

TEXAS A&M
AGRILIFE
EXTENSION



Extension Education in Clay County
Making a Difference

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Without regard to race, color, sex, religion, national origin, age, disability, genetic information, or veteran status.
The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating*

The Texas A&M AgriLife Extension Service has long been dedicated to educating Texans. Extension education evolved nationwide under the 1914 federal Smith-Lever Act, which sought to extend university knowledge and agricultural research findings directly to the people. Ever since, Extension programs have addressed the emerging issues of the day, reaching diverse rural and urban populations.

In Texas, all 254 counties are served by a well-organized network of professional Extension educators and some 100,000 trained volunteers. Extension expertise and educational outreach pertain to the food and fiber industry, natural resources, family and consumer sciences, nutrition and health, and community economic development.

EXTENDING KNOWLEDGE *Providing Solutions*

Among those served are hundreds of thousands of young people who benefit annually from Extension's 4-H and youth development programs.

Texans turn to Extension education for solutions. Extension agents and specialists respond not only with answers, but also with resources and services that result in significant returns on the public's investment. Extension programs are custom-designed for each region of the state, with residents providing input and help with program delivery. Here are just a few highlights of Extension impacts on this county and its people.

Clay County – Summary of 2016 Educational Contacts

Total Contacts: 33,732

Educational Events Contacts – 4,121

Sherri Halsell Contacts – 1,244

Bill Holcombe Contacts – 2,877

Contact Hours: 19,121

Hours: 4,517

Hours: 14,604

Other Contacts – 26,022

Individual Contacts - Direct: 856

Individual Contacts – Indirect: 19,663

Newsletter – 2,544

Editions – 65

Educational Resources – 392

Individual Contacts – Volunteers – 2,502

Cattle Trails Cow-Calf Conference 2016 Summary Report

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Oklahoma and Texas are famous for their cattle heritage. A large part of this heritage was the cattle drives. Cattle drives in the late 1800's moved millions of head of cattle from central and south Texas, through western Oklahoma, to the railheads in Kansas and in some cases as far north as Montana. Two of the more famous cattle trails were the Chisholm Trail and the Great Western Trail. The Chisholm Trail started in central Texas and crossed the Red River northwest of Nocona, Texas. It moved up through central Oklahoma near the towns of Waurika, Duncan, and Oklahoma City. The Great Western Trail began near Bandera, Texas and moved cattle through central Texas passing east of Abilene, Texas. The trail crossed into Oklahoma at the historic Doan's Crossing, near Vernon, Texas and proceeded through Western Oklahoma to its conclusion near Dodge City, Kansas.

The land area between these two cattle trails still record cattle movements. Today, it is either in the mode of cow-calf operations or stocker cattle movements. This area is now the home of the Cattle Trails Cattle Conferences.

The Cattle Trails Cattle Conferences are joint efforts between Oklahoma Cooperative Extension Service and Texas A&M AgriLife Extension Service. The vision of its planning committee has been to create two annual conferences that will include up-to-date information on topics that will influence cattle profits. The two conferences include a wheat and stocker cattle conference in the late summer and a cow-calf conference during the winter. The first of these conferences, the Cattle Trails Stocker Cattle Conference was held in July 2010. On December 1, 2016, the sixth annual Cattle Trails Cow-Calf Conference was held. In fact, this was the fourteenth overall Cattle Trails Cattle Conference. In effect, these conferences are designed to assist cattle owners and operators in driving their cattle to profits. This report details the December 2016 cow-calf conference held in Lawton, TX.

Planning the Program

The planning committee began meeting in late winter of 2015/16 for this conference. The group met, developed the agenda, initiated the promotion, and designed the evaluation of the conference. The registration fee was \$25 per participant. This included a noon meal, break



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refreshments, and material of the topics discussed.

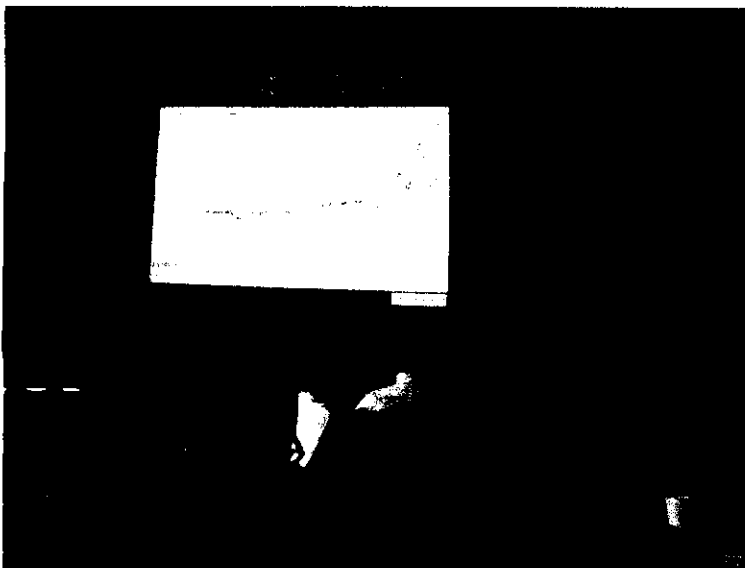
Promotion for the program began in October 2016. A news release was developed and circulated across Oklahoma and Texas. An example is included in the appendix. Interested people were encouraged to preregister by phone or by email. The conference promotion material was included on a website for easy access (<http://agrilife.org/txrollingplainsagronomy/2016/10/27/cattle-trails-cow-calf-conference/>). The news releases were included in county Extension newsletters. Additionally, personal invitation letters were sent to approximately 250 producers. Registrations prior to and at the conference totaled 39 producers, 2 media, 6 speakers, 10 sponsors, and 7 committee members for a total attendance of 64 people. The location facility was paid for this many participants.

Funding for the conference was accomplished via two methods. First, participants were charged a \$25.00 registration fee. This helped to cover the meals, refreshments, and brochures. Second, sponsors were solicited to support the conference at various levels of support of their choosing. These included the Signature sponsor, Platinum sponsor, Gold sponsor, Silver sponsor, or Bronze sponsor.

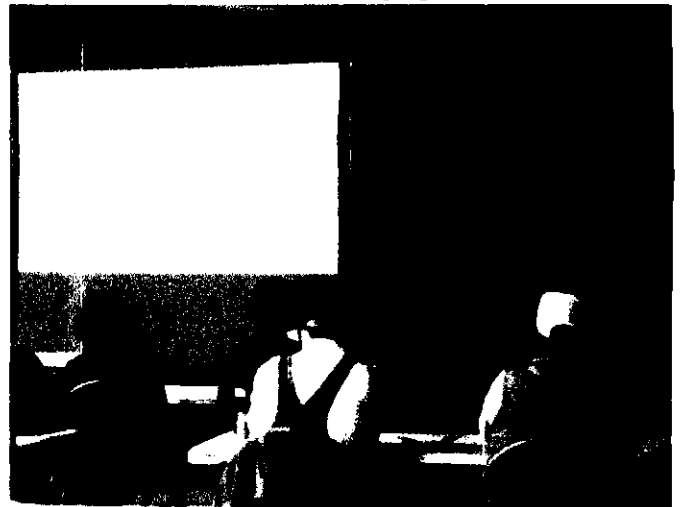
Each level carried incentives for the sponsors, but varied in the level of dollar support. This is outlined in the addendum.

Ten agri-businesses choose to support the conference. These included: Platinum Sponsor – Ag Risk Management, Gold Sponsors – Elanco, Lawton Co-op, Livestock Nutrition Center, Multi-Min, and Silver Sponsors – Farm Credit of Central Oklahoma, M & M Trailer Service, LLC, Oklahoma Farm Bureau, Producers Trading Company, Comanche Livestock Auction. In addition, Oklahoma Cattleman’s Association provided underlying support.

