Crop Production - Row crops & rice production continue to play a vital role in Fort Bend with 7,600 acres of corn; 37,213 of grain sorghum; 24,518 of upland cotton; 2,243 of soybeans; and 5,141 of rice. AgriLife Extension developed and implemented the following programs to address the relevant issues: 1) Row Crops Tour on 6/2/15 - 36 attended; 2) Sugarcane Aphid Scouting 5/5/15 - 38 attended; and the Cotton Defoliation Meeting on 8/21/15 - 36 attended. On average there was a 76.8% increase in an intent to use knowledge gained, with an overall 42.6% increase in overall knowledge. In addition, result demonstrations included: Insecticide Efficacy in control of Sugarcane Aphid in grain sorghum: Use of dicvandiamide, a denitrification inhibitor, for nitrogen loss management in grain sorghum; the economics of treating cotton root rot in cotton and aflatoxins in corn; and variety trials for cotton, corn and sorghum.

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 South Texas Agricultural Symposium via technology with 16 participants that covered cattle genetics, factors affecting calf prices, the cow's digestive system, and Old World bluestem management options; 2) The Fall Forage Seminar & Hay Show was held on October 27 with 50 producers and other members of the public. Several weeks prior to the Hay Show, producers submitted a total of 26 hay samples that were analyzed by the Soil Testing Lab in College Station for nutrient content; 3) The pasture weed management result demonstrations were conducted to help producers select herbicides for two potentially troublesome weeds - prairie indigo and green flat sedge; and 4) forage & livestock specific articles covering timely topics for our areas were written by specialists and published in the ANR quarterly newsletter.

Enhancing Our Horticulture

Backyard Basics – This series of workshops, conducted throughout the year support healthy living through home-base 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. The programs offered in Fort Bend included: The Spring Food Garden, Preserving Tomatoes, Pickling &

Canning, Freezing & Drying, Salsa & Relish, Gardening for the Wild, Earth-Kind Landscapes, The Fall Food Garden, Composting Made Easy, Jams & Jellies, Grilling, and Fruit & Nut Production. The scheduling for each of these programs varied as to the nature of the event. Some were simply instructor-led learning, while others were hands-on workshops. The time length of each event ranged from 2 to 4 hours, based on program format. A total of 245 registered guests participated—a 33% increase over 2014.

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 use! With water being a diminishing natural resource, it is extremely important that we teach water conservation & collection when and where possible. As a result, the Horticulture unit in Fort Bend continued to put forth major emphasis on water education in 2015. Activities included: Advanced Master Gardener volunteer training in Irrigation Efficiencies -2 certified; 2) In-depth Water Conservation training for new MG interns -27 trained; 3) Home Water Conservation Wksp. held in Sugar Land & Missouri City - 63 total attending; 4) Portable rain-water harvesting display at the Fort Bend Co. fair - 1,140 elementary school students, 125 teachers & parent/ chaperones and 60,000+ fair goers reached.

Master Gardener Training Program - The Master Gardener program educates participants on sound horticultural practices with the intent of creating good environmental stewards. Participants are required to attend fifty hours of classroom instruction. Classroom instruction introduces the participants to the basics of horticulture including trees, perennials, landscape design, propagation, turf, entomology and pathology, and the EarthKind® approach. This year we trained 28 new Master Gardeners for a total of 210 active members that 22,500 hours of service valued at \$519,075.

