



EXHIBIT

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2020 Hopkins County 4-H Agricultural Plan

Dr. Mario A. Villarino, County Extension Agent for Agriculture and Natural Resources Jessica Humphrey, Assistant Extension Agent for Agriculture and Natural Resources Hopkins County, Texas

Relevance: 4-H Agriculture and Natural Resources projects are an important component of the county 4-H program in Texas. Currently, sixty three percent of Texas 4-H members are enrolled in a livestock project. These projects provide youth with subject matter education, as well as valuable learning experiences, character education and leadership skills. Adult volunteer engagement is critical to administer the program and expand the outreach. The development of youth volunteer as ambassadors for agriculture and natural resources will educate and recruit other youth to the project. As today youth are further removed from farming, many do not understand the importance of agriculture and how it impacts their daily lives. This plan included a Science of Agriculture (Ag Literacy/Awareness) component to target elementary students (grades 4) and teachers in Hopkins County and provides the following educational components: Educational support materials for Science of Agriculture including an Ag Day/Ag Fair field trip, program evaluation, teacher evaluation, recognition certificates and information about 4-H opportunities for the participants and parents. Water conservation/protection awareness was also included. Hopkins County utilized the 4-H Livestock Project Coalition to provide direction and support for the programs and events conducted. The programs and events conducted also provided opportunities for 4-H members to develop or improve their leadership skills and other life skills. Volunteer recruitment, training and utilization was an important component of the plan. This plan involved 200 youth and 60 volunteers in projects and 900 in curriculum enrichment component. Educational Programs were promoted, and other timely information was shared with youth and volunteers through news articles, radio programs, newsletters, and/or social media. A Path to the Plate evaluation was used with attendees of the Ag Awareness Day. Volunteer committees (Ag awareness and Ag coalition) assisted in the planning of educational events. Tasks in which volunteers were involved include lining up speakers, serving as a speaker, assisting with bus unloading/loading, meal preparation and serving (for students and speakers),

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contacting the local media, donors, and more. The more that volunteers are involved in the program, the greater likelihood of success and the opportunity for the program to grow.

Response: To maintain the objectives plan the following activities were planned and conducted:

- 6 Veterinary Science 4-H sessions (12 participants).
- 2 Ag Awareness field days (October 2019) (1000 participants)
- Goat and Lamb project validations
- Swine Project Validation (16 projects)
- 2 Steer validations (one state, two county)
- 2 Heifer Validations (two state, two county)
- Dairy Heifer Validation
- Poultry Validation
- District Dairy Judging Contest (January 2020)
- 4 Project Livestock Clinics (Swine, Poultry, Lambs and Goats and Steer-Heifer)
- NETLA (County) Junior Livestock Show (February)
- NETLA (County) Dairy Livestock Show (June)
- 6 Project Planning Meetings (Ag Coalition)

Results: The results of the evaluation of the 2019-2020 Ag Awareness Day were as follows:

86.8% (33/38) respondents got a better understanding of the connection between agriculture and health.

97.4% (37/38) showed a better understanding of the path food production takes to get to our plate.

97.4% (37/38) indicated a better understanding of the importance and nutritional values of various foods.

89.5% (34/38) respondents got a better understanding of the way farmers and ranchers produce food we eat.

94.7% (36/38) indicated a better understanding of the value of agriculture and how it is important in daily life.

92.1% (35/38) indicated a better understanding of the importance of eating a healthy diet and variety of foods.

Acknowledgements:

The Hopkins County Extension Office recognizes the support of the Hopkins-Rains Farm Bureau, Master Volunteers and Ag Committee members for their support implementing this plan.

EXTENDING KNOWLEDGE Providing Solutions

3



Making a Difference

2020 Hopkins County Livestock and Forage Education

(Trainings, Tours and Field Days)

Dr. Mario A. Villarino County Extension Agent for Agriculture and Natural Resources in Hopkins County, Texas.

Relevance: Livestock and forage production is a 3.96-billion-dollar industry in the Central Region. Livestock and forage enterprises are affected by climate and market variability. Hopkins County currently has more than 100,000 head of beef cattle with 27,000 head of dairy cattle. Due to environmental requirements of federal and state authorities, Hopkins County dairy operators must maintain environmental requirements for operation. This plan will collaborate with diary (Dairy Farmers of America, Southwest Dairy Museum) and beef organizations (NETBIO) to determine and conduct educational efforts needed for the successful operation of livestock farms and ranches. Texas livestock and forage producers and related agribusinesses effectively evaluate and adopt research-based technology applications and best management practices for sustainable and profitable livestock management systems. Livestock producers improve knowledge of production and management systems to improve quality, profitability, and sustainability. This plan had the goal of providing educational experiences to 350 beef producers, 150 private applicators, 60 dairy producers and 60 landowner seeking private applicator accreditation.

