OSU EXTENSION
MASTER CATTLEMAN

Master Cattleman Quarterly

March 2024, Vol 62

Inside this issue:

Diet and Management Changes as Breeding Season Approaches

David Lalman, Professor and Harrington Endowed Chair, Animal and Food Sciences

Recent research has revealed that sudden changes in nutrition or management just prior to breeding or during the breeding season can have a negative impact on first-service conception rate as well as overall pregnancy rates in heifers and cows. The mechanisms are not well understood but generally related to stress of some type or rapid changes in uterine environment. The impact of stressful conditions or sudden changes in diet would likely have the most obvious impact on herds implementing synchronization and timed artificial insemination (AI) programs. However, changes in diet just prior to breeding and during breeding has also been shown to reduce fertility rates in natural service herds.

The stress of transportation alone has been shown to reduce AI conception rate. If cattle must be moved to a different location after breeding, they should be transported within 4 days if possible. In the Southern Great Plains (SGP) region, heat stress is possible during mid to late-spring, especially during times of high humidity. Therefore, care must be taken to avoid compounding transportation stress with heat stress. In situations where animals will not be in transit for more than an hour, transportation during early daylight hours is advisable. Longer trips may require pre-dawn or nightime transportation.

Fewer females show signs of estrus during heat stress. For this reason, AI programs in the SGP region planned for mid to late-spring may benefit from using a timed AI protocol rather than estrus detection.

Similarly, radical changes in diet and activity around the time of service (whether AI or natural service) can reduce conception rates. In general, a consistent, slightly positive plain of nutrition combined with minimal or gradual change in activity during the breeding season facilitates reproductive success. The timing of hay feeding, greenup and breeding could be an issue for some spring-calving herds. Limited work has been published comparing turning females out to pasture at least 30 days prior to initiation of breeding, to turing cattle out immediately after synchrnized AI or synchronized natural service. In each case, turing cattle out right after AI or at initiation of natural service was detrimental to early pregnancy. It would be better to turn cattle out ahead of greenup and supplement hay as needed to ensure adequate forage availability. This would allow the cattle more time to adapt to the lush, green forage as it gradually becomes a greater proportion of their diet.

Finally, other stressful activities, such as processing or long trail drives should not be scheduled just prior to or during the breeding season if it can be avoided.

If you have questions or would like more information on the topic, please contact your local County Extension Educator. Contact information can be found at https://extension.okstate.edu/county/.

Federal Programs for February 2024 Wildfire Recovery

Amy Hagerman, State Ag Policy Extension Specialist

On February 26, 27, and 28, 2024, high winds and low humidity created ideal conditions for wildfires that spread rapidly across the Texas Panhandle and into Western Oklahoma. The same weather conditions led to smaller fires across the state. Within this 3-day period 16 fires of varying sizes were combated across the state, affecting a total of 170,271 acres as of March 6. The largest fire in the two-state area was the Smokehouse Road Fire which claimed an estimated 1,059,570 acres in Texas and Oklahoma and is the largest recorded fire in Texas history. Of that total acreage, the Smokehouse Road Fire burned an estimated 31,596 acres in Roger Mills and Ellis Counties in Oklahoma. However, on the same day, the Catesby Fire burned an estimated 90,699 acres in Ellis County and the Slapout Fire burned an estimated 26,048 acres in Beaver County. Twelve individuals lost their homes, and the losses to cattle producers in terms of hay and pasture loss and total cattle killed in the fire or subsequently euthanized due to injuries is still being tallied as of this article.

After the fires are out and initial injuries are treated, we can begin the process of recovery. Unfortunately, producers in these affected counties have experience with wildfire. Producers are familiar with the alphabet soup of disaster and recovery programs: Livestock Indemnity Program (LIP), Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program (ELAP), and Emergency Conservation Program (ECP). They may have applied for a disaster loan in the past or used an *ad hoc* disaster program like the Wildfire Hurricane Indemnity Program Plus (WHIP+). It is important to realize that most programs are cost-share programs, designed to offset some or even most of the loss, but they are unlikely to offset all of the loss. On March 8th, the National Farm Service Administrator announced some special changes for those affected by these fires. In addition, special provisions were announced for grazing Conservation Reserve Program (CRP) acres, which could allow landowners with CRP acres to help their neighbors by temporarily housing cattle on nearby CRP fields. Factsheets describing all of these programs can be found on www.farmers.gov and on the Farm Service Agency website.

