



Master Cattleman Quarterly

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OSU Extension Hosting Cow-Calf Bootcamp in Ada, OK , April 20-22

Michael Trammel & Brian Freking, OCES SE Area Forage and Livestock Specialists

We are excited to announce that enrollment for the "2026 Cow-Calf Bootcamp" is now open! This three-day, hands-on program is designed for both new and experienced cattle producers who want to strengthen their management skills and improve their bottom line.

The Bootcamp will be held **April 20–22, 2026** in Ada, Oklahoma. Each day will begin at **8:00 AM** and run until approximately **7:00PM**, with the final day concluding around **5:00 PM**.

Registration Details:

- Capacity: Limited to 50 participants.
- Registration Fee: \$150 per person. This includes educational materials and meals.
- Registration is confirmed by email once payment is received.
- No refunds for cancellations after **5:00 PM on April 10, 2026**

About the Program:

The Cow-Calf Bootcamp covers a wide range of topics related to cow-calf production. Participants should come prepared to work hard, learn a lot, and connect with fellow producers. A tentative agenda will be shared soon.

What to Bring:

- Clothing suitable for working cattle and walking in tall grass
- Closed-toe shoes
- Sun protection
- Bug spray
- Additional details will be provided as the event approaches

Hotel Options:

Participants are welcome to book lodging at any of the several hotel options available in Ada.

Register Here:

https://secure.touchnet.com/C20271_ustores/web/store_cat.jsp?STOREID=15&CATID=860

Or

[2026 Cow-Calf Bootcamp Flier and Registration_Fillable.docx](#)

Persons with disabilities who require alternative means for communication or program information or reasonable accommodation need to contact **Erin Hubbard** at **580-332-2153** at least two weeks prior to the event.

**We look forward to seeing you in
April for another great Bootcamp!**



Spring Cleaning for Your Pastures!

Brian Freking, OCES SE Area Forage and Livestock Specialist

As I clean up damaged tree limbs and other material in my pastures, I'm always on the lookout for metal objects. Hardware disease happens when a cow swallows a sharp, heavy object (commonly wire, nails, screws/bolts, pins, etc.). Those heavy objects tend to settle in the reticulum (one of the stomach compartments that "catches" heavy material). With normal stomach contractions, a sharp object can puncture the reticulum wall and may lead to infection and damage in the abdomen—and in severe cases can penetrate toward the diaphragm/heart sac, which can be life-threatening.

Common Hardware disease signs you might see

Signs vary depending on where the object migrates, but commonly include:

- Loss of appetite, depression, "indigestion," reduced cud chewing
- Reluctance to move, stiffness, or signs of pain (sometimes worse with movement/straining)

If the heart sac is involved, fluid accumulation can lead to abnormal heart sounds and swelling/fluid in the brisket ("brisket edema")

Prevention (most important)

- Keep pastures, lots, and feed areas free of wire, nails, and other sharps so cattle don't have the opportunity to ingest them.
- Use magnets on feeding/mixing equipment to catch metal contamination in feed. (Note: magnets won't catch everything—some materials like copper wire or glass won't be collected.)

Many producers (especially dairies) use an intraruminal magnet ("cow magnet") placed in the reticulum to help trap metal fragments and reduce puncture risk.

Treatment (Veterinary Client Patient Relationship)

Treatment depends on severity and value of the animal. Options described in Extension resources include:

- Administering an intraruminal magnet when hardware disease is suspected/possible
- Confinement/rest and, if infection is suspected, broad-spectrum antibiotics
- In higher-value animals, surgical removal (rumenotomy/reticulum approach) may be considered.

It is key to have that VCPR when dealing with Hardware Disease.

Beef Cow Trivia Quiz

- 1) Texas has the largest beef cow inventory. Which state is number 2? Missouri, Nebraska or Oklahoma.
- 2) Which of the following is not one of the top ten beef cow states? Colorado, Florida, Kansas, Montana or South Dakota
- 3) Put the following in order from largest to smallest beef cow inventory? Arkansas, Kentucky and Montana.
- 4) The January 1, 2026 U.S. beef cow inventory was 27.6 million head; the smallest inventory since 1961. In which decade did the beef cow inventory hit a peak? 1950s, 1970s, 1990s or 2010s

Does Garlic Work as Fly Control?

