



July 2024

CARTER COUNTY
EXTENSION

Carter County Ag Advisory

OSU is an Affirmative Action, Equal Employment Opportunity, E-Verify Employer.

Upcoming Events

- **July 4th and 5th: Office Closed**
 - We will reopen Monday, July 8th.
- **July 9th: Master Gardener Meeting**
 - Call for information.
- **July 16th: Youth Entomology Class**
 - Join our Ag Educator at the Champion Public Library in Ardmore for a fun, free class about pollinators!
- **July 16th-18th: Big Three Field Days**
 - Livestock field days for youth, Stillwater, OK
- **July 17th: Carter County Junior Livestock Show Board Meeting**
 - Open to the public, starts at 5:30pm.
- **July 19th-20th: Oklahoma Cattlemen's Association Convention**
 - Register now! Embassy Suites in Norman, OK
- **July 23-26th: Oklahoma State 4-H Round Up**
 - Stillwater, OK
- **July 30th: Market Flower Bouquet Workshop**
 - Space is limited, call to register! Free event, take home your own bouquet!
- **August 1st: State Women in Ag Conference**
 - Register now! Edmond, OK

Your Local Office

Address:

25 A Street NW, Suite 200
Ardmore, OK 73401

Phone: (580) 223-6570

Website:

<https://extension.okstate.edu/county/carter/>

Follow our Facebook for updates!

@CarterCountyOSUExtension



Happy Summer!



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Ag News

Nitrate and Prussic Acid Toxicity

Stress conditions, such as drought, can cause accumulation of nitrates in the stems of forages including sorghums, sudangrass, millets, johnsongrass, and corn. Nitrate toxicity persists in forages even when they are dried for hay. Stress conditions also cause accumulation of prussic acid (HCN) in the leaves of forages including sorghums, sudangrass, and johnsongrass. Prussic acid does not persist in hay.

Both of these toxicities inhibit oxygen transport in the blood, which leads to asphyxiation and death in cattle.

As we prepare for drought this summer, keep in mind that the extension office can perform free, quick tests to determine presence of nitrates and prussic acid in live forages. Please call the office to schedule a consultation or test. Samples can also be submitted to the OSU diagnostic lab for quantitative results of nitrate levels for only \$6 per sample. Take advantage of these services to make informed decisions when grazing or feeding hay from any of the forages listed above.

Pasture Weed ID: Silverleaf Nightshade

While cattle don't normally eat this weed, it is highly toxic when ingested.

Symptoms:

- labored breathing
- salivary & nasal discharge
- paralysis, trembling, progressive weakness
- death



Grazon P+D and Weedmaster are both rated as 9 ("good") control of nightshade.

Summer Management Checklist

- Implement fly and tick control
- Plan anaplasmosis control
- Remove bulls from pasture to control length of breeding season
- Summer water supply: plan, check equipment, make repairs
- Cut native grass hay meadows by early July for the best trade-off between quality and quantity of hay
- **La Nina weather pattern is predicted for the next several months, manage pastures accordingly and prepare for drought**
- Scout pastures now to identify weeds and plan weed control program for next year



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Hort Notes

July Horticulture Tips

- Plant fall vegetable gardens in late July
- Continue to fertilize warm season lawns (Bermuda, Zoysia, St. Augustine)
- Once fruits are ready, harvest early in the morning and refrigerate ASAP
- Water plants early in the morning, 1- 2.5 inches of water is recommended
- Expect spider mite populations to grow as weather gets hotter and drier
- Expect some leaf fall (normal reaction to drought)
- Use fact sheet EPP-7307 to identify beneficial insects so you don't accidentally get rid of them

Want to Be Master Gardener ?

We are taking applications for the Fall 2024 Master Gardener Training class!

We are looking for residents of Carter and Love Counties who want to expand their horticultural/ gardening knowledge and become certified volunteers for OSU Extension. Volunteer opportunities include working in community gardens, educational workshops, presenting at club meetings, assisting with extension events, helping with 4-H clubs/ projects, writing educational articles for the newspaper, and much more!

Please contact Stephanie or Lauren for information and to apply:

stephanie.q.smith@okstate.edu (580) 223-6570
lauren.young@okstate.edu (580) 276-3385

What NOT to Do in the Garden

Pat Nesbitt, Carter County Master Gardener

Don't plant before the soil is fully prepared. Beds need all grass removed and lots of organic matter such as compost added before one seed or plant goes in. If you don't have time to do it right at first, you'll never have time to do it over.