The Program



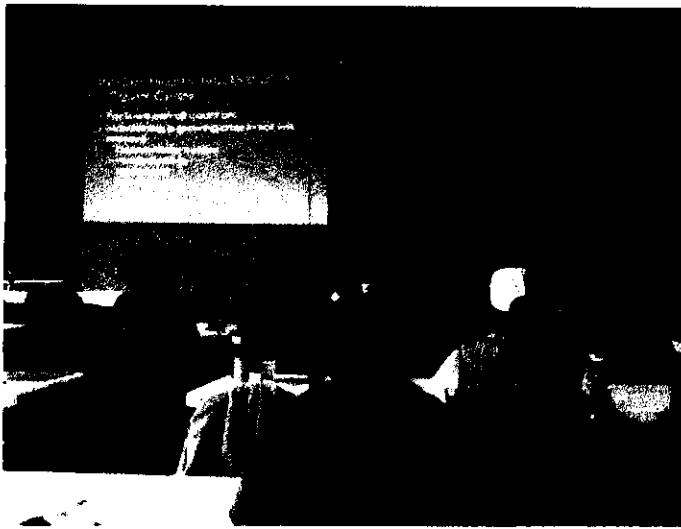
Comanche County (Oklahoma) Extension Educator, welcomed the audience and introduced the first



Each member of the planning committee played a major role during the conference. These roles included handling the registration tables, emceeding various parts of the program, and speaking during the program.

At least 19 cattle producers attended the conference based on evaluation. Obviously, the participants were from Oklahoma and Texas. Based on evaluation results, the average participant managed 1,425 acres of pasture annually and ran an average of 130 head of cows annually. Each year, the conference has a stronger agenda than before. This conference was no different, with this agenda including speakers who are considered the strongest across the country. Greta Meisner, the

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presenter. Dr. Darrell Peel, Professor and Extension Livestock Economist with the Oklahoma Cooperative Extension Service, Stillwater, Oklahoma, presented beef cattle market outlook and update. This was followed by Dr. Ted McCollum, Professor and Extension Beef Cattle Specialist, Texas A&M AgriLife Extension Service, discussing production risk management and the importance of efficient resource utilization. Dr. Ryan Reuter, Associate Professor of Animal Science, Oklahoma State University, Stillwater, Oklahoma followed with his explanation on maximizing forage resource and cow-calf operation. This was followed by Mr. Gary McManus, Oklahoma State Climatologist discussing weather outlook on the

southwest Oklahoma and north Texas regions. Following lunch, Dr. Jason Warren, Soil and Water Conservation/Management Extension Specialist with the Oklahoma Cooperative Extension Service, Stillwater, Oklahoma, discussed cover crop utilization for forage production. Finally, Dr. Barry Whitworth, Food/Animal Quality & Health Southeast Area Veterinarian from Oklahoma Cooperative Extension Service, Ada, Oklahoma, discussed last minute preparations for the Veterinary Feed Directive.

Evaluating the Program

To finalize the program, participants were asked to provide their candid responses to an evaluation. **26 evaluations were returned.** These results were compiled following the conference and are provided below.

The first three questions were scaled one to five with one being poor and five being excellent.

1. How would you rate the quality of speakers? **4.58** (Frequency: 1=0 observations; 2=0; 3=0, 4=11; 5=15)
2. How would you rate the facilities? **4.46** (Frequency: 1=0 observations; 2=0; 3=3, 4=8; 5=15)
3. How would you rate the overall conference? **4.5** (Frequency: 1=0 observations; 2=0; 3=0, 4=13; 5=13)

Of particular note on their ranking of the overall conference (question 3), no surveys rated the conference below 4.

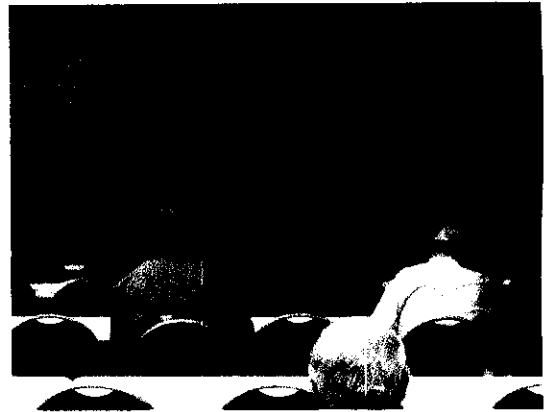


The fourth question captured whether the participants felt as if they would make changes to pending production and/or reinvesting plans based on the information they received at the conference. The question was scaled such that 1 represented "definitely will not", 3 equaled "undecided" and 5 was "definitely will". Frequency of responses included: 1=0; 2=0; 3=8; 4=15; and 5=3.

Based on these results, 69 percent expected to, at least minimally, change their production and/or marketing plan based on the information they received at the conference.

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Based on the specific respondents that said they would at least minimally change their plans and the average number of cows ran annually, a financial impact figure was determined. It was assumed that those that indicated a 5 on question 4 (definitely would change their plans) would increase their net income \$15 per cow managed. Likewise, for those respondents indicating a 4, it was assumed that an improvement of \$10 per cow managed. These changes would be in the form of better marketing, risk management, pasture management, etc. Given these hypotheses,



The financial impact of attending the Cattle Trails Cow-Calf Conference was estimated to be \$1,043 per respondent, or the economic impact of the conference was \$40,690 to the region.

Finally, the evaluation included three open-ended questions including 1) What were the main benefits you received from the conference; 2) What would improve the conference; and 3) Additional comments.

Summary

The December 2016 Cattle Trails Cow-calf Conference proved to be an outstanding program. Participants were particularly complementary based on their evaluations. Additionally, the program provided information such that 69 percent of the evaluation responders intended to make a change to their current production and/or reinvestment plans that should equal to an estimated \$1,043.

The Cattle Trails committee members from Texas A&M AgriLife Extension and Oklahoma Cooperative Extension have teamed to provide clientele from a common geographic area separated by the Red River a beneficial and impactful program.

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2016 Clay County Beef Cattle Management Plan

Developed by Bill Holcombe,

County Extension Agent – Ag and Natural Resources Clay County

Relevance

Cattle and livestock production is the primary economic factor in Clay County. Beef cattle production in 2015 accounted for \$48.925 million in the Clay County economy; in addition milk cattle production provided another \$4.4 million to the county. Based on the high value of the Cattle Industry to Clay County, it is imperative that programming and education efforts target these producers to both maximize and build on the knowledge, education, and production practices of producers in Clay County. In addition, coming out of the historic drought of 2011-2014, many producers in the area had concerns and issues regarding how to best get their ponds and stock tanks back up to production levels that are necessary as well as controlling problems such as algae and aquatic vegetation. Also, with the increased rains of 2015 and into 2016, hay production has surged in the county and plays a tremendous role in the cattle industry in Clay County.



Response

In order to properly address concerns and issues that producers are dealing, it was decided by the Clay County Beef Committee as well as consultation with Clay County Farm Bureau and the Little Wichita Conservation District to target a variety of areas regarding the cattle industry in Clay County on multiple fronts. One of the chief concerns this year was the declining prices in the cattle market. In order to address this we targeted several educational programs to address these specific issues, several cattle market outlook programs were held both in the county and as a multi-county group in order to better prepare the attendees for what we expected the market to do. In addition, production efficiency was targeted as a topic in regard to forage production, herbicide use and efficiency, brush and weed control, marketing strategies, cattle breeding, pond management, and body conditioning. In addition, we began a multi-year result demonstration on mesquite brush control on the Scaling Ranch.



