

Extension Education in Duval County
Making a Difference



The Texas A&M AgriLife Extension 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:

## **Duval County** – Summary of 2012 Educational Contacts

Total Contacts – 9,222 Contact Hours via Educational Programs – 23,714 Contacts by Volunteers – 1,774 Total Youth Contacts - 925 4-H Members – 123 4-H Leaders – 18 4-H Clubs - 5 Curriculum Enrichment Participants – 143 Office Contacts – 95 Site Visits -Phone Calls - 275 Newsletter/Mail/E-Mail Contacts – 1,105 Web Contacts – 468 News Releases - 7



2012 Duval County Agriculture and Natural Resources Programs Developed By: Samuel D. Gavito, Duval County Extension Agent

The Duval County Agriculture and Natural Resources Educational Programs for land owners were implemented by the Duval County Extension Office. These programs were in partnership with Jim Wells, Brooks and Jim Hogg, Kleberg and Live Oak Counties. The committees involved with these programs include the Duval Leadership Advisory Board and the Duval Ag and Natural Resources Committee. The programs for 2012 which include the following were found to be relevant to our local landowners and neighboring counties.

2012 Duval and Kleberg-Kenedy County Water Well Screening Outcome Summary - 207787

Developed by
Sammy D. Gavito, Duval County Extension Agent – Ag/NR
and
Frank Escobedo, Kleberg-Kenedy County Extension Agent – Ag/NR

#### Relevance:

Water well screening for arsenic, fecal coli form, nitrates, and total soluble salts is an ongoing natural resource issue to be addressed in Duval and surrounding counties. Landowners depend on well water for their livestock and for home use and consumption but do not know if there are any contaminants in their respective water table. For this reason, the Duval Agriculture Committee asks that the Extension Service continue to provide the landowners with the service of screening water samples annually. This is an issue across county lines, so it is a cooperative effort with landowners and the Extension Service in the seven county areas of Duval, Kleberg-Kenedy, Jim Hogg, Live Oak, Brooks and Jim Wells Counties.

#### **Response:**

Eleven landowners are involved with this water well screening project from Duval County and twelve samples from Kleberg-Kenedy County. The Extension Service from the six county area provided a water well screening for arsenic, fecal coliform bacteria, nitrates, and soluble salts. We set up the water well screening laboratory at the Jim Wells Fair grounds. Landowners receive their respective results and they also are provided valuable educational material on these subject areas. The landowners visit with us to interpret their results and learn how to remedy their water situation as needed. Landowners also received several educational resources that were made available through Extension office. A news release and several water publications (E-176 What's In My Water, SP-464 Private Drinking Water Well Basics, B-6186 Drinking Water Standards, B-6184 Drinking Water Problems: Nitrates, ER-004 Disinfecting Water Wells by Shock Chlorination, and L-5467 Drinking Water Problems: Arsenic).

Landowners were provided with the data for the water sample submitted and surveyed using a retro- post. Results are reflected below.



#### **Results:**

The results of this year's water well screening showed a high level of salt concentrations. We are not sure if this is due in part to the lack of rainfall the past couple of years or not. The average water well measured 2206 ppm salts in Duval County and 2182 ppm in Kleberg-Kenedy County. The nitrate level was also higher this year in Duval County with the average being 11.36 ppm and averaged lower in Kleberg-Kenedy County at 3.8 ppm. EPA maximum allowed standards are at 10 ppm. Arsenic levels varied with the average number at 7.7 ppm in Duval County and averaged lower in Kleberg-Kenedy County at 0.42 ppm. EPA maximum allowed standards are at 0.01 ppm. Fecal Coliform Bacteria was negative in all of the water samples. Landowners understand that the water screening numbers change from year to year. There is also an increased knowledge in applying the educational publications they have received to help make the water safer to drink and use on a daily basis.

Five surveys were returned by landowners participating in the Private Water Well Screening program. In summary, 40% of the participants knew that it is recommended for water well to get screened annually. 80% of the participants had knowledge of the contaminates (arsenic, nitrates, fecal coliform bacteria, and salinity) being screened. 50% of the participants had their water wells screened by another entity other than Extension. The average time frame was 8 years ago. 100% of the participants indicated that if the results were not within drinking water standards they plan on correcting the problem. Participants indicated that they valued the water screening program within a considerable range (\$251-\$1,000). 80% of the participants indicated that their well water was used for drinking, livestock, and irrigation.

## 2012 Result Demonstration - Rain Water Harvesting for Wildlife

The rain water harvesting for wildlife result demonstration is an ongoing project initiated by some members of the Duval Extension Leadership Advisory Board from the NRCS Office. This project has been set up at the Gamez ranch eleven miles north of Benavides. This ranch is 1200 acres with only one well on it. The need to capture and reserve water is high for this ranch. The structure is an 18 x 21 foot enchachment with a 1500 gallon reservoir tank. This rainwater flows to a 5 gallon trough with a float. The area around the trough was fenced with hog panel to keep the pigs from getting to the water source. The source can be used by deer, coyotes, bobcats, quail and other birds. A wildlife camera has been set up to view photos of wildlife coming to drink water. The project was built in August, 2012, and has received 6 "up to January 13, 2013. This results in a total of 1,413 gallons of water captured up to now.