Response: During 2020, the world responded to a human viral disease denominated COVID-19. Several response mechanisms were developed to mitigate the disease impact in the human population. The term business essential was coined to determine business operations during the response of the early onset of the disease. The Hopkins County Extension office was determined as business essential by county officials and continued normal operation, supporting cattle sales and financial emergency support to farmers and ranchers. A dairy-producers task force was created statewide by Texas A&M AgriLife Extension to determine emergency response priorities to dairy producers, support to workforce and financial aid to dairy farmers. A series of online meetings were conducted during this period with several outcomes (reported in result section). Texas A&M Agrilife Extension response to the emerging situation during COVID-19 included the participation of County Extension Agents to aid with the securing of funding during the implementation of the CARES Act. A series of trainings in coordination with local municipal officials and city managers were planned and conducted. As pandemic conditions due to COVID-19 evolved, Hopkins County relaxed face to face meeting requirements and two face to face programs were conducted: The North East Texas Fall Dairy Conference (October 2020) and Private Applicator CEU session (November 2020). A series of educational trainings directed to dairy producers was determined to be essential during the COVID -19 response in 2020. Three major components were determined as a priority: A short-term reduction of milk production strategies were developed and promoted due to the challenges in the food distribution chain of liquid milk during the first stage of COVID-19 response strategy. Three mass media press releases were created and distributed during this phase. The strategy included nutritional, management and animal husbandry protocols directed to

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reduce milk production with minimal animal well-being impact. An online training with 350 participants nation-wide was planned and implement by Texas A&M AgriLife Diary specialists (J. Pineido and J. Spencer) in March 2020 using an online platform (zoom). A second component was the creation of a COVID-19 response campaign to provide education to the Hispanic workforce training directed to communicate the Center of Disease Control (CDC) strategies to prevent COVID-19 adapted to dairy environments. Three factsheets were developed and distributed to dairy producers to re-distribute and post at their facilities. A series of monthly podcasts were developed to provide educational material to the Hispanic workforce (Manejo Lechero) (disseminate thru Facebook and Dairy Matters Extension Website) (viewers numbers unknown). A third component was the dissemination of financial resources available to dairy and beef producers under the CARES Act from federal and state authorities. Weekly meetings with county and city officials during 24 consecutive weeks were conducted with county and city personnel to facilitate the utilization of federal and state funding to mitigate expenses in the cities and county due to COVID-19 during the implementation of CARES Act. The results of the retrospective post evaluations of the Private Applicators CEU and North East Texas Fall Dairy Conference were as follows:

Results

- 93% (56/60) of respondents were mostly or completely satisfied with the information being accurate (Private Applicators CEU training).
- 90% (54/60) of respondents were mostly or completely satisfied with the information being easy to understand. (Private Applicators CEU training).
- 93% (56/60) of respondents were mostly or completely satisfied with the <u>timeliness of information</u> given on each topic. (Private Applicators CEU training).
- 87% (53/60) of respondents were mostly or completely satisfied with the <u>helpfulness of the</u> information in decisions about your own situation. (Private Applicators CEU training).
- 87% (53 /60) of respondents were mostly or completely satisfied with the <u>relevance</u> of the examples used. (Private Applicators CEU training).
- 100% (60/60) of respondents plan to take actions or make changes based on the information from this Extension activity (Private Applicators CEU training).
- 88% (53/60) of respondents anticipate benefiting economically as a direct result of what they learned from this Extension activity (Private Applicators CEU training).
- 98% (59/60) of respondents would recommend this activity to others (Private Applicators CEU training).
- 98% (59/60) of respondents would attend another subject offered by Extension if it addressed a specific need or interest of theirs (Private Applicators CEU Training).
- 87% (53/60) of respondents said that the information and programs provided by Extension were quite
 or extremely valuable to them (Private Applicators CEU Training).
- 100% (10/10) of respondents plan to take actions or make changes based on the information from this Extension activity (Northeast Texas Dairy Fall Conference).