- Clay County Spring Ag Seminar-February 22, 21 participants
- Clay County Pond Management Seminar-March 28, 19 participants
- Cattle Trails Cow Calf Conference-Dec 1, 85 participants
- Cattle Trails Wheat Stocker Conference-June 26, 85 participants
- North Region Beef and Range Workshop- August 10, 41 participants
- Clay and Montague County Hay Show-October 2, 16 participants

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- Clay and Wichita County Beef Cattle Seminar- September 13, 35 participants
- Clay and Montague County Predator Control Training-April 20, 22 participants

Results

• A variety of teaching methodologies were utilized to conduct this program including use of videos, lectures, demonstrations, slide presentation, tours and lab practicum. Direct feedback was utilized to assess program quality and to identify rate of adoption and knowledge gained. Upon completion of each program, participants also completed an extensive retrospective post evaluation. Program evaluations included the following data (rating based on the following scale: 4 = Superior; 3 = Good; 2 = Average; 1 = Poor):



	Program Content	Mean Before	Mean After	Percent
1	<i>Importance of sprayer calibration</i>	2.24	4.00	58.7%
2	<i>Decision aids available to determine least cost rations that meet the animal's needs. (osu cowculator)</i>	1.38	3.10	57.3%
3	<i>Reduction in fertilizer requirements of native species compared to introduced species</i>	2.38	4.00	54.0%
4	<i>Herd health and its impact on pregnancy rate and calving</i>	1.48	3.00	50.7%
5	<i>How a cow's body score affects reproduction</i>	2.15	3.60	48.3%
6	<i>How to utilize body condition scores to</i>	1.95	3.30	45.0%
7	<i>Knowledge level - Weed identification/c control</i>	2.20	4.20	50.0%
8	<i>Determining what works best for your calving season</i>	2.00	3.24	41.3%

Of the 20 participants who returned post surveys:

100% (20 out of 20) of the participants said they were satisfied with the program.

95% (19 out of 20) of participants say they have a better understanding of importance of sprayer calibration.

85% (17 of 20) Intend to directly apply information learned from these programs.

Acknowledgements: Special thanks to the following presenters for their time and expertise Stan Bevers, Ted McCollum, Dr. Ron Gill, Bob Lusk, Dr. James Rogers, Wilson Scaling, and Dr. Hugh Aljoe. In addition, appreciation is expressed to the agriculture/beef and forage committees Clay County, the Little Wichita Conservation Board, and Clay County Farm Bureau for their guidance and support of Extension programming within the county.

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Future Plans

We will continue to conduct our programming efforts to develop and enhance the knowledge and skill levels of our producers as well as to better prepare them for market and environmental changes and fluctuations. With as big of an economic impact as the beef and forage production industries have in Clay County, it is imperative we continue to educate and work with these producers.

VALUE

Livestock Production



Texas A&M AgriLife Extension programs targeted to large- and small-scale livestock producers help generate safer food and fiber products with maximum efficiency. The result is quality, consistent, affordable products and industries that support the state's rural economies.

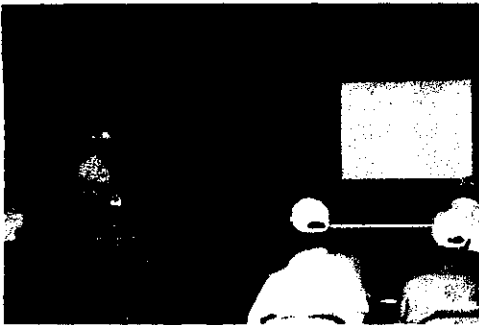
2016 Clay County Horticulture/Pecan Plan

Developed by Bill Holcombe,

County Extension Agent – Ag and Natural Resources Clay County

Relevance

While Cattle and Wheat production are dominant agriculture areas in Clay County, there is also a large segment of the county that produces fruit and nut trees. Predominantly these growers grow either Pecan or Peach trees, with the recent history veering towards pecan production. A large number of pecan orchards have been planted on the north end of the county to go with the historical presence of peach orchards in that area. Also, there is a large area of farm to table produce production that is grown in Clay County and sold to both Wichita Falls and Dallas/Ft Worth. In addition, with the return of rainfall to the area, many home owners are once again taking an interest in ornamental plants and landscaping around their property.



Response

In order to properly address the need for information among both the production side of the horticulture business as well as the homeowner interest, it was necessary to break them up into target areas. For the production based side, I focused with my committee on organizing field days and targeted site visits to work with producers and address their needs. On the home owner front, I concentrated heavily on getting my name out to the public as a resource and conducting site visits for everything from tree questions, to pest identification, to lawn care, and weed control. In addition, I wrote monthly horticulture columns for the local paper educating readers on horticulture questions.

- Clay County Pecan Field Day, May 12, 52 participants
- Clay County Pecan Field Day, November 17, 31 participants
- Production Site Visits, 41 visits
- Home owner site visits, 29 visits
- Horticulture focused Newspaper Articles, 13



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Results


• A variety of teaching methodologies were utilized to conduct this program including use lectures, demonstrations, slide presentation, and tours. Direct feedback was utilized to assess program quality and to identify rate of adoption and knowledge gained. Upon completion of each program, participants also completed an extensive retrospective post evaluation. Program evaluations included the following data (rating based on the following scale: 4 = Superior; 3 = Good; 2 = Average; 1 = Poor):

Your understanding of ...	Mean After	Percent Change
importance that variety plays in pecan production	3.33	42.3%
The role that site selection plays when planting an individual tree or orchard	3.61	48.0%
The importance of controlling and responding to major pests in pecans	3.47	41.0%
integrated pest management works	3.22	33.3%
importance of nutrition to a pecan crop	3.47	39.3%
fertilizers support both tree health and nut production	3.53	37.3%
The importance of early response to more destructive pests	3.38	35.7%

Table: Pre Means, Post Means & Percent Change

VALUE

Crop and Forage Production Education



Extension programs in crop production promote best practices that lead to reduced irrigation, safer pest management, and improved profitability of agricultural enterprises. This benefits Texas as a whole by contributing to the quality and quantity of water resources and enhancing both agricultural competitiveness and rural economies.

Of the 20 participants who returned post surveys:

100% (20 out of 20) of the participants said they were satisfied with the program.

95% (19 out of 20) of participants say they have a better understanding of importance of pest control.

85% (17 of 20) Intend to directly apply information learned from these programs.

Acknowledgements: Special thanks to the following presenters for their time and expertise Bill Ree, Charles Rohla, Jake Montz, Tim Montz, Jill Montz, Montz Pecan Company, Monte Nesbit, Kevin Roberts, and Helena Chemical. In addition, appreciation is expressed to pecan committee and Clay County Farm Bureau for their guidance and support of Extension programming within the county.

Future Plans

We will continue to conduct our programming efforts to develop and enhance the knowledge and skill levels of our producers as well as to better prepare them for market and environmental changes and fluctuations.

2016 Clay County Texas Quail Index

Developed by Bill Holcombe,

County Extension Agent – Ag and Natural Resources Clay County

Relevance



Quail have historically been an important species in Clay County. They have traditionally been important from a hunting perspective as well as a food source for predatory species living in the Rolling Plains area. Hunting is becoming a more and more important economic factor in Clay County and interest in a healthy quail population has increased as interest in hunting has increased. In addition there are many people who have grown up in the Clay County area that remember always seeing Quail until recently and have a strong interest in seeing the population return.

Response

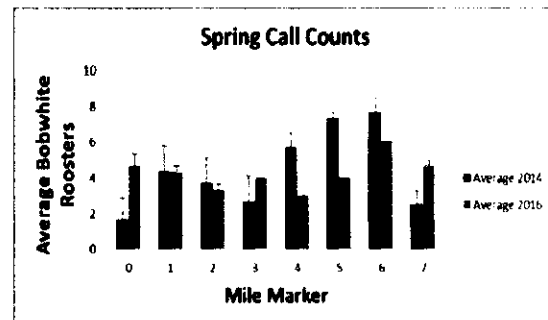
Methods

Texas Quail Index(TQI) participants must first establish a data collection transect: a series of 8 points (numbered 0-7) on the chosen study site where all subsequent demonstrations will be conducted. These points must be accessible, spaced at least a mile apart, and located away from distracting traffic or equipment noise. These data points were used to implement the entirety of the TQI program. From these points we were able to collect data ranging from Spring Call Counts, to Dummy Nest Survivability, to game camera's recording predators that were present, to habitat evaluation, and roadside bird counts.