Programs for Cattle Losses

Tallies on cattle losses are ongoing. Some cattle perished in the fires, while others were euthanized due to severe injuries or had to be permanently removed from production and sold as cull cows. Calving season is also ongoing and in addition to calf deaths in the fire, others may struggle to thrive after the fire or after birth when cows were affected by the fire. The Livestock Indemnity Program (LIP) pays 75% of the market value for cattle losses *in excess of normal mortality* due to a qualifying disaster event. The payment rates for 2024 are fixed and published online in the factsheet describing the program (https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/2022/FSA_LIP_LivestockImdemnityProgram_Factsheet_2023.pdf). LIP includes all commercial livestock, which can include working horses.

LIP notice of loss and applications are due by March 3, 2025. A notice of loss within 30 days of the loss becoming apparent is no longer required. Now the notice of loss and the application can be submitted at the same time; however, I recommend not delaying long to submit your application. You are more likely to track down required documentation closer to the loss. Also, you may need to consider the timing of when you receive the payment for tax purposes. Ownership and documentation requirements are the same, however. Records of beginning and ending inventory, vet records (pregnancy checks), program applications with cattle numbers, and loan documents can be used to show ownership. Pictures with dates, rendering receipts, vet records, and other third-party documentation can be used for loss documentation.

LIP also pays some indemnity for cattle sold within 30 days of the fire due to injury. If cattle are sold for less than the LIP indemnity rate, then livestock owners may be eligible to receive the difference between the indemnity rate and the value at sale. Again, documentation is required. As of the 2018 Farm Bill, there is no maximum payment cap on LIP. To apply for LIP, contact the Farm Service Agency office in the county where the loss occurred. For additional details, see the recent OSU Extension publication “FSA Offers Program For Livestock Loss Due To Wildfires” on the Emergency and Disaster Preparedness webpage (https://extension.okstate.edu/programs/ emergency-and-disaster-preparedness/).

Programs for Damages to Fencelines and Pastures

Many miles of fence lines were lost during the fires. The Emergency Conservation Program (ECP) provides assistance to replace not only fences, but also water tanks lost in the fires. ECP is a little different from other programs. First, state and county FSA committees made up of members of the agricultural community administer the ECP program, rather than FSA employees. Since the program is administered at the county level, exact enrollment periods and eligibility may vary. Stay in contact with the county office to find out if ECP has been activated and the guidelines for

Federal Programs for February 2024 Wildfire Recovery (cont.)

applying. For applications under $250,000 the county FSA committee will review the application. Larger applications will go to the Oklahoma FSA committee. ECP will pay up to 75% of the cost to restore the operation and up to 90% for beginning farmers and ranchers, socially disadvantaged farmers and ranchers or limited resource farmers and ranchers. ECP can be used to help pay for a variety of restoration activities, but critically important right now is that it pays for restoring cross fences, boundary fences, and gates.

A critical change made by FSA in light of these fires is the potential for an advanced payment of up to 25% of the cost share for approved ECP applications. With fence costs between $10,000 and $20,000 per mile depending on land type and materials, this could be incredibly helpful to landowners. As part of the application process, damages must be assessed and documented by FSA (or the producer if the county allows it) *prior* to clean up and damaged fence removal. Running an electric fence inside the boundary of the damaged fence should be fine (again, contact your FSA office for local rules set by the county committee), but don't replace the existing fence before the application is approved. ECP is limited to $500,000 per person or legal entity per disaster.

Also, producers who have a Non-insured Crop Disaster Assistance Program (NAP) forage policy have some protection against fire losses since the land's grazing capacity is reduced. NAP provides a yield-based disaster payment. A notice of loss can be submitted through the county FSA office where the NAP policy was sold.