Dana Zook, NW Area Livestock Specialist

Mother Nature has been handing out some crazy weather this year. Unseasonably warm temperatures lead to a natural increase in all types of flies that affect beef cattle. I've written about fly control in the past but several recent inquiries about garlic as fly control have prompted me to address that product in this article. I also want to give a quick review of horn flies since it's that time of year. So here we go...

In Oklahoma, we have several different species of flies, but horn flies are undoubtedly the most economically impactful fly species to beef cattle. Drummond and others in 1981 reported annual losses to the U. S. beef industry were estimated at \$730.3 million. Adjustments for inflation put that number somewhere near \$2,196 million. These detrimental pests spend their entire life on the backs and belly of cattle and require a fresh manure pile to lay their eggs. Horn flies prefer hot and dry weather, which typically allows their populations to peak in August and September despite control method. Horn flies can be controlled with many methods (tags, sprays, pour-ons, IGR), but resistance in some situations has reduced their effectiveness.

Garlic is a product that is becoming more popular as fly control. It's often included in a loose or block mineral product. Surprisingly there is only one scientific research report that was conducted in Alberta, Canada in 2021 evaluating garlic as a fly control. In this study, cattle were offered 1.) trace mineral salt with garlic powder or 2.) trace mineral salt only. All cattle were monitored for fly populations and defensive behaviors due to fly bites (side-licks, tail-flicks, head-throws, leg-stomps, and belly kicks). In year 1, cows consuming trace mineral salt infused with 2% garlic had 48% less flies compared to the control group (no fly control). This is a very effective level of control. However, in year 2 there was no difference in horn fly numbers between the group of cattle consuming garlic and those cattle without. Disappointing for sure. One notable difference was the trace mineral salt infused with 5% garlic offered to cattle in year 2 – an increase from the first year. This single two-year study is not much to go on to confirm or deny the

effectiveness of garlic.

That being said, here are some things to consider. First, understand that any product fed through mineral is impacted by consumption; if cattle don't eat mineral, they won't be consuming the product. In this study, I initially thought consumption might have been impacted in year 2 due to the increase in garlic concentration but to my surprise consumption was consistent across both years. Second, garlic is not always considered a registered feed product in a state although several garlic products show up in Oklahoma's registrations. You can check out this list at kellysolutions.com/ok/searchbyproductname.asp. Finally, here at OSU Extension, we stand by scientific data proven by research. If garlic is working well to reduce flies in your cattle herd, I'm happy for you. But until more research is conducted on garlic, we can't include it as a "tool in our fly control toolbox". Who knows, maybe I'll be looking for some producers in the future to help me figure this out! Until then, rotate your fly control chemicals and contact your local OSU Extension office to help identify the best fly control for you. If you would like more info about this topic, check out the latest episode on the Extension Experience Podcast found on Apple Podcasts App.

Sources:

Drummond, R. O., G. Lambert, H.E. J. Smalley, and C.E. Terrill. 1981. Estimated losses of livestock to pests, pp. 111-127. In Pimentel D. (ed.) *CRC Handbook of Pest Management in Agriculture*. Agric. CRC Press Inc, Boca Raton, FL.

K V Smith, K L DeLong, C N Boyer, J M Thompson, S M Lenhart, W C Strickland, E R Burgess, Y Tian, J Talley, E T Machtinger, R T Trout Fryxell, A Call for the Development of a Sustainable Pest Management Program for the Economically Important Pest Flies of Livestock: a Beef Cattle Perspective, *Journal of Integrated Pest Management*, Volume 13, Issue 1, 2022, 14, <https://doi.org/10.1093/jipm/pmac010>

Cattle Cycle Still Sputtering

Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

The cattle industry is still looking for a bottom in cattle inventories and waiting for solid signs of herd rebuilding. The U.S. beef cow herd decreased another 1.0 percent in 2025 leading to a January 1, 2026 inventory of 27.61 million head (Figure 1). The beef cow herd has decreased 4.03 million head since the cyclical peak in 2019, a decrease of 12.7 percent. The 2025 calf crop was 32.9 million head, the smallest total calf crop since 1941.