Results

Spring Call Counts

The statewide average this year was lower than last year, with 3.2 bobwhites heard per stop compared to 4.2 in 2015. The past two years both compare favorably to 2014, when drought conditions produced the lowest statewide average recorded for the Quail Index—2.5 bobwhites per mile marker.



Dummy Nests

Statewide dummy nest survival at the 4-week mark was about 10% lower this year than last year (48% survival vs 60% in 2015). Given that quail eggs require 23 days of incubation to hatch, a nest will have to remain unpredicted for 3-4 weeks for a chance at a success. Clay County itself had a dummy nest survival rate of over 40% which is a good bench mark for quail survival.

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Predator Surveys

Using game cameras, we were able to track and follow what animals were putting predatory pressure on quail in Clay County. In Clay County, there were a total of 10 predators observed, with hogs being the most common 80%.

Habitat Evaluations

The statewide average habitat evaluation value was **0.70** for bobwhites this year. This is slightly lower than the 2015 average of **0.72**, but higher than the 2014 average of **0.67**. The average habitat evaluation value for Clay County in 2016 was **.64** and ranged from **.59** to **.77** for individual mile markers. This places it in the 15th percentile statewide. The two greatest limiting factors in habitat quality were nesting cover and woody cover. Figure 9 provides a comparison of Clay County's evaluation values this year versus 2014.

Roadside Counts

In 2016, the average number of bobwhite quail counted per mile was **5.1**—identical to the value recorded last year. Both 2015 and 2016 represent a significant improvement over 2014's **2.0** quail per mile average. Bobwhite densities remain highest in the Rolling Plains ecoregion with just over **8** quail per mile. Other data collection agencies report similar results: the Texas Parks and Wildlife Department set a new record for the Rolling Plains this year with **50.2** quail per 20 mile route, and the Rolling Plains Quail Research Ranch recorded more than **500** quail over the same distance. Individual counties varied widely, however. Several recorded no quail at all while the highest averaged more than **15** birds per mile. The average number of quail recorded per mile in Clay County was **1.43**, which places it in the 30th percentile statewide.

Discussion and Conclusions

Based on the results of the spring call counts, the average number of bobwhite roosters was fair which represents good breeding effort given the ongoing drought. Available nesting sites are there as Clay County exceeded the threshold of 300 nesting sites per acre, which indicates quality nesting habitat. However, the Clay County site was lower the statewide average on dummy nest success rate. This may indicate that predation is a limiting factor for nesting quail on this site. This is also a result of the past two years of higher than normal rainfall which would also create higher than normal predator pressures. The limiting factor identified by the habitat evaluations is woody diversity so promotion of the growth of a more diverse woody plant species could benefit quail by providing more cover from predators. In most locations surveyed mesquite was the woody cover most available to quail. Although mesquite can be used as escape cover depending on the individual plant, it is often not ideal to provide good protection from hawks. In addition, Mile Marker 3 was fairly close to a river which we feel increased the predator pressure which attributed to the lower nest success at this site. Raccoons and wild hogs are nest predators of quail and were numerous on this site; therefore, control of feral hogs and raccoons may also be warranted here. Many of the techniques employed during the Texas Quail Index are best used to evaluate a single property over time. This means collecting the same data from the same locations year after year for comparison. The conclusions we can draw using just one year's data are limited; however, it is our hope that the landowners and managers can see the value in collecting these types of data to monitor their quail populations and evaluate their management activities for the benefit of quail populations on their property. The forecast for winter 2016 through spring 2017 calls for average rainfall. If this holds out the quail population could be poised to continue to recover from the droughts of the past years.

Acknowledgments

I would like to thank Dr. Dan Bolin for allowing us to utilize the Eagle Wind Ranch to run the Quail Index Study. I would also like to thank Holt and Conner for their many hours of help setting up the Quail Index Study and collecting data. Finally, I would like to thank Dr. Dale Rollins and Amanda Gobeli for their leadership in the program and their countless hours spent summarizing the data for the Quail Index Study.

VALUE

Wildlife Management

Texas A&M AgriLife Extension Service programs about fish and wildlife teach participants how to effectively manage these valuable resources. Hunting, fishing, and wildlife watching contribute approximately \$8 billion to the state's economy annually, supporting 139,000 jobs in Texas and enhancing the quality of life of all residents.

Agriculture and Natural Resources

2016 – Progress Report Oil Based Basal Treatments on Mesquites

Site Location: Clay County
Cooperators: Wilson Scaling

Authors:

James Jackson, Extension Program Specialist, Stephenville
 Bill Holcombe, County Extension Agent, Clay County

Summary

A site was established in 2016 to research the efficacy of labeled and experimental herbicides when applied to mesquite as basal treatments when mixed with basal oil as the carrier agent. Initial evaluations were conducted at approximately 90 days after treatment where percent defoliation was analyzed and percent mortality will be evaluated at one and two years after treatment.

Objective

Mesquite is the most common noxious plant invading Texas Rangelands; it can also reach such densities that can reach such proportions as to severely limit desirable forage growth by competing for nutrients, water, and sunlight. In addition, large quantities of mesquite bean consumption over a period of time (several months) can be toxic to grazing animals.

The objectives of this study are to compare and document the effectiveness of several new herbicides (Method and Invora) to the current standard of Garlon mixed with basal oil. The second objective of this project is to analyze these herbicides mixed with basal oil as the carrier agent instead of using the common standard treatment of triclopyr mixed with diesel. In the event any of these treatments deliver an acceptable rate of mortality it will be looked at as a possible recommendation for mesquite control.

Materials and Methods

Mesquite individual plant basal treatments (IPT) were applied in 2016 on the Wilson Scaling property. Basal treatments were applied using C02 sprayer equipped IPT spray wand with a Conejet X3 nozzle. All stems of the mesquites were sprayed to the point of wet but not dripping 12” up the stem. Each plant that was treated was tagged and will be evaluated at 90 days after treatment and at 1 and 2 years after treatment.

Table 1. Rates of application for Clay County mesquite treatments applied to mesquite 2016. Methylated Seed Oil was added to foliar treatments at 1.0% v/v.

Treatment No.	Herbicide	IPT Rate (v/v)	Material/plot	TSV	Tag Numbers
1	Method	5%	47 mL	32 oz.	846-862
	Basal Oil	95%	898 mL		
2	Method	7.5%	70 mL	32 oz.	863-881
	Basal Oil	92.5%	875 mL		
3	Method	10%	94 mL	32 oz.	882-900
	Basal Oil	90%	854 mL		
4	Invora	7.5%	70 mL	32 oz.	901-916
	Basal Oil	92.5%	875 mL		
5	Invora	10%	94 mL	32 oz.	917-931
	Basal Oil	90%	854 mL		
6	Method	5%	47 mL	32 oz.	932-945
	Garlon 4	15%	141 mL		
	Basal Oil	80%	756 mL		
7	Method	10%	94 mL	32 oz.	946-959
	Garlon 4	10%	94 mL		
	Basal Oil	80%	756 mL		
8	Method	5%	47 mL	32 oz.	960-971
	Arsenal	2%	18 mL		
	Basal Oil	93%	880 mL		
9	Method	7.5%	70 mL	32 oz.	972-980

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10	Arsenal	2%	18 mL		
	Basal Oil	90%	903 mL		
	Garlon 4	25%	23 mL	32 oz.	981-990
	Basal Oil	75%	709 mL		

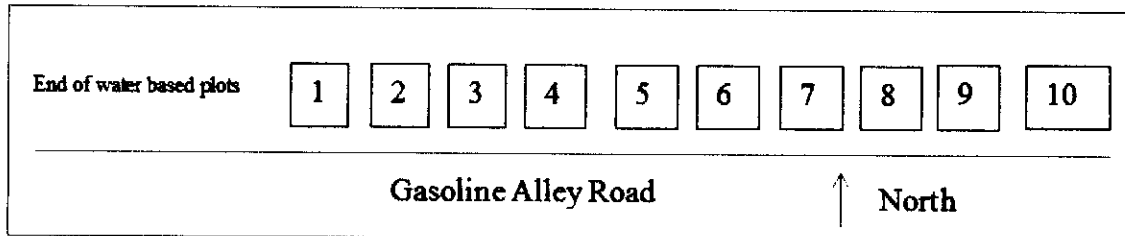


Figure 1: Plot layout of the Clay County basal treatment plots using basal oil that were established in 2016.