Acknowledgements: The Hopkins County Agricultural and Natural Resources Program recognize the support of Master Gardener volunteers, county officials and episodic volunteers during the development of programs, creating training materials and maintaining programmatic activities during 2020.

EXTENDING KNOWLEDGE Providing Solutions



Making a Difference

2020 Hopkins County Small Acreage/New Landowner Education

Dr. Mario A. Villarino County Extension Agent for Agriculture and Natural Resources in Hopkins County, Texas.

Jessica Taylor, Assistant Agent Agriculture and Natural Resources in Hopkins County, Texas.

Relevance: Recently new trends in property size and smaller tracts of land has created a new landowner and small acreage ranching/farming enterprises. Many new landowner/small acreage landowners are looking into agriculture as an alternative for tax exemption. Many new landowners have little or no understanding of agriculture and need basic information to engage in farming. This plan will provide education in farming/ranching to small acreage producers (fifty acres or less) residing in Hopkins County (40 small acreage landowners).

Response: Face to face trainings, press release articles, newsletters and field trips were organized to cover the topics of vegetable gardening, beekeeping, backyard poultry, livestock, water conservation, wildlife, pond management, and pesticide applicators training directed to small acreages landowners were organized. Due to the onset of limitations due to COVID-19 regulations related to face-to-face trainings, only two session were conducted: Economics of small acreage farming (February 2020) and The Homeowners Septic System Training (July 2020) (16 participants).

Results

Overall:

• 88% (14/16) of respondents were mostly or completely satisfied with the activity (Homeowner Septic System Training).

Content:

- 88% (14/16) of respondents were mostly or completely satisfied with the information being <u>what they</u> <u>expected</u> (Homeowner Septic System Training).
- 94% (15/16) of respondents were mostly or completely satisfied with the information being <u>accurate</u> (Homeowner Septic System Training).
- 94% (15/16) of respondents were mostly or completely satisfied with the information being <u>easy to</u> <u>understand</u> (Homeowner Septic System Training).
- 94% (15/16) of respondents were mostly or completely satisfied with the <u>timeliness of information</u> given on each topic (Homeowner Septic System Training).

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- 94% (15/16) of respondents were mostly or completely satisfied with the <u>helpfulness of the</u> information in decisions about your own situation (Homeowner Septic System Training).
- 100% (16/16) of respondents were mostly or completely satisfied with the <u>relevance</u> of the examples used (Homeowner Septic System Training).

Instructor(s):

- 100% (16/16) of respondents were mostly or completely satisfied with the instructor's <u>knowledge</u> <u>level</u> on the subject (Homeowner Septic System Training).
- 100% (16/16) of respondents were mostly or completely satisfied with the instructor <u>responses to</u> <u>questions</u> (Homeowner Septic System Training).

Facilities:

• 94% (15/16) of respondents were mostly or completely satisfied with the physical setting's contribution to ease of listening and participation (Homeowner Septic System Training).

Anticipated Changes & Economic Impact:

• 81% (13/16) of respondents <u>anticipate benefiting economically</u> as a <u>direct</u> result of what they learned from this Extension activity (Homeowner Septic System Training).

Value of Activity:

• 100% (16/16) of respondents would recommend this activity to others (Homeowner Septic System Training).

Acknowledgements: The Hopkins County Agricultural and Natural Resources Program recognize the support of Master Gardener volunteers, county officials and episodic volunteers during the development of programs, creating training materials and maintaining programmatic activities during 2020.

EXTENDING KNOWLEDGE Providing Solutions





Applied Research

Sale price variation of pre-conditioned cattle in northeast Texas

Cooperator: Northeast Texas Beef Improvement Association

Dr. Mario A. Villarino, County Extension Agent for Agriculture and Natural Resources in Hopkins County Texas

Summary

This applied research investigation compared yearly pre-conditioned cattle sale prices during five consecutive years. The results indicated a significant difference between beef prices of preconditioned cattle during 2020 when compared with all other previous years (2016-2019). **Objective**

The objective of this applied research was to identify the impact of year seasonality in saleprice variation according to year of sale of similar pre-conditioned cattle sold in comingled cattle auction format in Hopkins County.

Materials and Methods

A total of 153,271 pre-conditioned cattle where comingled, sorted in groups and sold to the highest bidder in an auction format setting in six bi-monthly sales during four consecutive years. Average sales prices (net) were compared by year using statistical analysis (ANOVA and Tukey HSD) in a personal computer.