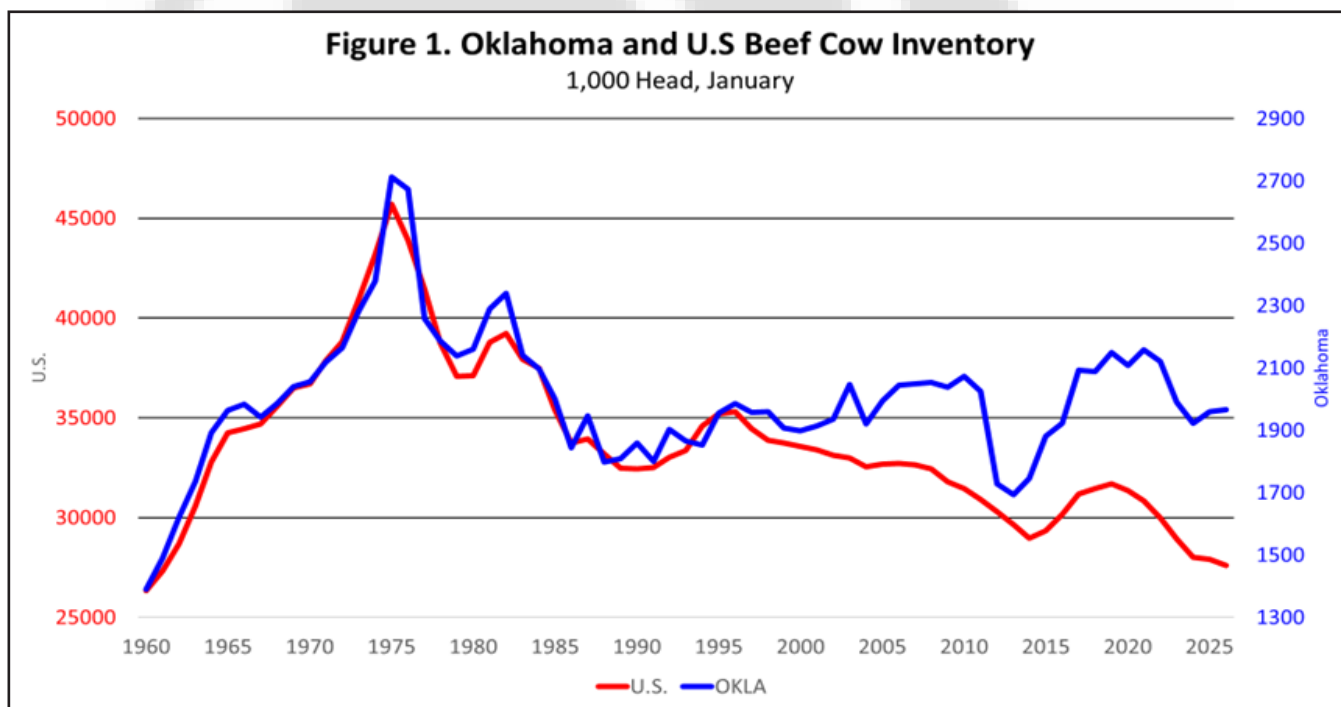
Two things are required to stop herd liquidation and begin herd expansion. First, beef cow culling must drop to the lowest possible level. Over the past 30 years the national beef cow culling rate has averaged 9.9 percent annually. From 2019-2024, the culling rate averaged 11.3 percent per year but dropped to 8.4 percent in 2025. This indicates that the beef cow industry is attempting to stop liquidation and stabilize the herd. The second requirement for herd expansion is increased heifer retention from which the beef cow inventory can rebuild. The January beef replacement heifer inventory was up 0.9 percent year over year, the first increase following eight consecutive years of declining heifer

inventories (Figure 2). This small increase in replacement heifers is not enough to indicate herd growth in 2026 but may indicate early stages of more significant heifer retention.

Oklahoma may be leading the way for herd rebuilding. The Oklahoma beef cow inventory and the beef replacement heifer inventory have both increased slightly since 2024. Figure 1 shows the increase in Oklahoma beef cow inventory since 2024. It also shows that the Oklahoma beef cow herd has increased relative to the national herd over the past thirty years.