Results and Discussion

An evaluation was conducted on September 27, 2016 to estimate percent defoliation; data is listed in table 3. Evaluations for percent mortality will be collected at the one and two year after treatment evaluations and will be reported in the 2017 progress report and 2018 final report.

Table 3. Rates of applications and percent defoliation at 10 weeks after treatment for mesquite control trial in Clay County

Treatment.	Herbicide	IPT Rate (v/v)	Material /plot	TSV	Tag Numbers	% Defoliation 10 WAT
1	Method	5%	47 mL	32 oz.	846-862	100
	Basal Oil	95%	898 mL			
2	Method	7.5%	70 mL	32 oz.	863-881	83
	Basal Oil	92.5%	875 mL			
3	Method	10%	94 mL	32 oz.	882-900	95
	Basal Oil	90%	854 mL			
4	Invora	7.5%	70 mL	32 oz.	901-916	60
	Basal Oil	92.5%	875 mL			
5	Invora	10%	94 mL	32 oz.	917-931	73
	Basal Oil	90%	854 mL			
6	Method	5%	47 mL	32 oz.	932-945	100
	Garlon 4	15%	141 mL			
	Basal Oil	80%	756 mL			
7	Method	10%	94 mL	32 oz.	946-959	100
	Garlon 4	10%	94 mL			
	Basal Oil	80%	756 mL			
8	Method	5%	47 mL	32 oz.	960-971	66
	Arsenal	2%	18 mL			
	Basal Oil	93%	880 mL			
9	Method	7.5%	70 mL	32 oz.	972-980	100
	Arsenal	2%	18 mL			
	Basal Oil	90%	903 mL			
10	Garlon 4	25%	23 mL	32 oz.	981-990	100
	Basal Oil	75%	709 mL			

Acknowledgements

This project was supported by Bayer Environmental Sciences, Clay County and the cooperating landowner.

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Agriculture and Natural Resources

2016 – Progress Report

Water Based Basal Treatments on Mesquites

Site Locations: Clay County

Young County

Cooperators: Wilson Scaling

Dustin Hudson

Authors:

James Jackson, Extension Program Specialist, Stephenville

Bill Holcombe, County Extension Agent, Clay County

Summary

Sites were established in 2016 to research the efficacy of labeled and experimental herbicides when applied to mesquite as water based basal treatments. Initial evaluations were conducted at approximately 3 months after treatment with the following evaluations being conducted at one and two years after treatment.

Objective

Mesquite is the most common noxious plant invading Texas Rangelands; it can also reach such densities where it limits desirable forage growth by competing for nutrients, water, and sunlight. In addition, large quantities of mesquite bean consumption over a period of time (several months) can be toxic to grazing animals.

The objectives of this study are to compare and document the effectiveness of several new herbicides (Method and Invora) mixed with water to the current standard of Garlon 4 mixed with basal oil. Currently this treatment off Garlon 4 mixed with basal oil serves as a treatment option for land managers want to avoid or are prohibited from using the standard treatment of diesel mixed with triclopyr for basal mesquite control.

Materials and Methods

Table 1. Rates of application for Clay County water based mesquite treatments applied to mesquite 2016.

Treatment No.	Herbicide	IPT Rate (v/v)	Material/plot	TSV	Tag Numbers
Clay County					
1	Invora	10%	95 mL	32 oz.	510-522
	MSO	1.0%	9 mL		
2	Invora	15%	141 mL	32 oz.	523-531
	MSO	1.0%	9 mL		
3	Invora	20%	189 mL	32 oz.	532-543
	MSO	1.0%	9 mL		
4	Invora	10%	95 mL	32 oz.	544-555
	MSO	10%	94 mL		
5	Method	7.5%	70 mL	32 oz.	556-571
	MSO	1.0%	9 mL		
6	Method	10%	94 mL	32 oz.	572-587
	MSO	1.0%	9 mL		
7	Method	15%	141 mL	32 oz.	588-600 800-804
	MSO	1.0%	9 mL		
8	Method	7.5%	70 mL	32 oz.	805-822
	MSO	10%	94 mL		
9	Garlon 4	15%	141 mL	32 oz	823-844

Agriculture and Natural Resources

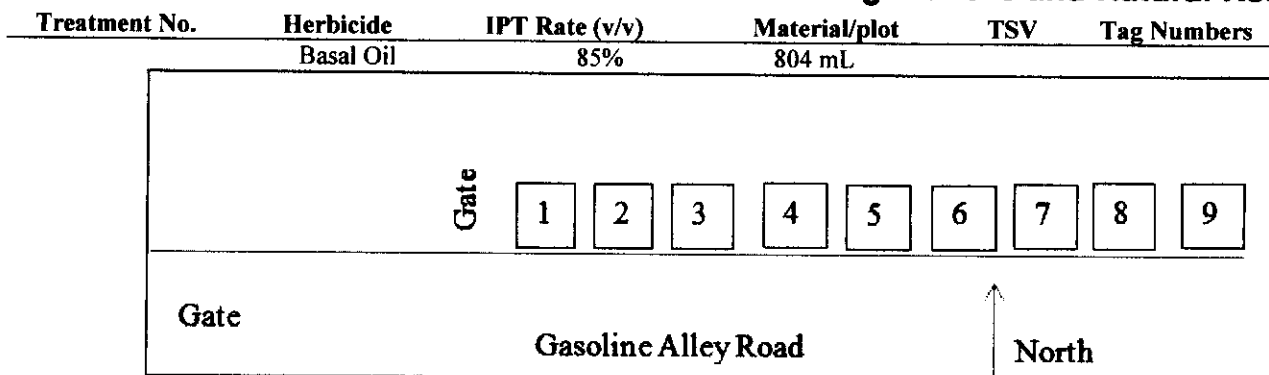


Figure 1: Plot layout of the Clay County water based basal mesquite treatments established 2016.

Results and Discussion

An evaluation was conducted at approximately 90 days after treatment to estimate percent defoliation on both sites; the data that was collected in this evaluation is listed in table 3. Evaluations for percent mortality will be collected at the one and two year after treatment evaluations and will be reported in the 2017 and 2018 progress reports.

Table 3. Rates of applications and percent defoliation for water based mesquite control trials in Clay County.

Treatment.	Herbicide	IPT Rate (v/v)	Material /plot	TSV	Tag Numbers	% Defoliation 10 WAT
Clay County						
1	Invora MSO	10% 1.0%	95 mL 9 mL	32 oz.	510-522	57%
2	Invora MSO	15% 1.0%	141 mL 9 mL	32 oz.	523-531	66%
3	Invora MSO	20% 1.0%	189 mL 9 mL	32 oz.	532-543	100%
4	Invora MSO	10% 10%	95 mL 94 mL	32 oz.	544-555	90%
5	Method MSO	7.5% 1.0%	70 mL 9 mL	32 oz.	556-571	100%
6	Method MSO	10% 1.0%	94 mL 9 mL	32 oz.	572-587	100%
7	Method MSO	15% 1.0%	141 mL 9 mL	32 oz.	588-600 800-804	100%
8	Method MSO	7.5% 10%	70 mL 94 mL	32 oz.	805-822	100%
9	Garlon 4 Basal Oil	15% 85%	141 mL 804 mL	32 oz.	823-844	100%

Acknowledgements

This project was supported by Bayer Environmental Sciences, Clay County, Young County and the cooperating landowner.