Contact Fort Bend County

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Extension Education in Fort Bend County

Making a Difference 2015

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 17.1% since 2010, from 585,375 to 685,345. Currently, our population represents with 35.1% white (decrease of 0.5%), 24.0% Hispanic, 21.1% black, 19.0% Asian (increase of).6%), 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 2015 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, its all about food! Our food choices affect our health and well being. In 2015, the following major educational activities were conducted by AgriLife Extension:

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 2015 Commercial Vegetable Conf. that reached 255 individuals and a second at the Mamie George Comm. Cntr. for 288 contacts. Evaluations (287 returned) indicate the events were highly successful in impact-

2015 Educational Outreach

Educational Sessions Conducted: 1,333
Educational Session Contacts: 79,500
Indirect Contacts/Media/Social Media: 53,647
Volunteers Involved: 1,219

Volunteer hours: 77,194 valued at \$1,780,865.00

ing family nutrition, noting: 75% understood meal planning; 85% understood foods impact our health; 82% understood how 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 77% 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 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 2015, 40 adults completed the BLT Back to Basics series that offered food & nutrition education to help improve planning and preparing nutritious meals, stretch food dollars, and prepares and store food safely. Of those participants, 40 completed the 30-day follow-up survey which indicated an increase of 30% in meal planning, 26% in using a shopping list, and 24% in comparison shopping.

<u>Do Well, Be Well w/ Diabetes</u> - The DWBW curriculum covers 4 nutrition & 5 self-care topics to help diabetics manage the disease. In 2015, Si Yo Puedo & Wisdon Power & Control were offered with 29 participants taking part. Thirty percent had never received any previous diabetes education and 90% were on some type of diabetes medication. After the classes, 90% considered their ability to control their diabetes to be good to excellent. Total Net Present Value for Lost Wages for males and females, the total economic is \$712.013.

Weight Management - Preventable illnesses make up 80% of the burden of illness and 90% of all U.S. health care 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 were conducted in conjunction with CEP's Expanded Food and Nutrition Program, Community Health Choice, and Attack Poverty Organization included:

- Healthy Kids Rock Program The goal was to provide nutrition, health, and wellness information to youth between the ages of 5-12. The participants were engaged in 8 weeks of health-related lessons. The topics covered during the sessions were: Sweetened Drinks; Veggies & Fruits; Nutrition Fact Labels; Whole Grains; Fast Foods; and Eating Breakfast.
- The Texercise program an 8 to 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 438 participants gained knowledge of portion size, label reading, food groups, and application of physical activity for healthier lifestyles.
- Petrospective results of >90 contacts indicated: 90.3% increased physical activity; 79.3% increased water consumption; 76.8% added more fruits and vegetables to their diet; and 69.9% engaged in exercise outside of school.

Protecting Our Environment

<u>Pesticide Education</u> - Fort Bend County has 628 pesticide applicators licensed with the Texas Department of Agriculture. Private Pesticide Applicators are required to acquire fifteen (15) CEUs (continuing education units) every five years. Commercial & Non-Commercial Applicators are required to acquire 5 CEUs every year in order to renew their licenses. There is a substantial audience and need for Extension to provide the educational opportunities for these applicators to obtain their CEU credits. In 2015 two recertification courses provided five (5) CEUs each with one 5-CEU program designed for Mosquito Control Professionals and several other CEU opportunities at field days and turn-row meetings. One of the 5-CEU events is in conjunction with the Fort Bend Regional Vegetable Conference. CEUs are also offered throughout the year at various seminars. Topics covered at events 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. Over 200 license-holders met the required 15-CEUs. In addition, 5 private applicator trainings were held to assist 29 in passing the exam to become a TDA private applicator license holder.

Strengthening Our Families

Teen Pregnancy & Parenting - The latest stats in 2013 indicated there were 26.5 births per 1,000 adolescent females ages 15-19 (273,105 babies). Teen pregnancy and childbearing can carry high health, emotional, social, and financial costs for both teen mothers and their children. Teen mothers can become overwhelmed by life. The Fort Bend County Pregnancy and Parenting Program was implemented throughout the county. Partnerships were established with Lamar Consolidated Independent School District, Fort Bend Independent School District, and the Pregnancy Resource Center. The program is divided into six to eight 30-45 minute sessions. The 638 participants learned about prenatal care, eating healthy, exercise during pregnancy, premature labor, keeping the baby healthy, saving money for baby, and breast & bottle feeding. The cost analysis for each participant is \$3,706.78.