The landowner has informed me that he wants to build five more rain water encachments on his ranch. This demonstration was presented at the White-Tailed Deer Seminar to 50 ranchers in attendance September 27, 2012. Many said they would consider this project on their respective ranches in the future.



### Acknowledgements:

The Duval Extension Office would like to recognize the Duval Leadership Advisory Board and the Duval Ag. Committee, Duval ranch owner, Ernesto Gamez and family, the Duval NRCS Office, and County Agents from Brooks, Jim Wells, Kleberg, Jim Hogg and Live Oak Counties and the Texas Agrilife Extension Water Specialist, Brent Clayton for their support in assisting with the planning and implementation of this important issue to local landowners.





#### 2012 Brush Country White-Tailed Deer Seminar

A White-Tailed Deer Seminar was presented to fifty landowners from Duval and surrounding counties on September 28, 2012 at the Gamez Ranch eleven miles north of Benavides. The seminar focused on deer management topics such as Buck Breeding Success, Fawn Recruitment, Feeding Fawns and Fawn Mortality, and how Fawns and Doe's get shorted at the feeders. These topics were presented bt Dr. Megan Clayton, Extension Range Specialist. Additional topics included Deer Home Ranges, Movements, and Deer Nutrition. These topics were presented by Marc Bartoskewitz, biologist for the Sweden Ranch in Benavides. Harvesting Rain Water for Wildlife was the last topic presented by County Extension Agent, Sam Gavito, Duval County.





## 2012 Duval County Youth Wildlife Educational Outcome Summary Developed by Sammy D. Gavito, Duval County Extension Agent

#### Relevance:

As today's youth are further removed from agriculture and natural resources, they do not understand the importance of agriculture and how it impacts their daily lives. This program is relevant to Duval County youth due to the fact that the White-Tailed deer industry in Duval County is the number one agriculture resource at this time. The current Duval Agriculture Committee and the local School District officials agree this educational program is important to teach our youth. This program targets 10th grade students from the Benavides High School and provides the following educational components: educational support materials on white-tailed deer, a wildlife field trip, qualified guest speakers, pre and post tests, instructor evaluation, and information on wildlife opportunities for the future by staying in school and attending college.

#### **Response:**

The twenty three 10th grade students and four adults were part of a "hands-on" educational clinic on white-tailed deer management. The topics included aging white-tailed deer "on the hoof", learning to put deer in categories of young, intermediate and mature, learning to observe distinct body characteristics to identify deer year after year, and antler terminology, and Texas Parks and Wildlife laws and regulations. The education was provided by experts in their respective field such as Game Wardens, and the Duval County Extension Agent. The Game Warden presented a thirty minute program called "Operation Game Thief", on the consequences of misbehavior such as poaching. The County Agent took the students and faculty on a tour of deer in breeding pens to give a "hands on" demonstration of what to look for in body characteristics of live deer to help age them "on the hoof". The County Agent also presented to the students and faculty a power point presentation and video on what we look for in "aging deer on the hoof". The presenters also gave a 10 minute talk on their respective bachelors and masters degree education they received after high school in order for them to pursue their respective careers.

#### Partnerships and Collaborators:

- Independent School District
- Law Enforcement Agencies (Local)
- Texas Parks and Wildlife

#### **Outcome Results:**

The program resulted in the students and faculty gaining knowledge in the white-tailed deer industry. The increase in knowledge by both the students and adults went from an average of a score of eight out of one hundred on the pre-test which consisted of twenty two fill-in-the-blanks, to an average score of ninety eight on the post test. One hundred percent of the students and adults were also "satisfied with the program" and would like to return next year. At the conclusion, the students verbally discussed the program with the adults and all agreed that



changes needed to be made on their respective parents or grandparents ranch to improve the existing white-tailed deer program. The discussion included topics of possible co-ops with neighbors and allowing young deer to live to later years. This can result in higher income from deer leasing in the future.