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Step Up and Scale Down Online - 2016

Summary developed by Sherri Halsell, County Extension Agent, Clay County

Relevance

According to a report by Susan Combs, Texas Comptroller, Obesity, a major risk factor for many chronic diseases, has reached epidemic proportions globally. A third of the world's adult populations were obese or overweight in 2005, and if current trends continue the share could reach 57.8 percent by 2030. The U.S. has already passed that milestone. The U.S. Centers for Disease Control and Prevention (CDC) reports that 63.2 percent of the U.S. adults were obese or overweight in 2009. And Texas is in even worse shape; fully two-thirds of Texans (66.7 percent) are overweight or clinically obese.

Response

After reviewing the data concerning obesity and other major factors for many chronic diseases, the Clay County Family and Consumer Sciences (FCS) Program Area Committee chose to adopt the *Step Up and Scale Down* plan in an effort to promote better health for county adults. In an effort to provide programming to address the issues of health, good nutrition and physical activity the committee adopted a variety of programming including:

- Online *Step Up and Scale down* (SUSD) is a 12-week weight management program that was designed to address two factors behind the obesity issue: physical activity and diet. Targeted towards adults, the program was offered in a group setting which allows participants to support and encourage each other. Weekly lessons covered the following topics:
 - Week 1 Scale Down by Setting Goals**
 - Week 2 Step up to a Healthy Plate & Fad Diets**
 - Week 3 Step Up to Label Reading**
 - Week 4 Step Up to Breakfast and Menu Planning**
 - Week 5 Scale Down with Moves to Lose**
 - Week 6 Step up your Hydration**
 - Week 7 Scale down by Finding your Motivational Mojo**
 - Week 8 Step up to Healthy Snacking**
 - Week 9 Scale Down with a Colorful Plate**
 - Week 10 Step up to Successful Socializing**
 - Week 11 Scale Down by Knowing Your Numbers**
 - Week 12 Step Up and Celebrate**
- Weekly Electronic Newsletters on good nutrition sent to 36 individuals.
- Weekly Facebook posts on healthy habits, 113 followers.

Results

Step Up & Scale Down results are shown below. 4 attended online class. 4 evaluations disrupted with 4 returned for pretest and 4 for posttest.

STEP UP AND SCALE DOWN	#	Total Pounds Lost	Avg. Lbs./ Participant (lbs.)	Highest Individual Loss (lbs.)
Online SUSD Class	4	4	1	2

4 Month Follow up Survey:

- ⊙ 100% (4 of 4) of the participants said they were satisfied with the SUSD program.
- ⊙ 100% (4 of 4) of participants say they now fill their plate at least half full with vegetables and fruits after completing the program.
- ⊙ 75% (3 of 4) of participants at least "sometimes" plan out meals and snacks after completing the program.
- ⊙ 75% (3 of 4) of participants are physically active for at least 5 times a week for 30 minutes.
- ⊙ In the 4 months since participating in SUSD the participants have lost at total of 37 pounds.
- ⊙ Additional changes made since completing SUSD:
 - "I eat better regularly."
 - "I don't buy sweets for the house."
 - "I eat more fruits and vegetables."
 - "I exercise more often."

Interpretation


Interpretation was presented to the commissioner's court and the Family & Consumer Science Program Area Committee.

Acknowledgements

Thanks are extended to the Family & Consumer Sciences Program Area Committee - Shirley Visentainer, Howard Beeler, Jan Slagle, Sue Woodson and Margo Grunseich and Odesa Appel, Extension Specialist for her role in support of the healthy life style programs.

VALUE

Obesity Prevention and Reduction



The Texas A&M AgriLife Extension Service engages children and adults in programs that teach them how to eat nutritious foods and engage in regular physical activity to promote health and reduce their risk for obesity. The Texas public benefits through a healthier population, reduced health care costs, and increased productivity.

Family and Consumer Sciences

Clay FCS Base Programs - 2016

Summary developed by Sherri Halsell, County Extension Agent, Clay County

Relevance

According to National Safe Kids, helmets can reduce the risk of severe brain injury by up to 88%, but only 45% of children wear bike helmets. Other studies from the organization found that nearly half of the hospitalizations related to bicycles are traumatic injury to the brain. Helmets should be considered an important part of bike riding.

- An *emerging issue* that presented itself during the 2014 year was bicycle safety.
- The city of Henrietta received a grant to create sidewalks around town to help students' safety walk to school.
- After the sidewalks were built many children were riding their bicycles to school but not stopping at intersections. There were many reports that drivers narrowly missed hitting these children.

Response

After reviewing the data concerning child bicycle safety and the need to wear helmets and the emerging issue of children riding to school without using safety precautions, the Clay County Family and Consumer Sciences (FCS) Program Area Committee chose to adopt the *Healthy Life Style for Youth* plan in an effort to promote better health and safety for youth. In an effort to provide programming to address the issues of health, physical activity and safety the committee adopted a variety of programming including: Bicycle Safety, Promotion of Physical Activity and Proper Hand Washing.

- ***Bicycle Safety Program*** - Presented on April 22, 2016 which consisted of lessons on bicycling for healthily exercise, rules of the road and bicycle safety with the need to wear helmet to the Henrietta Elementary students.
 - Task Force met 3 times to plan the Bicycle Rodeo. Previous year's evaluations were reviewed before planning. Specific *modifications* suggested by clientele include: Eliminating speaker that was not effective, incorporate more sessions with hands on learning experiences.
 - Sessions included: the importance of wearing helmets while riding a bike, knowing the rules of the road, the importance of physical exercise and that riding bikes is an excellent source, bike safety, brain injuries and bike maintenance check list. Then students bringing bicycles participated in a hands-on obstacle course to practice lessons learned in classroom.
 - Students without bikes participated in a hands-on pedestrian cross course and went to sessions on seatbelt safety and sports helmet safety.
 - **196** 3-5th grade students from Henrietta Elementary attended the program with **90** receiving new bicycle helmet, sponsored by Texas Medical Association, Henrietta PTO and Dr. T. David Greer.
 - There were **24** volunteers that helped with this program by contacting speakers, presenting sessions, guiding students from Elementary school to football field parking lot.
 - Halsell's duties included coordinating with Henrietta IDS; training volunteers; contacting speakers for the roll-over simulator, street light crossing and high school athletes to talk about the importance of helmets in their sport; recruiting sponsors and ordering helmet; taught the helmet fitting session and help fit helmets to student's heads.
- ***Mass Media Method*** -
 - A promotional news flier was sent to all 196 parents about the upcoming Bicycle Safety Program before the event.
 - After the event a parent newsletter (196) was sent to reinforce knowledge the students gained at the program. Parent newsletters were written and distributed to parents of Henrietta Elementary students on bicycle safety and youth diabetes.

Family and Consumer Sciences

- News articles were written and distributed to two newspaper outlets, one online newspaper and distributed to 6900. Articles included: Don't forget the Helmet, Bicycling safely for Good Health, National Nutrition Month and Healthy Lifestyle Choices.

Results

Bicycle Safety results are shown below. 210 attended program. 196 evaluations disrupted with 167 returned for pretest and 158 for posttest.

BICYCLE SAFETY	#	Minimum	Maximum	% Answered Correctly	Std. Deviation
Pretest Score	167	40	100	76.17	14.919
Posttest Score	158	20	100	83.73	15.454

Qualitative Data

- "I plan to wear a helmet when I ride my bike."
- "The obstacle course was the most fun."
- "I plan to be careful when crossing the street on my bike."
- "I didn't know there were rules for riding on the sidewalk."

Interpretation

Sheila Choate, S.H.A.C. Member & 4H Leader, presented an interpretation to the Henrietta School Board and S.H.A.C. Committee. The editor of Clay County Leader attended the Bicycle Rodeo to take photographs and printed them in the county newspaper the next week.

