Extension Education in Duval County

Making a Difference 2011
The Texas AgriLife Extension Service has been dedicated to serving Texans for nearly a century. The agency was established in 1915 under the Smith-Lever Act to deliver university knowledge and agricultural research findings directly to the people. Extension programs have continued ever since to address the emerging issues of the day, serving diverse rural and urban populations across the state.

Through a well-organized network of professional educators and more than 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 a significant return 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 Educational Contact

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2011 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 Counties. The committees involved with these programs include the Duval Leadership Advisory Board and the Duval Ag and Natural Resources Committee. The programs for 2011 which include the following were found to be relevant to our local landowners due to the extensive amount of ranching and wildlife operations in Duval County and neighboring counties.

2011 Duval Ruminant Parasite Management Outcome Plan Report
Summary

Relevance:
Livestock operations in Duval County continue to be a major component of ranch management. Ranchers deworm their livestock when they decide to work the animals in a “round-up” setting in their ranch along with branding, dehorning, weaning, and culling. There is a need to address education on internal parasites in ruminants as parasites will negatively affect their respective daily rate of gain, hair coat, diarrhea, and could cause death in some cases. The rancher ultimately loses income, so it is crucial that proper management decisions be made. The need for more knowledge on when to strategically de-worm for internal parasites was discussed by our local agriculture committee and the Duval Extension Office. This information would be presented by the Duval Extension Agent at the multi-county range and ranch field day.

Response:
The Duval Extension Office developed the following activities to address this issue to local ranchers.
- Duval Ag. And Natural Resource Planning Committee discussions
- Ag. newsletter to local ranchers
- Duval website educational publications on internal parasites in ruminants
- Ranch/Range Field Day in Duval County with educational publication hand outs on management of internal parasites in ruminants and a power point presentation to workshop attendees.
- retrospective post survey on knowledge gained on internal parasite management

Results:
A retrospective post survey was handed to thirty seven attendees after the power point presentation on internal parasite management in ruminants by the Duval Extension Agent. The results are as follows:
1) 43.2% gained knowledge on understanding the biology and life cycle of the brown stomach worm.
2) 43.9% gained knowledge on understanding proper management to break the life cycle of the brown stomach worm.
3) 35.8% gained knowledge of understanding proper selection of de-wormers in a cow-calf herd.
4) **42%** gained knowledge in understanding evaluations for proper timing of de-worming a cow-calf herd.
5) **44.6%** gained knowledge in understanding that larvae swim up grass blades in wet conditions.
6) **46%** gained knowledge in understanding larvae are active when soil temperatures are 55 – 85 degrees.
7) **41.2%** gained knowledge in understanding adults live, mate and lay eggs up to 60 days and then die.
8) **30.4%** gained knowledge in understanding that proper nutrition and rotational grazing increase immunity in ruminants.
9) **38%** increased knowledge in understanding extreme cold and hot temperatures and dry weather help control infestations.
10) **32.4%** gained knowledge in understanding ruminants can look wormy, but poor body condition can be related to poor nutrition, not parasites.

Overall there was a **39.75%** increase in knowledge on internal parasite management in ruminants from the thirty seven participants.

Some comments were made to me by some of the attendees after the workshop, on how they have been ranching for years and this is the first time they had educational material presented to them about internal parasite management in ruminants.

**Acknowledgements:**

The Duval Extension Office would like to recognize the Duval Ag. Committee, Duval ranch owner, Richard Shimer, The Jim Wells Extension Office and Extension Veterinarian Specialist, Dr. Floron Faries for their support in assisting with the planning and implementation of this important issue to local ranchers in the area.

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**2011 Result Demonstration – Effects of Herbicides on Tangle Head Grass**

The tangle head results are as follows. We can give some recommendations to ranchers with these results. We know from these results not to mow or disturb the grass before treatment.

We did an initial rating of plots yesterday in both Duval and Jim Hogg Counties. I’ve included some answers to questions I received in the field as well. Unfortunately, from the pictures you’ll see tangle head did very well this year, and even spread a good deal at the Flores ranch (a lot more individual plants not confined to the “clumps”) We rated the plots poor, fair, good (I included a poor control, fair, and good pic), instead of counting individual plants because many plots had plants unaccounted for, had been grazed, etc. The plan at this time is to wait until spring and treat again. We’re open for suggestions, but would like to do larger plots and use both IPT and broadcast treatments. We’d like to really look at multiple practices in order to “take back” a field invaded by tangle head.
1. You’ll notice that the mowed spots did not do very well. This is probably due to the drought and them having less green material when we treated them (not much rain in between mowing and spraying).

