

Extension Education — Making a Difference in Fort Bend County 2016 Executive Summary



Extension Faculty



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Agriculture and Natural Resources

- **Gardening With Confidence** – This series of workshops conducted throughout the year 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. Programs offered included: The Kitchen Garden—a review of the most popular vegetables & herbs used in the home; Landscape Plants for FB Gardens that support EarthKind and Texas Super Stars; Insects in the Garden—highlighting “beneficials” & “harmful insects; Irrigation System Efficiency; and The Healthy Lawn. A total of 155 registered guests participated in the series. A really great first year collections of topic areas.
- **Beef & Forage Production** - Fort Bend is a diversified agricultural county with beef cattle as one of the leading Ag commodities. To meet the needs of Fort Bend County Beef and Forage Producers the following programs were held: 1) The Fall Forage Seminar & Hay Show was held on Dec. 13 with 30 producers present. Producers submitted a total of 26 hay samples that were analyzed by the Soil Testing Lab in College Station for nutrient content; 2) The pasture weed management result demonstrations were conducted to help producers select herbicides for two potentially troublesome weeds – Vaseygrass and several sedges; and 3) forage & livestock specific articles covering timely topics for our areas were written by specialists and published in the ANR quarterly newsletter and social media to 450 & 650, respectively.
- **Water Conservation** – For the past 16 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 will need 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 placed major emphasis on water education in 2016. Activities included: 1) Advanced Master Gardener volunteer training in Irrigation Efficiencies; 2) Three-hour Water Conservation training for new MG interns - 32 trained; 3) Home Water Conservation Workshop held in Sugar Land - 36 attending; and 4) Portable rainwater harvesting display at the Fort Bend Co. fair - 1,097 elementary school students, 91 teachers & parent/chaperones and 49,500+ fairgoers reached.
- **Crop Production** - Row crops & rice production continue to play a vital role in Fort Bend County with 7,602 acres of corn; 37,213 acres of grain sorghum; 24,518 acres of upland cotton; 2,243 acres of soybeans; and 5,141 acres of rice. AgriLife Extension developed and implemented the following programs to address the relevant issues in crop production: 1) January Row Crops Meeting had 69 producers in attendance; 2) Total of 43 producers attended the Summer Row Corps Tour on June 15; 3) 79 producers attended a seminar on crop management; 4) The Cotton Defoliation Meeting on Aug. 21 - 81 received information; and 5) Educational and interpretative information shared on Facebook, FBC Webpage and Ag Newsletter via mail & email.
- **Multi-County Pesticide Education** - Fort Bend, Brazoria, Chambers, Galveston, and Harris Counties have a combined total of 2,769 pesticide applicators licensed (FBC=628) with the Texas Department of Agriculture. Private Pesticide Applicators are required to acquire 15 CEUs every five years. Commercial and Non-Commercial Applicators are required to acquire 5 CEUs every year in order to renew their licenses. Programs offered included:
 - ◇ Two 5-CEU programs designed for Mosquito Control Professionals
 - ◇ One 7-hour Agriculture session - electronically assisted
 - ◇ Feral Hog Training Workshop for 5 CEUs

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- ◇ One 5-hour Structural program
 - ◇ Four private applicator trainings in Fort Bend County with 24 attending
 - ◇ CEUs offered at 14 ag/horticulture-related programs in support of recertification
- Topics covered included sprayer calibration, drift management, pesticides & the environment, Integrated Pest Management of various weeds & insects, managing to reduce resistance development, and tactics for controlling feral hogs.

- **Emergency Response** - With major flooding occurring twice in 2016 (May & June), AgriLife and CEP Agents responded to incoming calls regarding crop loss, cattle loss, mold/mildew issues, invasive weed contamination, carcass disposal and debris removal. AgriLife partnered with FBC OEM, FBC EOC, NRCS, TDA, FSA and FBC Health Department.

Family and Consumer Sciences

- **Dinner Tonight! (DT)** - The goal of DT is to help families learn to how to cook quick, nutritious meals and cut down on diet-related illnesses. Weekly video demonstrations are sent via e-mail blasts to approximately 3,500 people. In addition, two DT Healthy Cooking Schools were conducted - one during the 2016 Commercial Vegetable Conf. that reached 240 individuals and a second at the Mamie George Community Center for 18 contacts. Evaluations (159 returned) indicated: 90% understood the Mediterranean Meal Plan; 83% would incorporate more fruits & vegetables in their diet; 85% understood how foods eaten impact health; 81% acknowledged meal planning saves time & reduces stress; and 77% understood how to modify recipes to reduce the fat.