Future Plans

After reviewing evaluations the FCS Committee and Task Forces plan to continue to provide Healthy Life Style Programming in the county through a variety of education methods including presenting a *Youth Health Fair* and *Bicycle Safety Program* rotating year other year. To continue providing the *Proper Hand Washing Lesson* each year at the request of the Elementary Principle and plan for other educations methods that will enhance and increase impact of this program.

Acknowledgements

Thanks are extended to the Family & Consumer Sciences Program Area Committee - Shirley Visentainer, Howard Beeler, Jan Slagle, Sue Woodson and Margo Grunseich, Henrietta Elementary - Kendra Bennett, principle Jeanette Holding, nurse, Chelsea Hoff, PE teacher and Pennie Clevenger, music teacher, Henrietta S.H.A.C.; Dr. T. David Greer and Henrietta P.T.O for sponsoring the event and Bev Kelner, Extension Specialist for their role in support of the healthy life style programs.

VALUE

Obesity Prevention and Reduction



The Texas A&M AgriLife Extension Service engages children and adults in programs that teach them how to eat nutritious foods and engage in regular physical activity to promote health and reduce their risk for obesity. The Texas public benefits through a healthier population, reduced health care costs, and increased productivity.

4-H Family and Consumer Sciences (FCS) 2016

Summary developed by Sherril Halsell, County Extension Agent, Clay County

The Clay County 4-H Family and Consumer Sciences Curriculum (foods and nutrition, consumer life skills and clothing and textiles) is designed to assist youth with developing skills that help them become productive, responsible adults. The 4-H FCS projects are a strong component of the Clay County 4-H Program. Approximately 95% of the youth enrolling in these projects do so to prepare for competitions associated with each project area. Whether the youth are competitive or not, the curriculum is designed to assist youth with developing skills for life.

Listed below is an overview of the scope of 4-H Family & Consumer Science project work in the past three years.

4-H Foods and Nutrition

2016

- I recruited the 2016 Clay County **Youth Fair Foods Superintendent** to present a workshop on preparing and presenting food for the Clay County Youth Fair food competition. **Youth Fair** had 122 individuals participant with 155 items and 43 volunteers helping.
- By using emails and other technology, the 4-H FCS Program Committee was able to plan and organize FCS workshops, practices, leader trainings and contests and discussed the need to find ways to communicate using web based group sites for meetings in the future.
- The **4-H Food & Nutrition Leader training** in September focused on the Food & Nutrition Guidelines and the Rules for the county and district fashion shows. 6 leaders attended.
- **Two 4-H Food & Nutrition Workshops** in August and September with 52 participating. Training 4 junior/teen leaders on presentations for the workshop. Subjects taught by 4-H members included knife skills, measuring skills, how to make substitutions on a recipe, handwashing and interview tips. Ag Agent William Holcombe stepped up and conducted the workshops and county food show during FCS Agent Halsell's illness.
- **4-H Food Show, Food Challenge and Nutrition Quiz Bowl Competitions** – as a result of all project meetings, 14 participated in the foods the project, 12 participated in county food show, 6 participated in the district food show with one senior winning 1st and will compete at the State Food Show in June, 8 in the district food challenge.

4-H Consumer Life Skills

2016

- I conducted **4-H Consumer Life Skills Leader training** each year for 1-3 leaders. Leaders were trained on preparation for the consumer decision making contest, oral reasons presentation as well as the appropriate procedure for completing scorecards. Study topic provided by the State 4-H staff and District 3 contest planning committee were reviewed. 6 participated in the project practices.
- **4-H Consumer Life Skills project meetings** – approximately 4 per year began each

4-H and Youth Development

March and continued through April in order to prepare for the district contest. Four to ten youth participated each year. This year 3 participated at the district contest.

- Halsell is chairman of the 2016 District Consumer Contest and as a result totally rewrote the contest letter with updated rules and streamlined information.

4-H Clothing and Textiles

2016

- The **4-H Clothing Leader training** in February focused on the Clothing Guidelines and the Rules for the county and district fashion shows. Simple sewing projects were shared with leaders to use with small groups. 4 leaders attended.
- The **4-H Clothing/Story Board Workshop** in March with 15 attending. Halsell trained 4 junior/teen leaders on presentations for the workshop. Subjects taught by junior leaders included storyboard design, Duds to Dazzle, interview tips and characteristics of cotton.
- The **4-H Sewing Workshop in January** with 10 attending and 3 volunteers helped participants make a casserole dish carrier.
- **4-H Fashion Show Contest** – as a result of all project meetings, 6 participated in the clothing project, 5 participated in county fashion show, 5 participated in the district fashion show.



District Food Challenge



District Food Show



County Fashion Show

District Food Challenge

4-H and Youth Development

2016 Clay County 4-H Livestock plan

Developed by Bill Holcombe, County Extension Agent – Ag and Natural Resources Clay County

Relevance

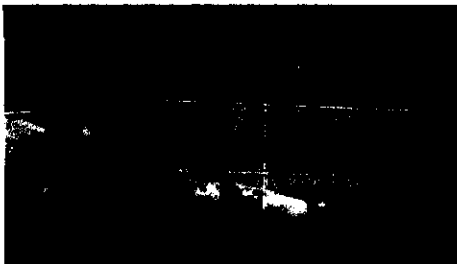
The Livestock portion of the Clay County 4-H program has traditional been a large focal point of the Clay County 4-H Program. We have members that participate not only in the County Livestock Show, but also in most every major livestock show in the state. In addition, livestock projects are often the impetus for many 4-Hers joining the program to begin with. With 4-H enrollment in Clay County having declined recently, it important that the livestock program be managed not only for the current youth involved, but also to continue to encourage and develop new 4-Hers into the program.



is

Response

With the current price of steers in the cattle industry, many families are shying away from raising beef projects which have traditionally been a large segment of the show project area, in addition most of our families now live within the city limits of their communities and thus do not have the land or facilities that such a project would entail. Due to these changes we have seen a decrease in the number of beef projects, and a large increase in the number of swine, lamb, and goat projects. Poultry and rabbit projects have held about the same. Due to this shift, we not only have large numbers of new people who have never raised a project animal, but we have families who would traditionally be familiar with beef projects that are now going into projects they have little or no experience with. So we have had to tailor our educational programs to focus more on these areas with the burgeoning participation in. IN addition, Clay County has a very large and passionate horse program which provides great educational and leadership experiences to its participants.



Results

With the agent change in 2015 in Clay County, livestock participation took a dip to begin the year but has rebounded. In 2016, we had 55 youth participated in the Clay County Jr. Livestock Show, in 2017; we will have 89 participants in the show. In addition, in 2016 we had 4 families participate in 4 major shows, whereas in 2017 we have 9 families entered into 6 major shows. In addition, in 2016 we have been able to grow knowledge level in the county by conducting county wide Lamb and Goat Clinics which each had 30+ attendees. Also, we held the 38th annual Texoma Beef Clinic to teach 4-H and FFA members about judging cattle, we had 52 participants at the event. In addition, on the horse side of things we had a successful County Horse show, District and State Horse Shows, and were successful in organizing several clinics and a 2 county Ranch Sorting event as a fund raiser and learning experience.



4-H and Youth Development

Topic	average level of understanding before (based on 1-4 scale)	average level of understanding after (based on 1-4 scale)	% Change
4-H livestock opportunities	2.1	3.9	85%
Knowledge of managing health in Lambs	2.1	3.87	84%
Goat Selection	2.5	4	60%
Judging Beef Cattle	2.71	3.87	43%
Goat/Lamb project Housing	2.8	4	43%
District and State Horse Opportunities	2.5	4	60%
Major Livestock Shows	2.5	3.65	46%

A variety of teaching methodologies were utilized to conduct this program including use of videos, lectures, demonstrations, slide presentation, and tours. Direct feedback was utilized to assess program quality and to identify rate of adoption and knowledge gained. Upon completion of each program, participants also completed an extensive retrospective post evaluation. Program evaluations included the following data (rating based on the following scale: 4 = Superior; 3 = Good; 2 = Average; 1 = Poor):

Acknowledgements: Special thanks to the following presenters for their time and expertise Josh Cox, Josh Hopkins, Dr. Ron Gill, Justin Rogers, Justin Hansard, Russel Harrison, Doug Vicars, LC Harrison, and Ed Cate. In addition, appreciation is expressed to the horse committee of Clay County and Clay County Farm Bureau for their guidance and support of Extension programming within the county.

