Protecting Our Environment

Texas Water Star Program in Travis County: Decreasing Landscape Water Use

It is estimated that Texans maintain over two million acres of turf and use over 1.37 trillion gallons of water annually in the municipal environment. Additionally, Texans apply an estimated 2 million tons of fertilizers and another 71 to 78 million pounds of pesticides in the home landscape. Couple this use of water, fertilizers, and pesticides with the expected rise of the state population to over 46 million by 2060. As Texas water supplies are projected to decrease by 10%, educational programs to conserve water in the urban environment and to reduce the risk of surface and ground water contamination are gravely needed. To respond to this critical issue, Extension developed the Texas Water Star program to address water conservation and water quality education for green industry professionals. Working with representatives in the irrigation, landscape installation, nursery, and grounds maintenance industries, two major programming opportunities that focused on irrigation and water quality issues were designed and implemented. First, we partnered with the City of Austin's Watershed Protection Department on the Grow Green Landscape Professional's training. Over 60 participants attended six weekly training sessions on various horticultural topics, including water quality and water conservation. After the training, 100% of participants indicated a plan to design or redesign landscapes to utilize lower water -use plants; 83% plan to convert from spray irrigation to drip, where appropriate; and 72% plan to utilize irrigation audits to improve water-use efficiency.

We also held a one-day conference for irrigation and turf maintenance professionals, at which there were 60 attendees. This training focused on irrigation topics such as irrigation scheduling, efficient irrigation practices, water conservation in athletic fields and parks, and selection of turfgrass cultivars for water conservation and lower inputs (fertilizers and pesticides). After the program, 93% of participants indicated the intention to use irrigation scheduling to improve water-use efficiency; 92% plan to select the most water efficient turf species for the location; 86% plan to use irrigation audits to improve water-use efficiency; and 83% plan to use the "cycle and soak" method with their irrigation systems, to prevent water loss and runoff. In addition, we also installed a series of turfgrass demonstration plots, with subsurface drip irrigation, at the Travis County Extension office. During several field days we showcased these plots and used them to provide instruction on best management practices. The plots contain the four most widely used turf species in Central Texas: Bermuda, St. Augustine, Zoysia, and Buffalo. Over 350 participants attended the two field days.

Community-wide Fire Ant Management

In 2002. Riggs et al showed that community wide fire ant management programs can help reduce red imported fire ant populations and reduce pesticide costs for community residents. By forming community wide programs for neighborhoods, fire ant reinfestation can be reduced or delayed. Two community wide fire ant programs were continued in 2014. These programs cover over 1,800 acres and include over 1,400 homes. 81% of respondents said the program has moderately to greatly reduced risks to human health within the community while 85% said the program has moderately to greatly improved their family's quality of life.

Pesticide Applicator Licensing

Learning how to use pesticides safely and effectively, with minimal effect on the environment is important. Pesticide applicator licensing is regulated by the Texas Department of Agriculture. AgriLife Extension partners extensively with the TDA in providing educational programs for individuals wishing to obtain their pesticide applicator license. In 2014, Extension provided the four-hour required training program to 93 participants.

Supporting Our Agriculture

Supporting our farmers and ranchers has always been a high priority for AgriLife Extension. In 2014, 227 participants attended beef cattle programming to learn the importance of stocking, restricted use chemicals, forage production, and herd health. Ninety-two percent of individuals surveyed showed an increase in skills needed for managing their herd.

Last year AgriLife Extension also took a role in education about the move of the yellow sugarcane aphid into the central Texas area. A multicounty program hosted by 5 counties educated 82 farmers on how to tell the difference between the white and the yellow sugarcane aphid, signs of infestation and the treatment methods for each type. Educational programming also included a farm tour to view damage from corn ear worms. Farmers in attendance at both programs said they were "pleased to see row crop education provided in this area."

For more information, contact:

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Educational programs of the Texas A&M AgriLife Extension Service and the Prairie View A&M University Cooperative Extension Program are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information or veteran status.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8,1914, as amended, and June 30,1914, in cooperation with the United States Department of Agriculture. Dr. Douglas Steele, Director, the Texas A&M AgriLife Extension Service.





Cooperative Extension Program



Extension Education in Travis County

Travis County is located in the heart of Texas and is home to the State Capitol. According to the 2013 Census estimate, 1,120,954 people call Travis County home, an increase of over nine percent since 2010. Our growing, urban population includes a diverse demographic of 50% White; 34% Hispanic/Latino; 9% Black/African American; 6% Asian; and 1% American Indian.

The Extension program in Travis County is part of the statewide Texas A&M AgriLife Extension Service and the Prairie View A&M University Cooperative Extension Program. 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 showcasing a variety of our educational activities in Travis County.

