.3% of the participants concluded the program with completed evaluations.



Cumulative results indicated 79.3% (3% increase over 2013) of the respondents had a change in behavior due to the program, with 76% giving positive feedback on the overall program.

Supporting Our Agriculture

2014 Agricultural Literacy - It is essential that AgriLife Extension take an active role in educating youth about the importance of agriculture in their daily lives. Fort Bend is unique in its demographic makeup with the north & east portions of the county being urban, while the south & west half remain rural. AgriLife Extension developed and implemented educational programming for youth (as well as adults) to address the relevant issue of Ag Literacy. *AG'tivity Barn* was conducted during the FB County Fair and involved 23 collaborators to reach over 990 elementary school students and 178 teachers, parent/s and chaperones; and, 573 youth entered the coloring contest. A total of 20 exhibits were utilized to promote the ag industry in Fort Bend with 83 volunteers & 11 agencies and organizations assisting. In addition, it was estimated that 60% of the 200,000 fair visitors attended *AG'tivity Barn* during the 10-day run.

Farm Bill Training (Agricultural Act of 2014) - held on 10-30-14 with 60 attending was hosted by AgriLife Extension with input from our local FSA. The new Farm Bill builds on historic economic gains in rural America over the past five years, while achieving meaningful reform and billions of dollars in savings for the taxpayer. Those in attendance indicated a 75% increase in understanding and a 63% possibility that this training will assist them in making positive decisions, while 78% indicated that they were still a bit confused.