2. Keep in mind these were individual plant treatments (IPT) and we cannot assume the same results with a broadcast spray.

3. This is only 6 months of data, during an exceptional drought, and our ability to extrapolate this data to other conditions is limited.

4. The Pastora was really to test sand bur control, and I think we saw that it might have some effect, but you really must have a good 1.5” of green growth for it to do a good job. In Jim Hogg Co, we did not find sand burs in our pastora plot, or the area around the plot (so not sure we did anything). The tangle head really enjoyed the Pastora.

We knew with enough green material roundup should work, but I would have expected the 1.5% to do a bit better. Imazapyr at 0.5% looks good, and velpar at 0.5% could still be an option as well. Imazapyr (trade name Arsenal) is a non-selective broad-spectrum herbicide and is soil active (it is a post emergent but has some residual control). It will also kill Bermuda grass.

Acknowledgements:

The Duval Extension Office would like to recognize the Duval Ag. and Natural Resources Committee, Duval ranch owner, Mr. Noe Flores and family, the Duval USDA Office, and the Texas AgriLife Extension Range Specialists, Dr. Megan Dominguez and Bob Lyons, Cesar Kleberg Wildlife Research representative, Aaron Tjelmeland, and the Brooks County Extension Office for their support in assisting with the planning and implementation of this important issue to local landowners.

This demonstration will continue this next year as more results are needed for this project.

2011 Brush Country Ranch and Range Seminar

A ranch/wildlife seminar was presented by the Duval and Jim Wells County Extension offices. The seminar was located at the Agua Poquita West Ranch located six miles south of Benavides on Hwy 339 South and was implemented on June 25, 2011. Guest speakers included AgriLife Beef Specialist Joe Paschal on Drought Management Strategies, Duval County Agent Sam Gavito on Internal Parasite Management in Ruminants, and Triple C Drilling on Solar Powered Water Wells to Replace Windmills. These topics were discussed with the Duval and Jim Wells Ag Committees as pertinent topics for this meeting. There were forty landowners present at this seminar.

A satisfaction survey was implemented at the conclusion of this field day. The following are the results:
Participant Satisfaction Results

**Activity Title:** Ranch and Range Field Day (16194)

**Activity Date:** 06-25-11

**Activity Description:** Jim Wells & Duval Counties

**Number of Participants:** 50

Percentages based on 33 respondents to the survey (Response rate = 66%).

**Overall:**
- 97% of respondents were mostly or completely satisfied with the activity.

**Content:**
- 100% of respondents were mostly or completely satisfied with the information being what they expected.
- 100% of respondents were mostly or completely satisfied with the information being accurate.
- 97% of respondents were mostly or completely satisfied with the information being easy to understand.
- 97% of respondents were mostly or completely satisfied with the completeness of information given on each topic.
- 91% of respondents were mostly or completely satisfied with the timeliness of information given on each topic.
- 97% of respondents were mostly or completely satisfied with the helpfulness of the information in decisions about your own situation.
- 94% of respondents were mostly or completely satisfied with the quality of course materials.
- 87% of respondents were mostly or completely satisfied with the relevance of the examples used.

2011 Pesticide Private Applicator Trainings

Two pesticide private applicator trainings were implemented for Duval County landowners. The trainings were on April 20th in the Duval Extension Office and September 29th in the Brooks County Extension Office. A total of five individuals took the trainings from Duval and passed the TDA exam.
2011 Brush Country Water Well Screening

Relevance:
Landowners in Duval, Jim Wells, Jim Hogg, Brooks, Kleberg and Live Oak Counties use water for their livestock and homeowner use. It is up to the landowner to screen his respective water well for impurities. The water well program allows landowners to screen their individual water wells for contaminants which include arsenic, fecal bacteria, nitrates and salinity. Extension Agents in the 6-county area teamed up to coordinate a Multi-County Water Screening Workshop and Water Quality Awareness Program for well owners in their respective counties. In May, agents developed a news release and distributed to clientele and local media to inform well owners on the importance of screening water samples and testing wells for contaminants. Clientele were also informed of the upcoming water screening workshop and instructed on how to collect and submit water samples. Each agent targeted approximately 25 individual well owners to promote this program.