## Youth Wildlife One Day Camp Garza Ranch Nov. 27, 2012

#### **Post-test**

1)_	is a calculated guess on estimating the age of a live deer.
2) /	A female deer is called a doe, and she has babies born in the time and they are called .
3) 9	Since deer are born in the summer, we estimate the age of a deer in November, December and January, (deer season), as being their age plus a
4) [	Male deer are called Bucks and they have (antlers or horns), (circle one), on their head. A doe does not.
5) /	A buck's antlers will fall off the head in the month of
6) /	A buck's antlers will re-grow beginning in the month of
7) ۱	When we find an antler that has fallen onto the ground, we call this a
8) \	When antlers grow during the summer, the antlers are made up of tiny blood vessels and we say the buck is in
9) /	As we age live deer, we look at the A) body characteristics, or we look at B) the size of the rack? Circle one
10)	Deer can be categorized when estimating their age on the hoof as young, intermediate, mature and .
11)	Young is considered from to years old.
12)	Intermediate is considered from to years old.
13)	Mature is considered from to years old.
14)	The proper terminology for points or tines on a bucks rack is G, G, G, G, ect.
15)	Deer have distinct characteristics we can look for in identifying a deer in future years. One of the areas to look at is a deer's color.
	How satisfied were you with this program: A) not satisfied B) satisfied
	Would you like to come back next year?
	What would you be interested in having as a topic?



#### **Benefits/Impacts:**

The students learned about deer and their body characteristics to help them "age deer on the hoof", but also learned from each presenter the importance of staying in school and get a degree that will help them pursue a career in wildlife. The School Principal and Superintendant said the program will continue next year as they were leaving back to school.

## 2012 Duval County Youth Chess Outcome Summary Developed by Sammy D. Gavito, Duval County Extension Agent

#### **Relevance:**

The Duval Youth Chess Project was implemented by the Duval Extension Agent at the request of the Benavides Elementary Principal and Counselor. Chess is a strategic, competitive game that requires the individuals to think and strategize to beat their opponent. The Principal and Counselor are using the project to see if the students will improve on their math scores by learning to think and solve problems through the help of Chess. This is relevant to the Elementary School at this time due to overall low scores from test results.

#### **Response:**

The fourteen elementary grade students are part of a "hands on" educational project, learning the game of chess. The students are participating in competitive chess games from 2:30 to 3:30pm . The kids first went thru educational workshops to learn the names of the pieces, how they move and capture and how to practice proper sportsmanship at the end of a game. The game is also teaching the kids how to win and lose. The Extension Agent is also communicating with the Principal and Counselor on how the project is progressing with the kids' school grades.

#### **Partnerships and Collaborators:**

Benavides Independent School District

#### **Results:**

The biggest impact the children seem to be receiving at this time according to the school counselor is the students change in attitude in a very positive way. The kids are trying to excel in school due to the fact that they have been told if the grades drop, they will be removed from the chess club. Parents have also verbally told me that their children want to do well in school so they can stay in the chess club. From the retrospective post test results, the kids had an overall increase in knowledge in how to play the game in general of 73%. All of the kids, except for two, had not ever played chess until now.



**2012 Duval 4H Shotgun Club** – The Duval Extension Agent is assisting the Shotgun coach with the new 4-H shooting sports project in shotgun. The goal is to have them learn this life skill and compete at the District 12 Shotgun Match to be held in Laredo in May, 2013.

**2012 Ag. Fair** – 4<sup>th</sup> grade elementary students from Freer and San Diego attended the Ag Fair in Alice May 9 and 10, 2012. Students learn about ag awareness in beef, cotton, dairy and wildlife.

**2012 District 12 Rifle Match** – The Duval Extension Office helped host the District 12 Rifle Match in Benavides on April 21, 2012. There were 109 4her's who participated from District 12 this year.

**2012 District 12 Archery Match** – The Duval Extension Office helped host the 2nd Annual District 12 Archery Match in Benavides on April 22, 2012. There were 65 4her's from District 12 who participated in the FITA and 3-D archery match. The 4her's also competed at the state games in San Antonio in July, 2012.

**2012 Duval 4H Golf Challenge Club** – The Duval Extension Agent is assisting with the new 4-H Golf Project. Fifteen 4-Her's have signed up for the golf project and they competed at the Alice Municipal Golf Course May 29, 2012.

**2012 Duval 4H Shotgun Club** – The Duval Extension Agent is assisting the Shotgun coach with the new 4-H shooting sports project in shotgun. The goal is to have them learn this life skill and they competed at the District 12 Shotgun Match held in Laredo in May 12, 2012. They also competed at the state games in San Antonio in July, 2012.

**2012 Duval Classic Prospect Show** – On November 10 and 11, 2012, the Duval Extension Office helped host the Duval Classic Prospect Show in Benavides in order for 4-H and FFA exhibitors to participate with their respective animal project. This year, 240 animals were exhibited so as to prepare themselves for their county fair or major livestock show.

**2012 Duval Shooting Sports Fundraiser** – The Duval Shooting Club helped hosted a fundraiser to benefit the Duval 4H Shooting Club on October 27, 2012 at the Duval County Park. The event raised \$6500.00 from the cook-off, and shotgun shoot. The event was collaborated with the Duval Sherriff's Department and the Duval County Attorney's office.

# Texas A&M AgriLife Extension Service Duval County

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