The small inventory continues to support record high cattle prices in 2026. Increased heifer retention in the future will further tighten supplies suggesting that prices likely will not peak until after 2026.

The worsening drought conditions in Oklahoma and across much of the U.S. is the biggest threat to turning the cattle cycle. If drought persists, additional herd liquidation is likely or, at best, no progress on heifer retention would postpone any herd rebuilding (Figure 3).



Cattle Cycle Still Sputtering (cont.)

Figure 2. Heifers Held As Beef Cow Replacements
January 1, U.S.

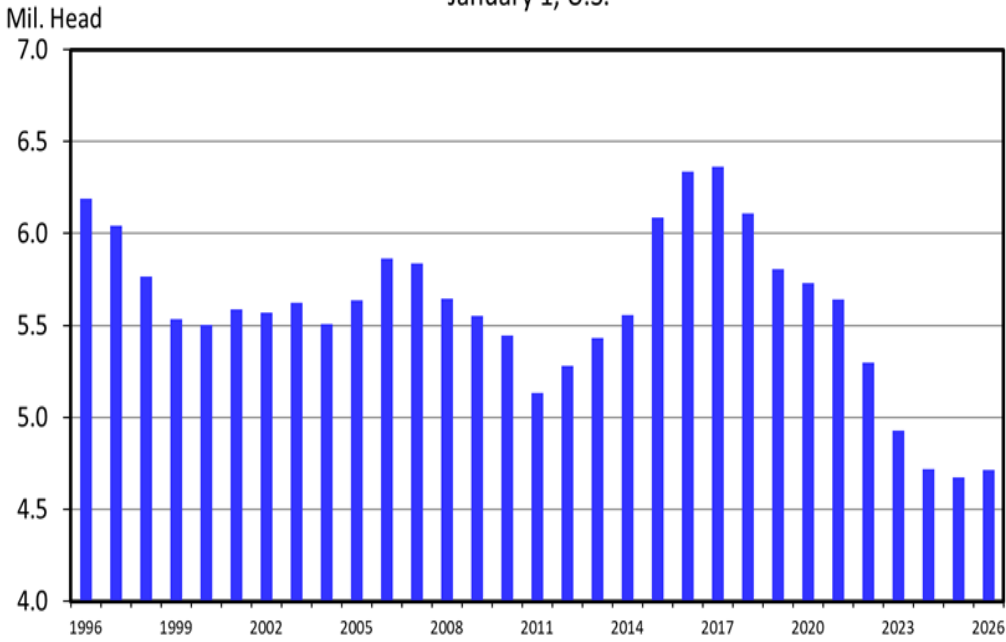
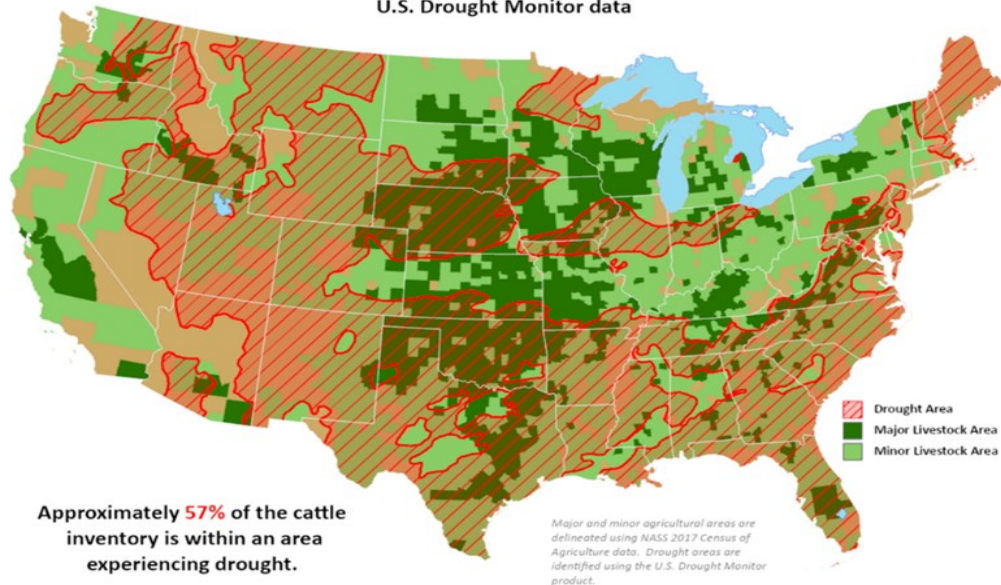