Strengthening Our Families

Financial Literacy

The Financial Literacy Coalition of Central Texas (FLCCT) works in partnership with Texas A&M AgriLife Extension to be a leading, trusted, unbiased and credible source of personal financial education. The FLCCT uses nationally recognized curriculum, *Money Smart*, to assist instructors in providing financial literacy education to clientele. During 2014, 107 FLCCT programs were conducted, with 770 clientele participating.

2014 Educational Outreach

Educational Programs Presented: 6,780 Attendance at Educational Programs: 97,923 Individual Contacts: 426,695 Volunteers Involved: 1,786 **47,967** Volunteer Hours

Valued at \$1,081,656*

*Hourly value of volunteer time, provided by Independent Secto

Improving Our Health

Expanded Food and Nutrition Education Program

EFNEP offers practical lessons in basic nutrition, food preparation, food budget management and food safety to voung families and vouth most at risk from hunger and food insecurity. During 2014, EFNEP staff enrolled 618 families and 4,711 youth in a series of classes. Upon completion, 96% increased consumption of at least one food group; and 90% improved one or more nutrition practices such as using the "Nutrition Facts" on food labels to make healthier food choices.

Studies have shown that for every \$1 spent on EFNEP. \$10 was estimated to be saved in health care costs and \$2 saved in food costs by participants. For Travis County, this is \$4 million in estimated health care cost savings and almost \$806,000 in food costs.

Heroes 4 Health

Teen leaders at LBJ High School were selected and trained to teach their peers about nutrition/physical activity education. 107 programs were conducted reaching 1,401 youth. 207 surveys were completed with 89% reporting they had learned how to make healthier food choices.

Better Living for Texans

Supplemental Nutrition Assistance Program

248 programs were conducted in 2014, with 6,338 SNAP eligible individuals and families participating. Using "hands-on" experiences, BLT participants completed a series of lessons focusing on meal planning, stretching food dollars, and decreasing fat and sodium consumption.

As a result of participating in BLT programs, the following behavior changes were achieved:

- •84% reported using the information about FAT on the food label when shopping, a 46% increase over pre-test results.
- •83% reported using the information about SODIUM on the food label, a 50% increase.
- •81% used the information about SERVING SIZE on the food label, a 56% increase over pre-test results.

Step Up, Scale Down



Step Up and Scale Down is a 12-week weight management program designed to address two factors behind the obesity issue: physical activity and diet. Thirty people enrolled and twenty completed the program. Evaluation included a pre, post, and 30-day follow-up survey with

the following behavior changes reported:

- •75% use calorie information at fast food restaurants, a 40% increase over pre-test.
- •50% always plan meals and snacks, a 40% increase.
- •30% fill two-thirds of their lunch and dinner plates with fruits and vegetables, a 25% increase.
- •On average, participants lost 7.5 pounds during the 12-week period, for a total of 165 pounds.

Childhood Obesity Prevention Program

In Travis County, about two-thirds of adults and onefifth of children are overweight or obese. To address this issued, 49 educational workshops were conducted, reaching 604 youth and adults. Health and wellness surveys addressing changes in behavior and knowledge were completed by 119 participants:

- 80% reported this program would help them make better nutrition/wellness decisions in the future.
- 85% will drink more water, and 42% will eliminate sodas.
- 73% will consume more fruits and vegetables.
- 50% will engage in physical activity as a family.

Dinner Tonight! Video Webcasts

1,147 recipients have requested the weekly *Dinner Tonight!* email blasts that features a video demonstrating a quick and healthy recipe, that



is cost effective. An additional 39,000 are reached each week through TCTV-Channel 17, Travis Central, and external partners. *Dinner Tonight!* videos and recipes can be found at http://healthyliving.tamu.edu.

Enhancing Our Horticulture

2014 Master Gardener Program

With the critical need to address issues regarding natural resources, having a corps of well-trained volunteers is essential to the ability of Extension to make an impact in our communities. Community service and leadership is vitally

important to educating the public on many environmental issues, including water conservation and the safe use of fertilizers and pesticides. To address this need, Extension in Travis County offers an annual 14 week training program. Thirty-one participants were accepted into the 2014 training cohort. At the completion of their training period, 100% of participants indicated that they would modify their soil to conserve water in the landscape and that they would decrease their use of pesticides; 95% indicated an inten-



tion to improve the management of their home irrigation systems; and 93% indicated that they would decrease their water use by more than half.

