COW/CALF CORNER

The Newsletter

From the **Oklahoma Cooperative Extension Service**

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In this Issue:

Proper Cow Culling is Important to Your Business

By Glenn Selk

Cull cows represent approximately 20% of the gross income of any commercial cow operation. Cull beef cows represent 10% of the beef that is consumed in the United States. Therefore Oklahoma ranchers need to make certain that cow culling is done properly and profitably. Selling cull cows when they will return the most income to the rancher requires knowledge about cull cow health and body condition. Proper cow culling will reduce the chance that a cow carcass is condemned at the packing plant and becomes a money drain for the entire beef industry.

Is she good for another year? At cow culling time, producers often face some tough decisions. Optimum culling of the herd seems to require a sharp crystal ball that could see into the future. Will she keep enough body condition through the winter to rebreed next year? How old is the cow? Is her mouth sound so that she can harvest forage and be nutritionally strong enough to reproduce and raise a big calf? At what age do cows usually start to become less productive?

There is great variability in the longevity of beef cows. Records kept by the Desert Ranches of Florida in the 1980's show how productivity changes over the life of the beef cows. These large data sets, (19500 cows, and 14000 cows in two separate years) compared the average percentage of cows determined to be pregnant based on their age in years.

This data would indicate that cows are consistent in the rebreeding performance through about 8 years of age. A small decline was noted as cows aged from 8 to 10 years of age. However the most consistent decline in reproductive performance was noted after cows were 10 years of age. A steeper decline in reproductive performance was found as they became 12 years of age. In other words, start to watch for reasons to cull a cow at about age 8. By the time she is 10, look at

her very closely and consider culling; as she reaches her 12th year, plan to cull her before she gets health problems or in very poor body condition.

Cull open cows. Why feed a cow all winter that will not have a calf next spring? Call your veterinarian and find which cows have not bred back. Cull them while they are in good body condition after summer pasture and before you spend over $100 on the winter feed bill.

Other reasons to cull cows:

Examine the Eye Health of the cows. The number one cause of condemned beef carcasses is still "cancer-eye" cows. Although the producers are doing a much better job in recent years of culling cows before "cancer-eye" takes its toll, every cow manager should watch the cows closely for potentially dangerous eye tumors. Watch for small pinkish growths on the upper, lower, or corner eye lids. Also notice growths on the eyeball in the region where the dark of the eye meets with the "white" of the eyeball. Small growths in any of these areas are very likely to become cancerous lesions if left unchecked. Likewise be aware of cows with heavy wart infestations around the eye socket. Many of these become cancerous over time. *Culling these cows while the growth is still small, will allow the cow carcass to be utilized normally.* If however, cancer engulfs the eyeball and gets into the lymph nodes around the head, the entire carcass will likely be condemned as not fit for human consumption.

Check the feet and legs. Beef cows must travel over pastures and fields to consume forages and reach water tanks and ponds. Cows with bad stifle joints, severe foot rot infections, or arthritic joints may be subject to substantial carcass trimming when they reach to the packing plant. They will be poor producers if allowed to stay on the ranch while severely lame. They may lose weight and body condition, weigh less, and be discounted at the livestock market by the packer buyers. Culling them soon after their injury will help reduce the loss of sale price that much later may be suffered. If any cows have been treated with antibiotics for foot rot, be certain to read and follow withdrawal times before marketing the treated cows. Antibiotic residues in cow carcasses will not be tolerated in the food supply chain.

Bad udders should be culled. One criteria that should be examined to cull cows is udder quality. Beef cattle producers are not as likely to think about udder health and shape as are dairy producers, but this attribute affects cow productivity and should be considered. OSU studied the effect that bad udders had on cow productivity. They found that cows with one or two dry quarters had calves with severely reduced weaning weights (50 - 60 pounds) compared to cows with no dry quarters. Plus, cows with bad udders tend to pass that trait along to daughters that may be kept as replacement heifers. *Two key types of "bad" udders to cull include: the large funnel-shaped teats and weak udder suspension.* The large funnel-shaped teats may be indicative of a previous case of mastitis and cause the quarter to be not capable of producing milk. In addition, large teats may be difficult for the newborn calf to get it's mouth around and receive nourishment and colostrum very early in life. As some cows age, the ligament that separates the two sides of the udder becomes weakened and allows the entire udder to hang very near to the ground. Again it becomes difficult for the newborn calf to find a the teat when the udder hangs close to ground. Select against these faults and over time your cow herd will improve its udder health.

Cull cows when in moderate body condition. Send older cows to market before they become too thin. Generally, severely emaciated cattle have lightly muscled carcasses with extremely small ribeyes and poor red-meat yield. This greatly lessens the salvage value of such animals. Just as importantly, emaciated cattle are most often those which "go down" in transit, as they lack sufficient energy to remain standing for long periods of time. Severe bruising, excessive carcass trim, increased condemnations, and even death are the net results of emaciation. Very thin cows have a low dressing percentage (weight of the carcass divided by the live weight). Because of these factors, cow buyers will pay less per pound for very thin, "shelly", cull cows. In addition, thin cows will weigh less. *As you combine these two factors (weight and price per pound), thin cull cows return many fewer dollars at sale time than if the cow was sold when in moderate body condition.*

Cull any really wild cattle. They are hard on you, and your equipment, and they raise wild calves. Wild calves are poor performers in the feedlot and are more prone to producing dark cutting carcasses as they reach the packing plant. "Dark cutters" are discounted about $35 per cwt on the rail.

Light Frosts May Add Prussic Acid Problems to Nitrate Toxicity Concerns

By Glenn Selk

Prussic acid when ingested by cattle, is quickly absorbed into the blood stream, and blocks the animal's cells from utilizing oxygen. Thus the animal dies from asphyxiation at the cellular level. Animals affected by prussic acid poisoning exhibit a characteristic bright red blood just prior to and during death. Lush young regrowth of sorghum plants are prone to accumulate prussic acid especially when the plants are stressed such as drought or freeze damage. Several nights have recently reached the freezing mark. Light frosts, that stress the plant but do not kill it, are often associated with prussic acid poisonings. Producers should avoid grazing fields with sorghum type plants following a light frost. The risk of prussic acid poisoning will be reduced, if grazing is delayed until at least one week after a "killing freeze". As the plants die and the cell walls rupture, the hydrocyanic acid is released as a gas, and the amount is greatly reduced in the plants. One can never be absolutely certain that a field of forage sorghum is 100% safe to graze. To date, only millets have been shown to be unlikely to accumulate prussic acid.

Cattle that must be grazed on sorghum pastures during this time of year should be fed another type of hay before turning in on the field, and should be watched closely for the first few hours after turn in. If signs of labored breathing, such as would be found in asphyxiation, are noted, cattle should be removed immediately. Call your local veterinarian for immediate help for those animals that are affected.

Nitrates may still be a concern. Even though Oklahoma has had a summer with above average rainfall, laboratory tests of forage sorghum hays are continuing to show high concentrations of nitrates in some of the late summer, and early fall hay cuttings. Any of the summer annuals that would be in sorghum family (especially millets) are capable of accumulating nitrates. Don't be

caught off-guard with the relatively mild summer, nitrates can still be a potential issue as producers feed forage sorghum type hay this winter.