Programs for Feeding and Watering Surviving Cattle

The Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program (ELAP) covers a lot of ground and has evolved over time, which can make it confusing to use. Three key ELAP parts may be useful to producers and landowners affected by fire.

First, ELAP provides compensation for grazing and feed losses due to fire (on non-Federally managed land). Payments are based on the number of grazing days a pasture cannot be used due to the fire but cannot exceed 180 days. The formula used to calculate the payment multiplies the daily grazing value ($1.94 daily rate according to the ELAP factsheet) by the FSA determined normal carrying capacity on that land, . then multiplied by the number of days lost due to the fire.

Second, ELAP provides the transportation cost of hay. This may sound familiar from the 2022 drought, but the fire provides another eligible condition for the ELAP hay and feed transportation program. Producers can be reimbursed up to $6.60 per mile in transportation cost for hay and feed brought in from more than 25 miles away. Once again documentation is key - retain detailed receipts that include a source address, a delivery address, and a date.

Finally, and less commonly used, ELAP covers the cost of hauling water to livestock at a rate of 10 cents per gallon. This may apply if water has to be purchased and hauled to a temporary location.

Emergency Grazing of Conservation Reserve Program (CRP) Land

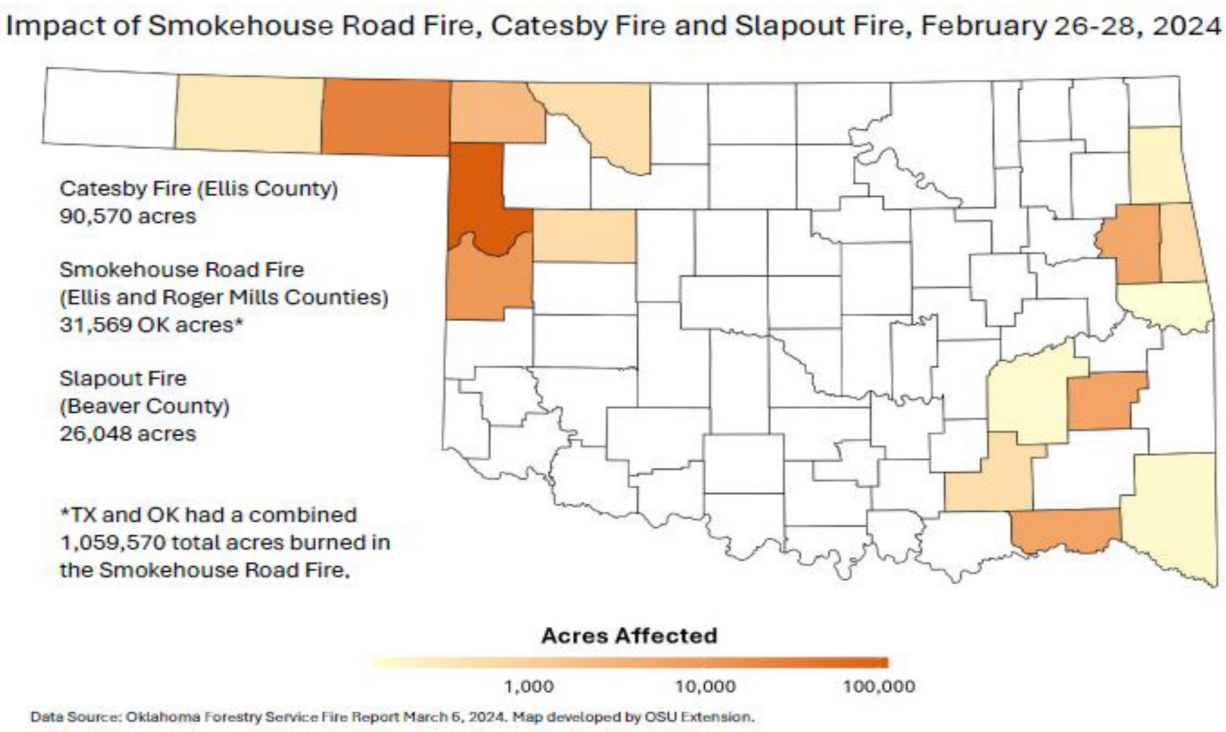
Western Oklahoma has a large number of CRP acres relative to the rest of the state. FSA has authorized emergency haying and grazing of CRP land in Oklahoma and nearby states from now until the beginning of the primary nesting season. If cattle are displaced due to grazing damage or fence line damages, consider getting approval for emergency CRP grazing. The landowner with the CRP contract will need to make the request for emergency grazing, and the livestock owner can apply for the ELAP program to help offset the cost of temporary rental of the land for grazing and for the transportation of livestock to that pasture. This will require coordination between landowners, cattle owners, and potentially two different FSA offices. Finally, Ellis and Roger Mills Counties quality for the FSA emergency loans. These loans can be used to repair or replace damaged fences, farm buildings, pens, equipment, and stored feed or hay. The interest rate for emergency loans as of March 2024 is 3.750%.

