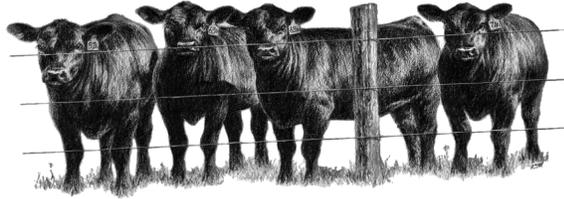




ALFALFA COUNTY
EXTENSION

Alfalfa County Cooperative Extension News

Beef Cow Herd Calendar



This Beef Cow Herd Calendar was developed as a production practice and management guide for Oklahoma cattle producers. Local adjustments and adaption in some areas may be necessary due to differences in types of grass and cattle, amount of rainfall, length of growing season or other factor.

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December

Fall Calving

1. Continue winter feeding program. Vaccinate cows 30 days before breeding season with Leptospira/Campylobacter bacterins, IBR, BVD, PI3' BRSV vaccine depending on the local veterinarian's recommendations.
2. Castrate, dehorn, implant, and vaccinate new calves with 7-way Clostridial bacterin and Intranasal IBR, PI3' BRSV vaccine. Don't implant replacement heifers.
3. Treat cows for internal parasites and lice. If needed.
4. For wheat or other small grain pasture:
 - a) Limit-graze cows for protein needs.
 - b) Provide a special area for calves to creep graze.
5. Watch the herd continuously for health problems. Pay particular attention to cattle grazing fescue for signs of fescue foot.
6. Provide OSU Silver creep for calves.

Spring Calving

1. Continue feeding program which was begun in October and November.
2. Limit-graze dry cows on fescue three to four days per week.
3. Watch the herd continuously for health problems. Pay particular attention to those grazing fescue for signs of fescue foot.
4. Continue to monitor herd for lice infestation. Implement control program as needed.
5. Identify the purebred herds and test stations at which you want to look for herd sires. Check sale dates and review performance criteria to use.

Garden Tips for December

David Hillock



Lawn & Turf

- Remove leaves from cool-season grasses or mow with a mulching mower. (HLA-6420)
- Continue mowing cool-season lawns on a regular basis. (HLA-6420)
- Continue to control broadleaf weeds in well-established warm- or cool-season lawns with a post-emergent broadleaf weed killer.

Tree & Shrubs

- Select a freshly cut Christmas tree. Make a new cut prior to placing in tree stand. Add water daily.
- Live Christmas trees are a wise investment, as they become permanent additions to the landscape after the holidays.
- Light prunings of evergreens can be used for holiday decorations. Be careful with sap that can mar surfaces.

Flowers

- Apply winter mulch to protect rose bush bud unions and other perennials. Wait until after several early freezes or you will give insects a good place to winter.
- Poinsettias must have at least six hours of bright, indirect light daily. Keep plants away from drafts.

Fruits & Nuts

- Cover strawberry plants with a mulch about 3-4 inches thick if plants are prone to winter injury.
- Wait to prune fruit trees until late February or March.

General

- Keep all plants watered during dry conditions even though some may be dormant. Irrigate all plantings at least 24 hours before hard-freezing weather if soil is dry. (HLA-6404)
- Order gardening supplies for next season.
- Now is a great time to design and make structural improvements in your garden and landscape.
- Send for mail-order catalogs if you are not already on their mailing lists.
- Christmas gift ideas for the gardener might include tools, garden books and magazine subscriptions.
- Clean and fill bird feeders.
- Make sure indoor plants are receiving enough light or set up an indoor fluorescent plant light.
- Till garden plots without a cover crop to further expose garden pests to harsh winter conditions.
- Visit your county extension office to obtain gardening fact sheets for the new gardening season.
- Join a horticulture, plant or urban forestry society and support community “greening” or “beautification” projects.
- Review your garden records so you can correct past mistakes. Purchase a new gardening journal or calendar to keep the New Year’s gardening records.

Mineral Supplementation of Stocker Cattle on Wheat Pasture

Britt Hicks, Ph.D., Area Extension Livestock Specialist

Grazing stocker cattle on winter wheat during the fall and winter months can provide cost-effective gains. Wheat pasture is succulent, palatable and nutritious. However, wheat pasture is typically low in calcium, marginal to sufficient in phosphorus and magnesium, and contains excess potassium for 400 to 600 lb stocker calves. It is also typically low in the trace minerals, copper and zinc. Due to these deficiencies, mineral supplementation on wheat pasture is highly recommended. Calcium is the macro-mineral of primary concern in most wheat pasture-grazing situations.