Program classes cover all of the basic horticultural topics and Earth Kind principles that will help to build a foundation for future horticultural learning. Highly-trained Master Gardener volunteers aid Extension by answering tele-

During 2014, 222 Master Gardeners volunteered over 12,000 hours of their time, worth an estimated \$271,000. phone/in-person/email requests; providing speakers for gardening presentations to civic clubs and other groups; establishing and maintaining demonstration gardens; working with special audiences in the community; conducting school garden projects; and designing and implementing community improvement projects, as well

as coordinating Master Gardener peers and planning and organizing group projects and activities.

Volunteer Alicia Zubay had this to say after completing the training course, "The Master Gardener program has energized me and multiplied my resources, knowledge and support group exponentially. After taking this course, I feel much more prepared to tackle my landscape in a more water conscious, environmentally-friendly, and cost effective way."

Eighth Annual East Austin Garden Fair

Over 500 participants attended this year's fair, including 100 youth. Held at the Parque Zaragosa Rec Center in East Austin, this annual event includes informational booths on everything from vegetable and fruit production to food safety and hand-washing. Booths are manned by Extension agents and well-trained volunteers, and all include hands-on activities. Our most popular booth this year was on back-vard bee hives.

Developing Our Youth

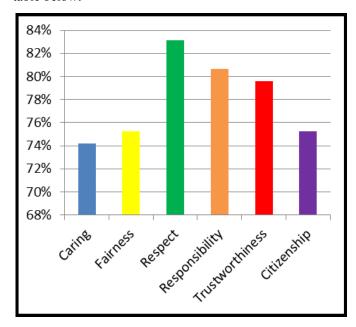
Youth Learn Consumer Decision Making

Consumer Decision Making (CDM) gives youth the opportunity to make wise decisions when shopping. CDM is a judging contest designed to teach kids to observe, compare and make consumer based decisions on facts. 4-Hers use their consumer knowledge to rank similarly based products to fit a given scenario. Kids learn to organize their thoughts and to defend their decisions in oral reasons. Four senior aged 4-H'ers were members of the 2014 team, devoting seven months to studying and practicing for the state contest; reading and writing scenarios, researching products, preparing and judging classes. The 2014 Travis County 4-H Senior Consumer Decision Making Team has had an outstanding year competing in contests. The team placed at all contests in which they competed and finished strong at Texas 4-H Roundup winning 1st place and advancing to Nationals in January 2015. The intermediate and junior teams also did very well, placing at most of the contests in which they competed. This was the first year for a county contest to be conducted and there were 20 youth who competed in the event. One senior earned a \$10,000 scholarship from the San Antonio Livestock Show for placing first at the contest.

4-H CAPITAL Builds Character

4-H CAPITAL strives to teach positive character development using the Connect with Character curriculum. All instructors teach the Six Pillars of Character: Trustworthiness, Respect, Responsibility, Fairness, Caring, and Citizenship. In 2014, 3,825 contacts were made and 487 Character Counts sessions were led for a total of 822 hours of instruction. Across the board, the program positively impacted the youth's attitudes.

The percentage of students who increased positive attitudes within each Pillar of Character are indicated in the table below:



4-H CAPITAL After-School Science Programs

4-H CAPITAL engages youth in hands-on engineering and design to teach low-income youth 21st Century skills that they need to be successful. Programs focused on engineering and technology supplement learning during the

school day by applying school day learning to real world experiences. This year student projects included: learning about animal behavior with small mammals, computer programming for a 3-D printer, building their own city, and much more.

2,233 youth participated in 4-H CAPITAL after-school programs during 2014. Survey results from youth enrolled in the Fall indicated the following results:

55.5% of youth enrolled in4-H CAPITAL programs at tended the program 30 days



- or more (613 youth). A standard measure set by the State of Texas to measure program impact on youth outcomes.
- •71% of those who attended the program 30 days or more (337 youth out of 475 completed surveys) demonstrated an increase in school engagement.
- •40% of those who attended the program 30 days or more (190 youth out of 475 completed surveys) demonstrated an increased interest in science.

Youth Science Experiment

Travis County 4-H was the recipient of a \$15,000 National 4-H Council Grant that was sponsored by the Philips Company through the Philips Cares Program. Travis County 4-H partnered with Hays and Guadalupe counties to offer workshops on the Magic of Electricity. Over 200 youth and adults participated in the hands on learning experience of how to wire a model house.

Youth Scholarships

Ten Travis County 4-H members received \$33,000 in scholarship monies to be applied to their college education.

Take A Stand

Over 1000 youth were reached through the efforts of Travis County Extension agents training teachers and conducting the TAKE A STAND Against Bullying lesson series at over 20 local elementary schools.

Photography Project

One of the biggest projects in Travis County, had a 52% increase (150 photos) in photo submissions for the 2014 year. A new contest was implemented this year called Photography judging and an intermediate team from Travis County placed 1st at the District contest.