Have a Designated Record Keeper to Control the Chaos

Each of these programs has its own rules, its own timelines, its own application, and its own documentation requirements. Do you have one person on your farm that is really good with records? Designate that person as the key point to keep all records and documentation to help spread out the responsibility…and the stress. That person can keep the applications lined up and make sure they are on top of the next step. It may well be a full-time job in the days ahead. As always, reach out to your county Extension office for additional questions and for access to any factsheets mentioned.

Want to Help? Please see the donation centers listed at https://extension.okstate.edu/programs/emergency-and-disaster-preparedness/wildfire/

Federal Programs for February 2024 Wildfire Recovery (cont.)



External Pest and Parasite Control for Your Herds

Jonathan A. Cammack, Ph.D., Assistant Professor and State Extension Specialist

Howdy from the new OSU Extension Livestock Entomologist and Parasitologist! I started my position in late January, and am looking forward to meeting and working with you in the coming months and years. As we move into spring, it is once again time to protect our herds and ourselves from pests such horn flies, stable flies, and ticks.

Horn Flies

The best ways to manage horn flies with insecticides is with a two-pronged approach that targets both the larvae developing in the cow manure, and the adults feeding on the animals. Treat your herd with a feed through insecticide (insect growth regulator, IGR) to control larval horn flies beginning in March, so that the compound is present in the manure once the adult flies are seeking manure pats for egg-laying sites. Use feed additives or mineral supplements containing the active ingredients Diflubenzuron (products such as ClariFly®, HerdGuard™, or JustiFLY®) or Methoprene (products such as Altosid®, Dipteracide®, or Pertinent IGR), at a consumption rate of 4 oz/head/day. Make sure to continue providing the IGR through the end of October to have the greatest impact on the overall horn fly population impacting your animals.

Also, begin monitoring your herds for adult horn flies in March; once you see approximately 200 flies per animal (see Figure 1 below), it's time to tag your animals with insecticide-treated ear tags. Adult horn flies can be identified by their characteristic shape and feeding behavior: they typically feed with their heads pointing downward, and their wings held in a "V-shape". Make sure you are rotating chemical classes annually, and don't use the same ear tag/active ingredient as last year! A good rotational schedule to follow is: Year 1:

External Pest and Parasite Control for Your Herds (cont.)

synergized pyrethroid + macrocylic lactone combo (such as TRI-ZAP®); Year 2: organophosphate (such as Dominator®, Max40™, OPtimizer®, or Patriot™); Year 3: synergized pyrethroid (Such as CyLence Ultra®, PYthon®II, or SABER™ Extra); Year 4: macrocyclic lactone (such as XP820®). Continue to monitor adult horn fly populations on your animals throughout the season. For the most effective control, a second ear tag application may be necessary in the summer if fly numbers surpass 200 flies per animal, as ear tags will only be effective for 3-4 months. Also, rotational grazing can help reduce horn fly numbers by preventing the accumulation of fresh manure within the same pasture.