Weight Management - Preventable illnesses make up 80% of the burden of illness and 90% of all U.S. healthcare costs. Over the past three decades, childhood obesity rates in America have tripled with nearly 33% children being overweight or obese. The numbers are even higher among African Americans and Hispanics where nearly 40% of the children are overweight/obese which may lead to diabetes, heart disease, high blood pressure, cancer, and asthma. Educational programs conducted in conjunction with CEP's Expanded Food and Nutrition Program, Community Health Choice, and Attack Poverty Organization included:

- ◇ **Walk Across Texas** - 136 participants took part in this 8-week exercise event by walking (a total of 36,549 miles) to create a healthy habit of walking everyday. The ultimate result was not only weight loss, but also a delay of the onset of type 2 diabetes.
- ◇ **The Texercise program** - an 8-12 week fitness and educational program that provided education & opportunity for regular physical activity to reduce the risk and minimize the impact of disease. The 26 seniors gained knowledge of portion size, label reading, food groups, and application of physical activity for healthier lifestyles.
- **Childcare Provider Conferences** - Over 60 percent of children from birth through age 6 (not yet in kindergarten) receive some form of childcare on a regular basis from persons other than their parents. There are over 100,000 childcare providers caring for more than 760,000 children under the age of 13 in licensed or regulated childcare facilities in the state of Texas. In 2016 a total of 214 providers representing 48 centers caring for 4,151 youth gained valuable knowledge, skills and tips while earning a total of 832 clock hours.
- **Food Protection Management** - Each year, an estimated 1 in 6 people become ill from the food they eat. Common symptoms of foodborne disease include nausea, vomiting, diarrhea, abdominal cramping, fever, and headache. While some people may view this as a mere case of "food poisoning" foodborne illness has serious health and economic consequences. In fact, foodborne illnesses from five pathogens alone (Campylobacter, Salmonella, Listeria monocytogenes, E. coli O157:H7, and E. coli non-O157:H7 STEC) cost more than \$6.9 billion in medical expenses, lost productivity, and even death. To meet the need for quality food safety education in Texas retail food establishments, the Food Protection Management (FPM) program was developed.
 - ◇ 113 people in Ft. Bend County completed the food handler program.
 - ◇ 123 people in Ft. Bend County participated in the FPM program and completed the certified food manager program.



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- **Better Living for Texans (BLT)** - An estimated 1 in 14 households in Fort Bend lives in poverty resulting in diets 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. In 2016, 121 adults completed the BLT “A Fresh Start to a Healthier You” series that offered food & nutrition education to help improve planning and preparing nutritious meals, increasing physical activity, and store food storage. Of those participants, 114 completed the 30-day follow-up survey which indicated an increase of 5% in meal planning, 4% in using a shopping list, and 23% in comparison shopping according to the pre/post evaluation.
- **Art of Living Etiquette & Leadership Camp** - This camp, held in August, allowed 4-H members and youth to explore academic disciplines of family & consumer sciences and help them gain valuable skills and knowledge that can be applied to daily life. Twenty-two young citizens were exposed to the idea of branding themselves, making first impressions, grooming, and formal dining etiquette through a real live environment. Students were able to learn about many aspects of leadership, etiquette, entrepreneurship, professionalism, and delve into areas of arts, film, and agriculture.

4-H and Youth Development—Club Statistics

4-H Clubs in Fort Bend County - 29
4-H Adult Leaders—110
Curr. Enrichment Participants - 1,376

4-H Club Members - 585
Youth Leaders - 94
4-H Special Interest/Short Term - 39,137

- **2016 Agricultural Literacy** - It is essential that AgriLife Extension takes 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 21 sponsors/ collaborators to reach over 1,097 elementary school students and 91 teachers & parents/ chaperones; and, 409 youth entered the coloring contest. A total of 19 exhibits were utilized to promote the agricultural industry in Fort Bend with 115 volunteers & 17 agencies and organizations assisting. In addition, it was estimated that 60% of the 86,000+ fair visitors attended *AG'tivity Barn* during the 10-day run.
- **Cooking Camps for 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. The most common **causes** are genetic factors, lack of physical activity, unhealthy eating patterns, or a combination of these factors. As a result, AgriLife Extension implemented two programs in 2014: The Pantry-to-Plate & the Teen Chef Cooking School. Both were 3-day cooking camps for youth with 30 participants total. Campers learned the nutritive values of healthy foods vs. the empty calories of others, food safety, healthy snacking, and MyPlate.