Future Plans

We will continue to conduct our programming efforts to develop and enhance the knowledge and skill levels of our 4-Hers as well

Clay Youth Water Program - 2016

Summary developed by Sherri Halsell and William Holcombe, County Extension Agents, Clay County

Relevance

Water quality and conservation have emerged as predominant issues across Texas as indicated through local input, elected officials/legislative actions, and numerous other indicators. Water for domestic and agricultural use is becoming increasingly limited in Texas. The steady influx of new people presents challenges to continued water availability. The Texas Water Development Board (TWDB) projects that by 2060; an estimated population of 46.3 million will reside in Texas and require approximately 22 million acre feet of water per year. TWDB also projects an annual shortfall of some 7 million acre feet of water given existing infrastructure. This program will be presented to the Henrietta 5th grade students to help students understand the importance of water conservation by each individual.

Response

After reviewing the data concerning water issues in Clay County the Clay County Leadership Advisory Board and the Family and Consumer Sciences (FCS) Program Area Committees chose to adopt the *Water Program for Youth* plan in an effort to promote new water management strategies, such as conservation, reuse, rainwater harvesting, and water-quality protection to the youth of the county.

In an effort to provide programming to address the issues of water the committee adopted a H2O Fair to address variety of programming topics.

- **H2O Fair** - Presented on May 13, 2016 which consisted of lessons on rainfall simulation, EnviroScape Water Pollution, Incredible Water Journey, Stream Trailer, 40 Galloon Water Challenge, Xeriscape, and Water Safety.
 - Task Force met 3 times to plan the H2O Fair. Previous year's evaluations were reviewed before planning. Specific **modifications** suggested by students include: incorporation of more sessions with hands on learning experiences.
 - Sessions included: on Rainfall Simulation, EnviroScape Water Pollution, Incredible Water Journey, Stream Trailer, 40 Galloon Water Challenge, Xeriscape and Water Safety. The students rotated between the session experiencing hands-on lessons of water issues.
 - **69** 5th grade students from Henrietta Elementary attended the program.
 - There were 8 volunteers that helped with this program by contacting speakers, presenting sessions, guiding students from Elementary school to the parking lot.

4-H and Youth Development

Results

H2O Fair results are shown below. 69 attended program. 69 evaluations disrupted with 65 returned for pretest and 59 for posttest. With a 31.7% increase or change in mean scores.

	65	20	80	50.46	14.623
Pretest Score	65	20	80	50.46	14.623
Posttest Score	59	10	90	66.44	18.266

Results of specific questions answered correctly.

Question	Pre-test % correct	Post-test % correct	Increase
Water that falls onto the land and drains to a common place is called a: (watershed)	23.1%	74.6%	51.5%
A leaky toilet wastes up to ___ Gallons of water each day. (200)	15.4%	54.2%	38.8%
Removal of soil by water, wind or other factors is called erosion. (True)	75.4%	94.9%	19.5%
There is no new water, all the water we have is already on the Earth.	73.8%	86.4%	12.6%
Which of these are pollutants when they runoff into water? (All of these – oil, soil, pesticides)	43.1%	55.9%	12.8%

Interpretation

Sheila Choate, S.H.A.C. Member & 4H Leader, presented an interpretation to the Henrietta School Board and S.H.A.C. Committee. The editor of Clay County Leader attended the Bicycle Rodeo to take photographs and printed them in the county newspaper the next week.

Future Plans

After reviewing evaluations the LAB Committee and Task Forces plan to continue to provide the Youth Water Program in the county through a variety of education methods including presenting a *H2O Fair and other programs and news articles in 2017*.

Acknowledgements

Thanks are extended to the Leadership Advisory Board – Judy Morris, Murray Don Dawson, Annie Brown, BJ Dunn, Martha Moose, Johnny Reynolds and Howard Raeke; the Family & Consumer Sciences Program Area Committee - Shirley Visentainer, Scott Cleveland, Jan Slagle, Sue Woodson and Margo Grunseich, Henrietta Elementary – Kendra Bennett, principle, 5th grade Henrietta Teachers; and the Clay County NRCS and FSA for their role in support of the youth water programs.

4-H and Youth Development



Left Photo: Stream Trailer – Kenny Pruitt, NRCS, demonstrating the importance of foliage along river banks.

Right Photo: Rainfall Simulator – Tony Dean, Retired NRCS, demonstrating water run off demonstration.

VALUE

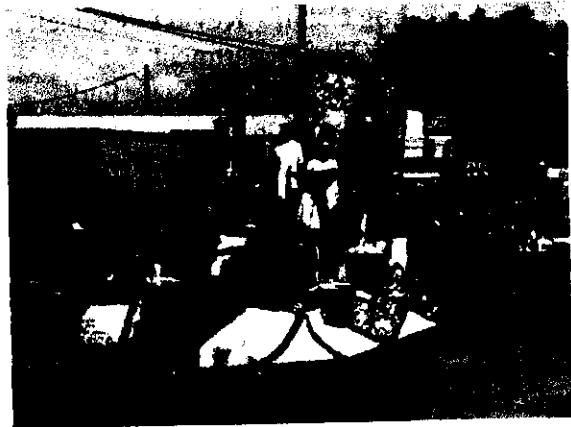
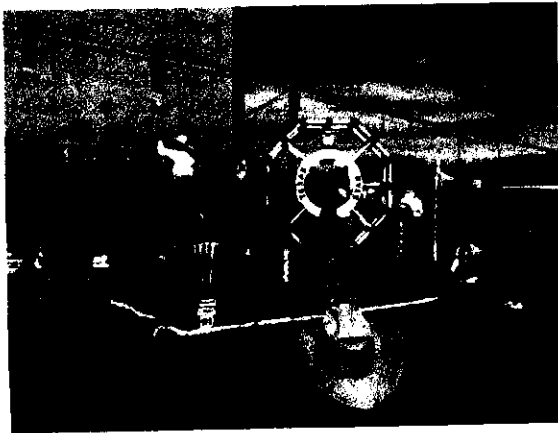
Water Conservation Education



Texas A&M AgriLife Extension programs that teach farmers, homeowners, and business administrators to conserve water are helping reduce demand on the state's limited water resources. Texans benefit from a safer, more reliable water supply at no additional cost.

Pioneer Reunion Report

- Each year the Clay County Pioneer Association plans and implements the Pioneer Reunion and Rodeo. The event brings in hundreds of visitors to the county. There are parades every day of the reunion, 1 horse parade and 2 float parades. Halsell is the chairman of the float parades and responsibilities include:
 - Publicize parade theme in the local newspaper monthly and weekly as needed
 - Receive entries for the parade, about 135 per year
 - Prepare and update parade rules and guidelines and have them approved by Nine-man Board.
 - Help secure and train 8 parade judges; tabulate results.



Hello Neighbor Report

- Each year the Clay County Leadership Advisory Committee plans and implements the Hello Neighbor Tour. The event brought in **49** individuals to tour the county. The tour rotates from precinct to precinct each year visiting different locations each year. The commissioner of the precinct helps plan the tours showcasing highlights in their precinct. Points of interest toured in Precinct 3, Commissioner John McGregor included:
 - Rockin' M Distillery – Debbie and Tony Moore of Deercreek
 - Log Cabin – Kevin O'Connell and Liz Kesler
 - Joy Fire Department
 - Lake Arrowhead State Park
 - Commissioner John McGregor toured with us and showed highlights in Precinct 3



Old log cabin by Deer Creek



Passengers on the bus.

Texas A&M AgriLife Extension Service Clay County

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