Stable Flies

Stable flies can be distinguished from other fly pests of cattle based on their feeding behavior: they will usually be found on the lower legs of the cattle. Due to the painful bite, the economic threshold is quite low: 15 flies per cow; bites from stable flies disrupt feeding behavior in cattle, resulting in decreased weight gain. If you are feeding your cattle hay, make sure to rotate hay bale placement sites to prevent the buildup of urine- and manure-soaked hay, which is where larval development occurs. A granular IGR such as Cyromazine or Novaluron (products such as Flynexx® and Exhalt™) can be applied at hay feeding sites to help control developing larvae, as can providing the cattle with feed-through IGRs listed in the horn fly section above.

Ticks

Unfortunately, winter was not long or cold enough to have any real impact on tick populations, so we're likely in for a pretty heavy tick season/year. Gulf Coast Ticks are already active and feeding on animals, and throughout the rest of the spring Lone Star Ticks will become more active. If you are already working your animals for a spring deworming, the good news is, these Macrocyclic Lactones (such as Ivermectin®, Cydectin®, and Dectomax®) will also provide some control for ticks. Ear tags being used for horn fly control will also help control Gulf Coast Ticks. If you have pastures in which tick numbers have been high in the past, moving your herd to a different pasture in April or May, for two months, can help reduce tick populations.

In addition to protecting your animals, it is also equally as important to protect yourself from ticks. Ticks can vector several pathogens to people and are responsible for alpha-gal syndrome (AGS), or the red meat allergy. When working with your animals or walking in your pastures, take precautionary measures to prevent tick bites. Treat your clothing with permethrin to reduce the likelihood of a bite, conduct a tick check on your body after being out with your animals/in pastures, and remove ticks from your body as soon as possible.

Figure 1. A cow with approximately 200 horn flies present and bloodfeeding.
Photo Credit: Ashley Di Agostino, M.S. Graduate Student in Animal Science.

Oklahoma Quality Beef Network Maintains Strong Premiums in 2023

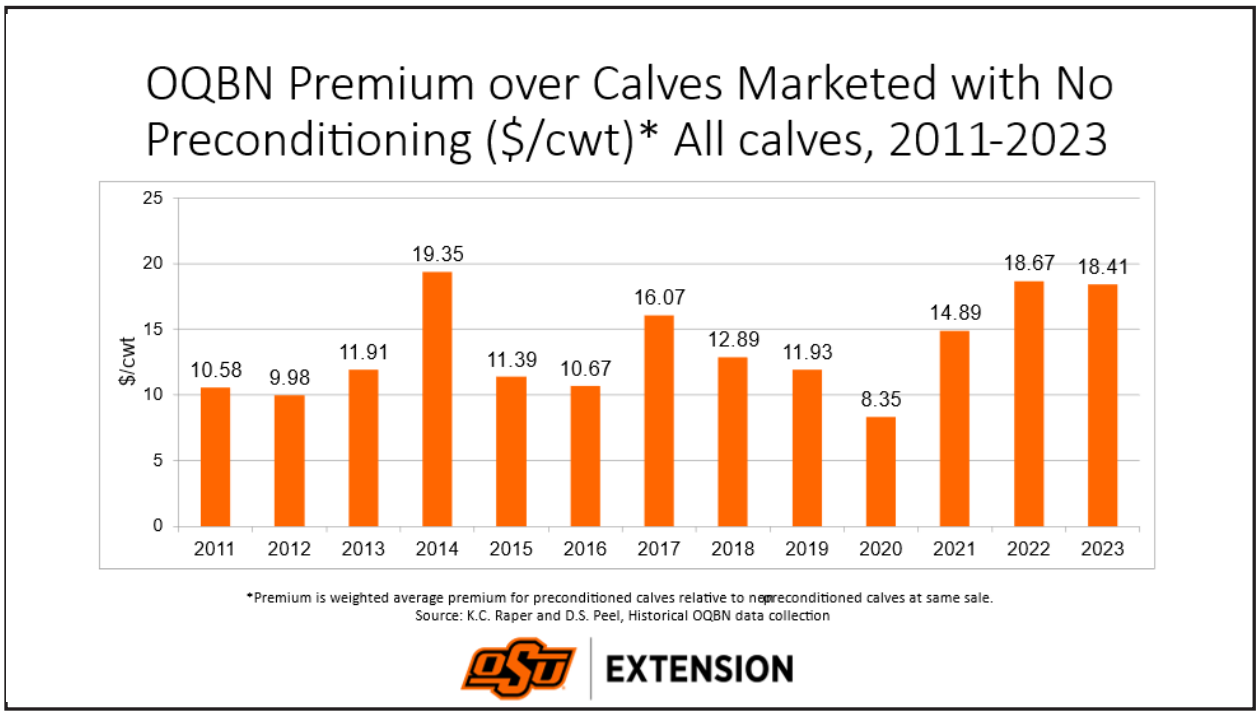
Kellie Curry Raper, Oklahoma State University Livestock Marketing Specialist
Derrell S. Peel, Oklahoma State University Livestock Marketing Specialist