Figure 3. *Cattle Areas in Drought*

Reflects March 24, 2026
U.S. Drought Monitor data



What Does Marketing Bulls as Feeder Calves Cost You?

Shelby A. Sumner, Graduate Research Assistant, and Kellie Curry Raper, Livestock Marketing Specialist

In competitive cattle markets, market prices reflect the quality and characteristics of the animal, the risks that buyers expect to face and the expected performance of the animal. For example, bulls typically bring lower prices as feeder cattle than steers because buyers expect more work, more risk, and lower performance. An article in the December 2025 *Master Cattleman Quarterly* discussed the increasing proportion of bulls in Oklahoma feeder cattle markets over the past few years. When buyers see a bull come through a feeder cattle market, they factor in the potential extra time, labor, and health risks and lower their bids accordingly. The market discount for bulls reflects how buyers value castration and the reduced risk that comes with it. This

follow-up article takes a deeper dive into the cost of marketing feeder calves as bulls rather than steers.

A recent study at OSU used Oklahoma auction data to measure the feeder market discount for lots that include bulls and also whether that discount is different across weight categories. Any differences in cattle characteristics are accounted for, so the measure captures only the price difference attributed to a lack of castration. The discount for bull lots relative to steers with similar physical and management characteristics was estimated at \$11.96 per hundredweight for bulls

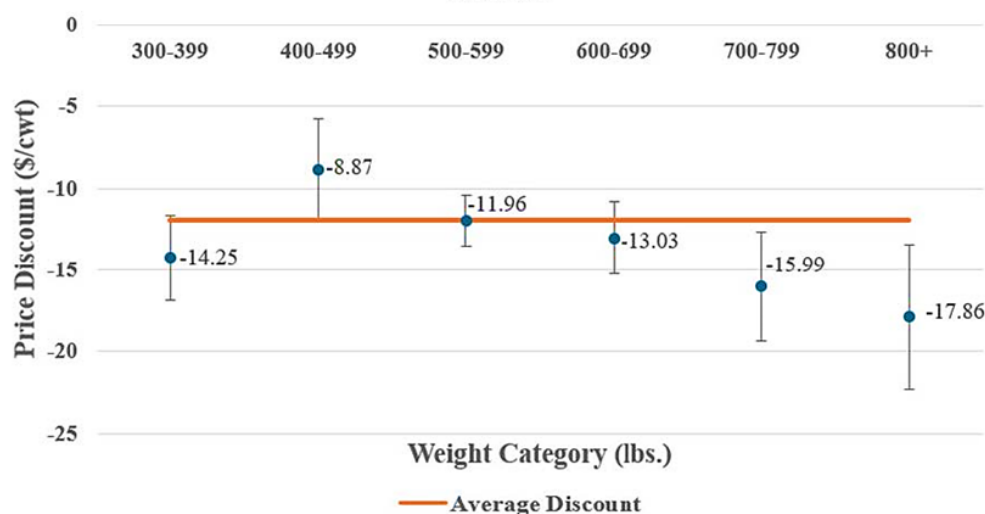
relative to steers. In this case, the impact of weight category on the bull discount was also estimated. Figure 1 illustrates these estimates relative to the primary estimate of \$11.96 per hundredweight.

While the bull discount *estimates* do differ somewhat across categories, tests indicate that they are *not statistically different* from each other so we cannot place much confidence in those differences. The standard error bars on the chart in Figure 1 illustrate that for each weight category's estimate, the margin of error is

too wide for the values to be distinct from each other. The result is that the estimated bull discount of \$11.99 per hundredweight holds across all weight classes, statistically speaking.