Screening Workshop:
On May 3, 2011, 125 water samples were collected and screened for the presence of fecal coliform bacteria, nitrates, arsenic and salinity. Mr. John Smith, Extension Program Specialist with the Texas A&M University Soil and Crop Sciences Department provided supplies and technical assistance in screening the water samples.

Results:
(Duval County)
A total of 18 water samples were submitted by Duval County cooperators and screened for bacteria, nitrates, arsenic and salinity during this program. The presence of fecal coliform bacteria was found in 11% of these samples. The average nitrate concentration for all samples screened was 8.1 ppm. The EPA maximum allowance is 10. The average salinity of all the samples was 948 ppm. Individual well owners with high levels of contaminants were alerted to those problems and provided with information on how to correct them or to simply avoid use of that water.

The 2012 Water Screening Workshop is scheduled for May.
Making a Difference 2011
The 2011 Duval County 4-H and Youth Development programs were implemented by the Duval County Extension Office, Benavides Independent School District, Duval Leadership Advisory Board, Adult Volunteers, and Project Leaders. The 2011 youth programs which include the following have been found to be relevant due to the demographics and rural area we reside in.

2011 Duval 4-H Youth Shooting Sports Outcome Plan Summary

Relevance:

The Duval 4-H Youth Program is relevant to youth due to Duval County having a large hunting industry that supports shooting sports education for our youth. Such as overall safe handling of a firearm, or bow and arrow, good sportsmanship, team work and shooting competitions. The Duval Extension Office is teaming up with individuals, local businesses, Duval Sheriff’s Department, Duval Commissioners Court and Duval County Attorney’s Office in developing a shooting range for educational and competitive events to assist our local youth and youth in surrounding counties.

Response:

Texas AgriLife Extension Service in Duval County helped develop the following activities to address this relevant issue:

- Planning with adults the 4h project calendar of events
- Adult volunteers receiving their respective coaching certificate
- Shooting Sports fundraising activities
- Educational classroom safety fundamentals instructions
- Educational shooting practices in rifle and bow and arrow thru out fiscal year at shooting range
- Educational exercises to teach if child is right or left eye dominant
- Educational exercises on the proper clothing and equipment needed
- Educational exercises to teach 4her’s to score their respective targets
- Educational exercises to teach the 4her’s the rules of the sport
- Educational exercises to teach good sportsmanship
- All participants preparing shooting range for district matches
Results:

The Duval Extension Office noticed a renewed interest in youth participating in the Duval 4-H program as we had a higher 4-H enrollment than previous years. We had five 4-Her’s come to practice as right hand shooters and found thru our eye dominance exercise that they were actually left eye dominant, and ultimately learned to shoot left handed. The junior and intermediate teams placed in first place as a team or as individuals at the 2011 District 12 Rifle and Archery match and the senior rifle team placed first which enabled them to be the first ever 4h rifle team to represent Duval County at the State match in Rosenberg. The coach is from Freer and the team was from Benavides and it was well noticed by all that this is a county 4-H effort with this shooting project. This shooting sports project also helped the local communities to understand that 4-H was more than showing animals at the county fair. This project also showed how the Freer, San Diego and Benavides communities all came together in support of the 4-Her’s and families involved.

Acknowledgements:
The Duval Extension Service would like to recognize all of the adult leaders, business entities, coaches, Sheriff’s Department, County Attorney’s Office and the Duval Commissioners Court for their support in this youth project.

2011 Duval Youth Sports Fishing Educational Outcome Plan Summary

Relevance:
The Duval Youth Sports Fishing Educational Plan is relevant to Duval County youth due to the arid area we live in, the youth are not exposed to the fresh or salt water fishing sport. This program targets tenth grade students from Benavides High School and is supported by the High School Principal, Counselor, Ag. Science Teacher, and the Duval Game Warden. The plan is to educate the children on the Blue Gill fish and other components of sports fishing at the field trip in October.

Response:
The Texas Agrilife Extension Service in Duval County developed the following activities to address this youth issue.

- Planned topics, speakers and events with the High School Principal and Counselor, and Game Warden
- Educational exercise on laws and regulations, bag limits, sizes eligible for harvesting on fishing for various types of fish
- Educational exercise on safety when casting the rod and reel
- Educational exercise on using different types of bait or artificial lures
- Educational exercise on equipment needed for the tackle box
- Educational exercise on fishing the bottom of the water, on the surface or with a popping cork
- Educational exercise on different types of reels, strengths of line, setting the drag and matching the reel with the proper rod
**Results:**

The tenth grade students were given a retrospective post test to measure their respective knowledge gained on the sports fishing project. The results are as follows.