Calf enrollment numbers may have been down, but premiums for Oklahoma Quality Beef Network (OQBN) VAC-45 calves were not. The combination of drought and higher calf prices did entice some producers to forgo preconditioning programs last fall. However, those producers who did participate in OQBN's 3rd party verified Vac-45 preconditioning program during 2023 saw the 3rd highest average premium in program history. Data collected on 6,200 head of cattle across 767 lots indicate that 2023 OQBN premiums averaged $18.41/cwt. OQBN premiums are measured as the weighted average premium for OQBN VAC-45 calves relative to non-preconditioned calves at the same sale.

While premiums were strong across all weight classes, this year's pattern looks a bit different. In a typical year, premiums per hundredweight tend to be higher for lighter weights. Interestingly, heifers generally followed that pattern, commanding higher premiums at lighter weights. However, the premiums for steers this year deviated from that norm. Steer premiums tapered slightly as weight class increased, but then spiked back up beyond the 5-weight category. The average premium across all weight classes was $21.75/cwt for steers and $14/23/cwt for heifers. Across the years, the bulk of OQBN calves are typically marketed between 400 and 600 pounds. However, 2023 saw that shift toward slightly heavier calves. For steers, 77% sold at weights between 500 and 700 pounds, as did 68% of heifers.

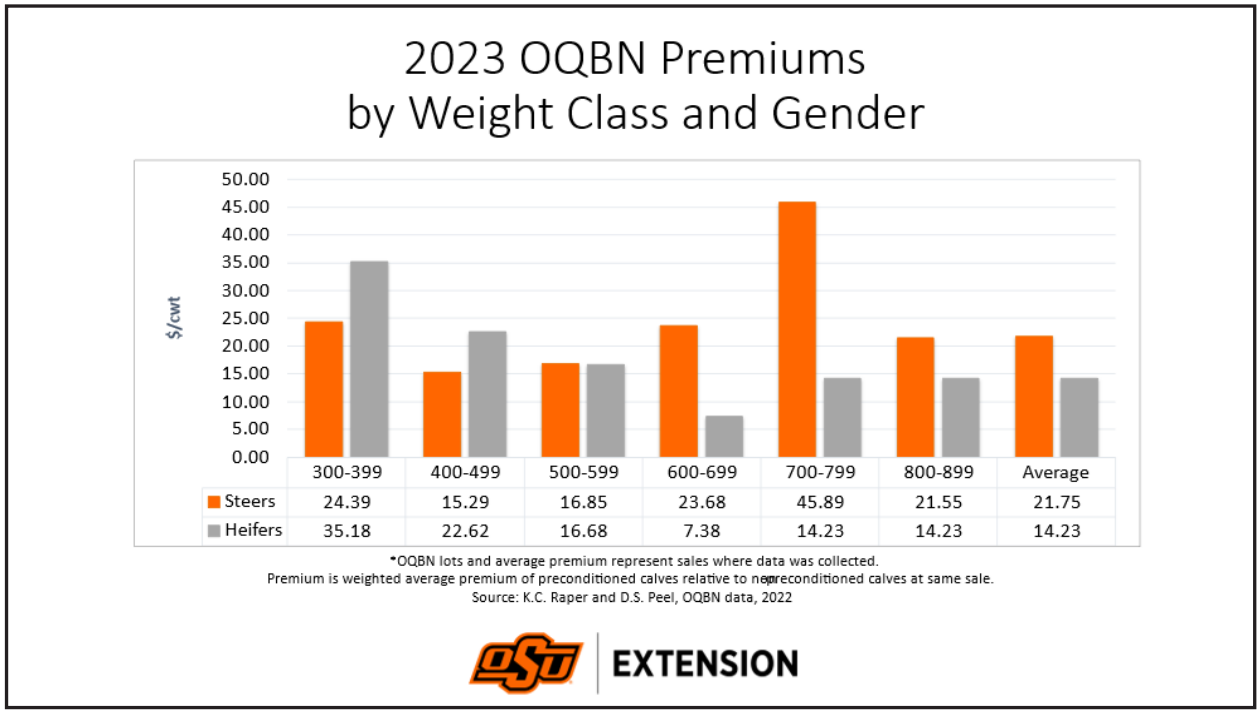
Overall, OQBN added an estimated additional $238,777 in revenue across 2,091 head from 50 producers in 2023. That's an average increase in value of $114/head based on premiums alone. Approximately $6.2 million in value has been added to Oklahoma calves through OQBN since 2010, for an increased average revenue of $103/per head over that extended time period.