Hatching in the Classroom – This project is designed to provide background information and exciting experiential activities in life science for use in the school classroom. With this curriculum students have the opportunity to develop skills related to science such as qualitative and quantitative measurement of data, scientific method, and critical thinking. Partners in this effort were Quail Valley Elementary in Sugar Land with 189 students (K-5) participating and Seven Lakes Junior High School of Katy ISD with 650 youth (5th & 7th graders) participating. The lessons and materials used from the curriculum were Incubator Setup, Life Cycle, Candling, and creating a “Tweet House.”

ROBOTICS - The nation is facing declining proficiencies in science, engineering, and technology, as well as workforce shortages in these critical fields. In an attempt to address these deficits, Fort Bend is increasing efforts involving hands-on activities using robotics as understanding the basics of computer programming will enhance their critical thinking skills and problem solving. The following activities supported robotics:



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Program Aid - CEP

Support Staff



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Specialist
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- ◇ **Robotics Workshop** - 25 youth & adults participated and learned the basics of coding and use of Spheros. They were introduced to the EV3 Lego Mindstorm kits, and taught how to build & program robots using the EV3 software
- ◇ **Robotics Camp** - 20 youth participated where their programming skills were put to the test as they competed in the LEGO Mindstorm EV3 Space Challenge.
- ◇ **Robotics Project Interest Meetings** - 40 youth and adults attended the interest meetings held in Katy and Sugar Land. Three new Robotics clubs were started for a total of 47 youth and 12 adult volunteers in the 4-H Robotics project.
- ◇ **National Youth Science Day**- Sullivan Elem. of Fort Bend ISD 5th grade classes participated in the NYSD's *Drone Discovery*. A total of 150 5th graders became engineers for the day to complete the project.

- **ONE DAY 4-H** started in 2009 to allow 4-H members across the nation to thank their communities, counties and state for more than 100 years of support. This event has become the largest organized day of community service by 4-H in the nation. In Fort Bend County for the seventh year *One Day 4-H* was held on October 8th. This year, the Fort Bend 4-H County Council voted to serve Fort Bend County Animal Services by painting the facilities and beautifying their gardens, as well as collecting donations of pet supplies. Throughout the months of September and October kennel and pet food donations were accepted. We had a great turn out for our national day of service, One Day 4-H on October 8th. A total of twenty-four Fort Bend 4-H members gave up their Saturday morning in support of Fort Bend County Animal Services.
- **4-H Veterinary Science Project/Certificate Program** - This project deals with techniques and procedures involved in caring for animals and consists of 100 lessons and 50 activities with 500 clinical hours of on-the-job training in which participants have five years to complete. Since the establishment of the Veterinary Science Certificate Program in Fort Bend in 2012 we created nine 4-H clubs. Highlights for 2016 include:
 - ◇ Six youth who completed the 5-year curriculum and received a Texas 4-H Veterinary Project Completion Certificate.
 - ◇ Seven Vet Science 4-H members took part in the Vet Science Skillathon at State 4-H Roundup - a competitive event designed to test the knowledge and skills.
 - ◇ Thirty youth participated in the 4-day Veterinary Science Camp hosted by TAMU with 4 youth from Fort Bend County. During the camp, youth completed 33 of 78 required Certified Vet. Assistant Level 1 Skills.

Total Educational Contacts

Educational Sessions Conducted - 1,329	Ed. Session Contacts - 87,291
Contact Hours via Ed. Programs - 146,159	Master Volunteers - 318
Extension Education Club Members - 40	Total of Volunteers - 1,270
Total Volunteer Hours - 76,771	Volunteer Value - \$1,808,727.12
Direct Contacts (office/site/phone) - 6,762	Indirect Contacts (mass media) 70,017
Newsletter/Email/Mail Contacts - 90,202	Social Media Posts - 3,614
Social Media Followers - 149,020	eXtension - <i>Ask the Experts</i> - 575

Contact Information

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[www.http://fortbend.agrilife.org](http://fortbend.agrilife.org); www.facebook.com/FortBendCountyExtension

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Dr. Douglas Steele, Director, the Texas A&M AgriLife Extension Service.