1) **12.5%** gained knowledge in understanding that you need a fishing license if you are under seventeen years of age.
2) **48%** gained knowledge in understanding that a blue gill is a fresh water fish.
3) **50%** gained knowledge in understanding that there is no limit on blue gill fish and no size limit requirements.
4) **57%** gained knowledge in understanding that the blue gill is the preferred food of the largemouth bass.
5) **9%** gained knowledge in understanding that the tackle box is used to carry most fishing supplies like hooks, floats, lures, pliers, etc.
6) **42%** gained knowledge in understanding that a blue gill can be caught using artificial lures or cut bait.
7) **50%** gained knowledge in understanding that a blue gill is a fish that can be eaten when it gets to one pound in size.

The results show that the kids on the most part new about fishing license and tackle boxes but gained significant knowledge on the blue gill fish. The High School Principal also caught her very first fish. She was very pleased with the program and suggested we continue an annual event with school.

**Acknowledgements:**

The Duval Extension Office would like to recognize the Benavides High School Principal, Counselor, Ag. Science Teacher, the Duval Game Warden, and Mr. Luis Beto Garza for allowing us to use his fishing pond and residence for this youth project.

**2011 Duval Youth Wildlife Program** – The 10th grade class from Benavides High School participated in the 3rd Annual Duval Youth Wildlife Program. The class was educated this year on the Bob White quail and its eco-system. This was presented by a graduate student from Texas A&M Kingsville. This was done through a power point presentation and from the use of live male and female quail. The program also consisted of the students learning to score deer antlers thru the Boone and Crockett scoring system. The kids did hands on scoring using deer mounts. This presentation was presented by the Duval Extension Agent.
2011 Duval Horsemanship Clinic – Thirteen kids from Duval, Brooks, Jim Wells and Zapata Counties participated in a two day horsemanship clinic provided by the equine science department in College Station. This event occurred at the Saenz residence in San Diego. The kids learn proper riding and reining techniques to help them to compete at the District 12 4-H Horse Show.

2011 Duval Classic Prospect Show – On November 12 and 13, 2011, 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, 185 animals were exhibited so as to prepare themselves for their county fair or major livestock show.

2011 District 12 Rifle Match – The Duval Extension Office helped host the District 12 Rifle Match in Benavides on May 14, 2011. There were 109 4her’s who participated from District 12 this year.

2011 District 12 Archery Match – The Duval Extension Office helped host the 1st Annual District 12 Archery Match in Benavides on May 15, 2011. There were 65 4her’s from District 12 who participated in the FITA and 3-D archery match.

2011 Duval Shooting Sports Fundraiser – The Duval Shooting Club helped host a fundraiser to benefit the Duval 4H Shooting Club on October 29, 2011 at the Duval County Park. The event raised $29,000.00 from the cook-off, shotgun shoot, archery 3-d shoot and the horseshoe tournament. The event was collaborated with the Duval Sherriff’s Department and the Duval County Attorney’s office. The Shooting club gave a check to the Sherriff’s Department for $3000.00 to go to the Toy’s for Tots Program.

2011 Ag. Fair – 4th grade elementary students from Freer and San Diego attended the Ag Fair in Alice May 11 and 12, 2011. Students learn about ag awareness in beef, cotton, dairy and wildlife.

2011 Duval Take a Stand – The counselor for the Benavides Elementary presented the Texas Agrilife Extension Curriculum on bullying called, Take a Stand, to the 5th and 6th grade students once a week, in the fall of 2011. The program is continuing with the 3rd and 4th grade students in the 2012 fiscal year.

2011 Duval Chess Club – The Duval Extension Agent is teaching twelve Benavides Elementary students the game of chess during the week from 2:30 pm to 3:30 pm. The Principal believes it helps the students to think and strategize better which will help them achieve better scores in other subjects such as math.
2011 Duval 4H Golf Challenge Club – The Duval Extension Agent is assisting with the new 4-H Golf Project. Ten 4-Her’s have signed up for the project and the goal is to have them compete at the 1st Annual District 12 Golf Match in Alice. All of the kids are learning this life skill from scratch.

2011 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, 2012.
Texas AgriLife Extension Service
Duval County

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