Data collection helps us provide immediate feedback to producers regarding overall value differences associated with preconditioning. Over the longer run, it also facilitates opportunities to measure and communicate market values for the research-based calf health management and marketing practices encouraged in Extension efforts. OQBN is available to all producers willing to follow the protocol, as there is no minimum num-



Oklahoma Quality Beef Network Maintains Strong Premiums in 2023 (cont.

ber of calves required for program enrollment. Most producers market through special OQBN sales at designated livestock markets, but some choose to direct market their certified OQBN cattle or to market through alternative livestock markets. The overarching goal of the program is to encourage continual improvement of the Oklahoma beef industry and to provide value-enhancing opportunities to producers. If you'd like more information, visit https://extension.okstate.edu/programs/oklahoma-quality-beef-network/



Fast Facts from OQBN Sale Data Collection

Kellie Curry Raper, Oklahoma State University Livestock Marketing Specialist

- In 2023, 54% of all lots collected were Black, followed by 11% White Gray, 10% Black Dominant—Mixed, 7% Red and 7% Mixed Hide Colors—High Quality
- The proportion of lots with horned cattle increased slightly from 3.3% in 2021 to 4% in 2023.
- The proportion of male lots containing bulls increased from 15.6% in 2021 to 24.4% in 2023.
- Percentages reported here represent ALL lots collected including non-OQBN lots.

Agricultural Economics Dept.
513 Agricultural Hall
Stillwater, OK 74078

OSU Internal Parasite Study

Mackenzie Phillips, Undergraduate Research Scholar, Animal and Food Sciences
Dr. John Gilliam, Clinical Professor, College of Veterinary Medicine
Dr. Rosslyn Biggs, Beef Cattle Extension Specialist, College of Veterinary Medicine
Dr. David Lalman, Professor and Harrington Endowed Chair, Animal and Food Sciences
Dr. Paul Beck, Professor and White Endowed Chair, Animal and Food Sciences

Dear Oklahoma Beef Cattle Producers and Veterinarians,

Our beef cattle extension and research team at OSU is conducting a statewide project to determine parasite resistance to different anthelmintic products. We are in the process of recruiting beef cattle producers to participate in the project and would like to involve veterinarians and their clients. We hope to collect data from at least 50 different groups of cattle dispersed around the state. Samples can be collected through spring and summer 2024.

If you or others would like to participate, please fill out the online interest form linked to the QR code at the bottom of this page. Once we have received the interest form, someone from our team will be in contact to answer any questions and coordinate delivery of the sampling kits and other details. Our Area Livestock Specialists and County Extension Educators are also informed about the project and happy to assist with sample collection, sample shipment, etc.

Kellie Curry Raper
Agricultural Economics
kellie.raper@okstate.edu

OSU EXTENSION
MASTER CATTLEMAN

David Lalman
Animal and Food Sciences
david.lalman@okstate.edu