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 2015: The Pantry-to-Plate and the Outdoor Cooking School. Both were 3-day cooking camps for youth with 15 participants each. Campers learned the nutritive values of healthy foods vs. the empty calories of others; food safety; and MyPlate.



Learn, Go, Eat, Grow -Arrived this fall! The Texas A&M AgriLife Extension Service and Texas A&M University, in collaboration with the Univer-

sity of Texas School of Public Health have received funding to implement and evaluate the impact of two intervention programs designed to improve physical activity and eating behaviors of children at Coordinated Approach to Child Health (CATCH) elementary schools across Texas that include: (a) Junior Master Gardener Program (JMG); and (b) Walk Across Texas Program (WAT). Thirty-two (32) Title I schools in four counties in Texas with three to five third-grade classes will be invited to participate in the three-year project.

Developing Our Youth

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 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 2015 included:

- ♦ Two youth who completed the 5-year curriculum and received a Texas 4-H Veterinary Project Completion Certificate.
- ♦ Three Vet Science 4-H members took part in the Vet Science Skillathon at State 4-H Roundup a competitive event to test the knowledge and skills.
- ♦ Eleven youth participated in the Veterinary Science Career Day hosted by TAMU.
- ♦ Texas 4-H held their first Veterinary Science Camp in 2015 during their Texas 4-H Roundup. Of the 30 youth participating, 10 were from Fort Bend. During the 4-day camp, youth completed 33 of 78 required Certified Vet. Assistant Level 1 Skills.

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 sixth year One Day 4-H was held on October 10. From Sept. - Oct., Fort Bend 4-H diligently collected over 300 gift items that were given to the 127 underprivileged children of the Fort Bend Family Promise Center - the only Family homeless center in the Houston area. Toys were organized into age groups: infant, toddler, 5-7 yrs, 8-13 yrs, & teen 14+. Once the families arrived at the center they were greeted by our 4 -H elves that helped them pick out their toys. The children got their picture with Santa and enjoyed milk and cookies, fully embracing our "Christmas in



October." We had 356 youth & 100 adults involved with a total of 35 hours invested in planning. What a great program!

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

Summer Camp Results – One of the goals of Fort Bend Co. 4-H in 2015 was to introduce non-traditional 4-H projects (Wildlife and Fisheries, natural resources, and creative arts) to growing communities in our county. Highlights were:

- Basic Angler Program Texas A&M AgriLife Extension Services partnered with Texas Parks & Wildlife and Coastal Prairie Mast. Naturalists to offer a free Basic Angler program for the thirty-five youth of Fort Bend County at Seabourne Creek Park. The Basic Angler program offered 7 sessions: Fishing; Basic Tackle & Knot Tying; Fish 'N' Bait; Regulations, Ethics, and Safety; Gyotaku; Ecology; and Learn to Cast. An increase in knowledge gain ranged from 84% to 96%.
- Nature Watch Camp This camp focused on Natural Resources along with Wildlife & Fishery and included sessions on endangered species, predators, recycling, and container gardening. The camp provided leadership to 30 of our senior 4-H'ers by having them serve as educators for the sessions to the youth ranging from ages 6 10.
- 4-H Theater Camp Fort Bend 4-H held their first week-long theater camp. The camp was led by a parent volunteer, Ms. Jennifer Triplett, who is a former drama teacher. She taught the 11 campers about public speaking, improving body language & expression, and improving communication skills.

Supporting Our Agriculture

2015 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 pro-



gramming 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 1,140 elementary school students and 125 teachers & parents/chaperones; and, 522 youth entered the coloring contest. A total of 19 exhibits were utilized to promote the agricultural industry in Fort Bend with 95 volunteers & 12 agencies and organizations assisting. In addition, it was estimated that 60% of the 100,000+ fair visitors attended *AG'tivity Barn* during the 10-day run.