Two conditions which may occur with grazing of wheat pasture are wheat pasture poisoning (grass tetany) and frothy bloat. Wheat pasture poisoning is a complex metabolic disorder of cows grazing on wheat pasture. It occurs most frequently in mature cows that are in the latter stages of pregnancy or are nursing calves, and that have been grazing wheat pasture for 60 days or more. It results from a dietary deficiency of magnesium or from the presence of some factor in the diet which reduces absorption and/or utilization of magnesium. Studies have shown that high levels of potassium and/or nitrogen in the forage result in impaired magnesium uptake by the plant and/or utilization by the animal. Forage dry matter that contains less than 0.2% magnesium and more than 3% potassium and 4% nitrogen (25% CP) is likely to cause grass tetany. Since wheat pasture is typically high in nitrogen and potassium, magnesium utilization is reduced. Research suggests that a potassium level of 3 to 3.5% reduces magnesium absorption by about 30 to 35%. Cows with wheat pasture poisoning have low blood concentrations of both calcium and magnesium. While a similar, tetany-like condition occurs in stocker cattle, the incidence is extremely low.

Frothy bloat is a major cause of death in stocker cattle grazing wheat pasture and occurs as a result of the entrapment of gases in ruminal fluid froth and/or foam. It is generally thought that frothy bloat is caused by soluble proteins. Soluble proteins contribute to froth or foam formation in the rumen that entraps fermentation gases in the rumen. The chemical composition of wheat forage changes with environmental growing conditions, stage of wheat plant growth or maturity, soil fertility level, etc.; and, therefore, affects the degree or likelihood that a stable ruminal foam will be formed and bloat will occur when wheat is grazed. Oklahoma research has shown that bloat on wheat pasture is more prevalent when plants are low in dry matter and total fiber (neutral detergent fiber, NDF). Thus, bloat is more common when the wheat is actively growing in the fall and spring. Stockers grazing the more fibrous, less succulent wheat forage may secrete more saliva. This saliva may have an anti-foaming effect and thus reduce the incidence of bloat.

Poloxalene is the only product labeled for bloat prevention. It reduces the surface tension of the gas-trapping froth in the rumen. The froth then forms much larger gas bubbles, permitting the normal release of gas; hence, reducing the danger of bloat. Feeding monensin can also help reduce bloat. Although Monessen (Rumensin®) is not a true bloat preventive compound like poloxalene, studies have shown that it does decrease the incidence and severity of wheat pasture bloat.

The perception exist in the field that a high-magnesium mineral fed to wheat pasture stockers will reduce bloat. However, there is no evidence to support the suggestion

that supplemental magnesium will decrease the incidence and/or severity of bloat of stocker cattle on wheat pasture. There may be a relationship between ruminal motility (and the ability of stocker cattle to eructate gases) and the calcium status of the cattle. Research has shown that ruminal and gut motility is greatly compromised by subclinical deficiencies of calcium.

All of the information presented above indicates that calcium is the mineral of primary concern when developing a wheat pasture mineral program. It is generally recommended that stocker calves on wheat pasture be fed a mineral containing 15 to 20% calcium. Phosphorus may be of some concern but a level of less than 5% is adequate. A low concentration of magnesium may be desirable (~2%) even though the incidence of grass tetany in stocker cattle is extremely low.

Research at the USDA Southern Great Plains Range Research Station (Woodward, OK) showed that stocker cattle grazing wheat pasture fed a non-medicated mineral gained 0.51 lb/day more in the fall grazing season and 0.57 lb/day more during the spring graze-out period compared to non-supplemented cattle. In addition, OSU research at the Marshall Wheat Pasture Research Unit has shown that stockers grazing wheat pasture fed a non-medicated gained ~0.25 lb/day more than stockers not fed supplemental mineral. Adding an ionophore (Monessen) to the mineral increased gains by about another 0.20 lb/day. These data illustrate that stocker calves grazing small grain pastures will respond efficiently to mineral supplements and Monessen. Consider using these tools in your management program.

Note: Two ionophores (Monessen and lasalocid) are available for wheat pasture stocker cattle. Both, if delivered at the proper dosage, increase weight gains of growing cattle on wheat pasture by 0.18 to 0.24 lb/day more than that of the carrier supplement and improve the economics of supplementation programs.