Results and Discussion

The cattle numbers pre-conditioned and sold during NETBIO sales were as follows: for the year 2016: 34, 889 head of cattle; for the year 2017: 42,270 head of cattle; for the year 2018: 46,597 for year 2019: 44,905 and for year 2020: 36,010 . All cattle were sold in pre-conditioning sales during the months of January, March, May, July, September and November of corresponding year. Average prices per head per month of sale are reflected in Figure 1



Figure 1: Average sale prices averages (USD) of pre-conditioned cattle by year and month.

In the 1990s, Extension Specialists at Texas A&M University developed a set of standardized calf health management protocols to guide producers in adding value to calves. Since weaning and shipping are both stressful events in a calf's life, the time lapse between weaning and shipping is important. By separating these stressors, the immunosuppressive impacts of each event are not combined, which reduces overall stress. Therefore, separating weaning and shipping, when combined with a sound vaccination protocol, further enhances the value of calves and is rewarded in the marketplace. To seize economic benefit of pre-conditioning programs, a partnership between Texas A&M AgriLife Extension-Hopkins County, a group of organized beef producers and the Sulphur Springs Livestock Auction created the Northeast Texas beef Improvement Organization (NETBIO) and implemented periodical preconditioned cattle auctions. After 18 years of yearly sales, and because commissioned cattle numbers surpassed handling capacity of auction barn, bi-monthly sales were implemented in 2016. During early 2020 the negative impact of COVID-19 on the March sale (March 2020 vs March 2019) was -\$131.03 per head (average) or -\$ 484,548.94 (all cattle ticketed sales). Average sale prices improved as the year continued to reach expected sale prices in November Sale.

Acknowledgements

The Texas A&M AgriLife Extension Service in Hopkins County will like to recognize the support of NETBIO during the development of this investigation.

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STATEWIDE SURVEY Identifying the Strengths & Needs of Texas Communities

WHAT IS TEXAS SPEAKS?

TexasSpeaks is a state-wide online survey conducted by Texas A&M AgriLife Extension Service with the purpose of listening to Texas citizens as they identify the strengths and needs of their communities.

Data from the survey will be aggregated at local levels and provided to local stakeholders. Additionally, statewide data will be aggregated and made available to state agencies and decision makers.

WHAT IS THE GOAL?

To engage as many Texas citizens as possible to create the most accurate and helpful data to support Texas communities at both the state and local levels.



QUICK FACTS ABOUT THE SURVEY

- Online
- Open to the public
- Anonymous
- Takes 10 minutes
- Includes an opportunity to collect open-ended feedback



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Contact Dr. Scott Cummings <u>s-cummings@tamu.edu</u> 979-229-3187

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Family & Community Health Updates – January/February, 2021 Presented by: Johanna Hicks, CEA/FCH

- 1) Chronic Disease Management/Diabetes: 2021 "Do Well, Be Well with Diabetes" series each Wednesday in February with agents from Hopkins, Titus, Rockwall, and Fannin Counties working collaboratively. Due to a grant from DSHS, the virtual series is being held free of charge. Twenty-two individuals participated the first week.
- 2) Head Start programs: "Thrive by Five" presented to Head Start parents; "Healthy Snacking" activity sheets and incentive items were provided to all 170 Head Start students. Currently offering "A Fresh Start to a Healthier You" on-line course with 8 Head Start parents participating; participated in Head Start Advisory meeting; monthly "Ask, Share, Learn" web meetings
- 3) 4-H: Sewing Fun Day: held two sessions for social distancing purposes 11 total participants. One 4-H member wants to make & sell his items to raise a little money (entrepreneurship!); Cumby 4-H Collegiate Edu-Nation is gaining speed with frequent Zoom trainings and correspondence; County 4-H Council & Leaders' meeting took place February 1; preparing for District 4-H Contests to take place in March and April – we are hosting the District 4-H Food Challenge at the Civic Center in March.
- 4) Other: "Five Healthy Habits" program for Alpha Delta Kappa; Community Chest Board meeting; LEAP Virtual Career Fair; Path to the Plate Training; Sulphur Springs SHAC meeting; canner lid testing & publication distribution; weekly mass media contributions; COVID 19 agency updates
- 5) **TEXAS SPEAKS survey**: Please take time to complete the survey. The goal is for every county in Texas to achieve 10% response rate (See flyer for link and details)