Though the discount per hundred-

Figure 1. Bull Price Discount by Weight Category, Hedonic Model



weight is estimated to be the same across weights, the total value lost per head from not castrating still increases as animal weight increases. Table 1 calculates the range of market value lost per head for bulls, as well as the range of net returns on investment in dollars per head and in percentage terms. Note that cost of castration is taken from Sahs' (2022) survey of Oklahoma producers and is assumed to be constant at \$5.28 per head since the question was not asked based on animal weight. In reality, castration costs are likely to increase with animal weight as the procedure becomes more

What Does Marketing Bulls as Feeder Calves Cost You? (cont.)

physically demanding and time-intensive for larger calves. Lost market value represents lost revenue by marketing an uncastrated male of that weight. Lost market value for bulls in the 300-pound weight class ranges from \$35.88 to \$47.72, while bulls in the 800-pound plus weight class are estimated to lose between \$95.68 and \$113.62 in revenue per head due to lack of castration. Net return value is calculated as avoided revenue loss from castration minus the cost of the procedure. For example, 300- to 399-pound calves have a net return of \$30.60 to \$42.44 per head, while 800- to 950-pound calves show net returns of \$90.40 to \$108.34 per head. For a 399 pound bull calf, that can be explained as spending \$5.28 to increase your check from the livestock market by \$47.72, netting \$42.44 more than you would have had you not castrated the calf. Finally, the last column is return on investment as a percentage of castration cost (ROI) and is calculated as:

$$\text{ROI} = (\text{Return} - \text{Cost}) / \text{Cost} \times 100.$$

For that 399 pound calf, ROI is estimated at 804%, indicating that you made back your \$5.28 plus another 8 times that cost. The estimates in Table 1 demonstrate that castration is economically beneficial across all weight classes, with the financial advantage growing as calves get heavier.

Every producer's resource base is different with respect to resources such as time, labor, and equipment, so your cost may vary from what is represented here. The examples here indicate that castration of your bull calves prior to marketing is a cost-effective decision that more than pays for itself. So consider the dollars left on the table when castration is not on your calf management list and consider whether your resource base allows you to make a change.

Table 1. Impact of Castration on Feeder Calf Market Value and Return on Investment (\$/head)*

Weight Class (lbs.)	Lost Market Value No Castration (\$/head)		Net Return on Castration Investment (\$/head)		Net Return on Castra- tion Investment (%)	
	Low	High	Low	High	Low	High
300-399	-35.88	-47.72	\$30.60	42.44	580%	804%
400-499	-47.84	-59.68	\$42.56	54.40	806%	1030%
500-599	-59.80	-71.64	\$54.52	66.36	1,033%	1257%
600-699	-71.76	-83.60	\$66.48	78.32	1,259%	1483%
700-799	-83.72	-95.56	\$78.44	90.28	1,486%	1710%
800-950	-95.68	-113.62	\$90.40	108.34	1,712%	2052%

Source: Oklahoma Extension Feeder Cattle Auction Data, 2021-2024

*Castration cost = \$5.28/head (Sahs, 2022)

Upcoming Farm Transitions Workshops

Shannon L. Ferrell, Professor, Agricultural Law, Oklahoma State University Department of Agricultural Economics

Thanks to a generous grant from the Noble Research Institute, the Department of Agricultural Economics is excited to announce its new Farm Transitions Program for 2026 and 2027. The program will provide participants with the new updated and expanded Second Edition of the Farm Transition Workbook, an online library of transition planning resources, and an educational event series including one-day introductory workshops, live webinar events for participants' questions and support, and a two-day advanced workshop. Participants are encouraged to bring multiple generations of their family to the live events, and can receive discounts for bringing multiple family members.

The first set of one-day workshops will be held around the state this fall at the following dates and locations:

- August 28th, 2026 – Guymon
- September 11, 2026 – Woodward
- September 25, 2026 – Ardmore
- October 16, 2026 – Claremore
- October 28, 2026 – Lawton

To receive more information and notifications when registration is open, contact your local Extension office or email Kareta Casey at kareta.casey@okstate.edu.

Answers: 1) Oklahoma; 2) Colorado; 3) Montana, Kentucky, Arkansas; 4) 1970's (1975 with 45.7 million beef cows)

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OSU EXTENSION
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