Don't neglect to mulch every square inch of bare soil. Mulch improves the soil, deters weeds, makes plants healthier, reduces watering, keeps the soil cooler, and looks much nicer. Mulch can save gardeners up to 80% of manual garden labor, mostly by controlling weeds!

Don't plant aggressive, invasive plants in your beds. Be wary of accepting plants from anyone who tells you they are "vigorous and multiply rapidly". What that really means is they will take over your whole yard within a year and you will never get rid of them.

Don't try to work for hours at a time or in the heat of the day. Work early in the morning while the temperatures are usually in the 70s instead of later in the day when they are getting up near the 100s. Follow the shade, take breaks, stay hydrated, and switch up the chores. Your garden should be enjoyable so take time to relax and smell the roses, lilies, and phlox you worked so hard to plant and care for.





Featured Article

Working with Cattle in the Heat

Paul Beck, OSU Extension Beef Nutrition Specialist

Over the last few weeks we have had some really scorching temperatures with highs in the triple digits and lows in the upper 70's. Coupled with the high humidity it is hard to get any relief for ourselves and our livestock. Below is the Beef Cattle Temperature Humidity Chart (Figure 1), it helps determine the risk level of heat stress given the temperature and the relative humidity. Notice the higher the humidity the lower the temperature that is cause for concern.

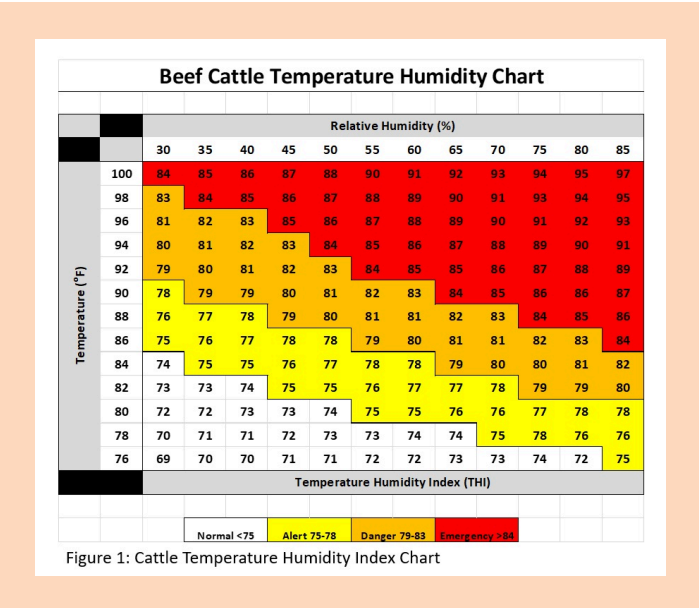


Figure 1: Cattle Temperature Humidity Index Chart

In hot summer conditions, heat transfer failures cause accumulation of body heat resulting in heat stress, reduced performance, animal discomfort, or death. When animals experience discomfort from heat stress, their behaviors change to reduce heat load (increased water consumption, decreased feed intake, seeking shade, standing in water, etc.). Water intake per unit of feed intake is twice as high during the summer than in the winter. Evaporation of moisture from the respiratory tract through panting is an important way for the animal to lose excess heat load. When temperatures are above 40° F, water intake should increase by 1 gallon for every 10° F increase in temperature.

Shade has been found to be beneficial to feedlot cattle, the greatest benefit of shade for finishing cattle is at the onset of the heat stress event. Cattle with shade have lower respiration rates and body temperatures when temperatures increase. Under heat stress, shaded finishing cattle in feedlots have increased average daily gain, hot carcass weights and dressing percentage as well as improved feed efficiency.

Finally, cattle handling should occur in the early morning before temperatures get too high. If there is little to no night cooling, cattle handling operations should be delayed until better conditions exist. Work cattle in small groups so that no groups are in holding areas longer than 20 to 30 minutes. Cattle should be handled easily with a little stress as possible to reduce elevating core body temperature through increased activity.

Remember, if you are not comfortable neither are your livestock, so take steps to increase comfort of livestock during heat stress events.