



The Fenceline

September 14, 2020

Controlling Summer Pink Eye in Beef Cattle: Part 2

John Benner, Virginia Cooperative Extension

As promised, here are some additional tips for controlling and minimizing pink eye in beef cattle. Iowa State research from the early 2000's found calves infected with pink eye may have weaning weights that are lighter by an average of 18 lbs, even after recovery and treatment. University of Kentucky research found calves treated for pink eye to be lighter by 30-40 lbs at weaning, which translates to a loss of \$45 to \$60/head in lost gain. Add in treatment costs (I figured about \$40 for medicine and labor) we are back about \$100/head.

<u>Treatment</u>—Observation of cattle is critical. Early detection not only reduces treatment costs as less expensive drugs are often more effective in earlier stages, but also will reduce permanent damage to affected eyes. Long acting tetracyclines are effective through the early stages of the disease. In advanced stages tulathromycin has proved to be effective. A sub-bulbar conjunctiva injection dexamethasone/penicillin may be warranted to speed healing. In recent years, penicillin has been substituted by

Tulathromycin (Draxxin®) This procedure should be undertaken only with consultation from your herd veterinarian. A 2016 review of antimicrobials and their effectiveness on pink eye revealed that many products have effectiveness over a placebo in treating and healing eyes. Early treatment of infected cattle may stop an outbreak in its tracks, preventing the spread of the disease throughout the herd. Eyes infected with pinkeye often produce tears which attract face flies that may further spread the disease.

<u>Nutrition/Mineral Supplementation</u>—According to research by the University of Kentucky, there is no clinical evidence that states additional supplementation of one mineral or vitamin may prevent pink eye infections. However, a thorough and consistent trace mineral and vitamin program will help support a healthy immune system in grazing cattle. This means keeping mineral in front of cattle on a consistent basis, especially when pastures are dry and dormant or forage availability is limited.

<u>Selection</u>—Producers have long observed that some cow families tend to come down with pink eye at a greater prevalence than other cow families. Is there anything to this? Researchers at Iowa State did a study of pink eye treatment records in university cow herds during the early 2000s. They concluded pink eye resistance may have a heritability of 0.11. Though lowly heritable, which would indicate slow genetic progress in improving resistance, we nevertheless should take it into account in our genetic selection decisions.

No Treatment—The time, labor, medicine and stress on cattle and ourselves of gathering them for treatment all have considerable costs on our operation. I have heard it said by veterinarians and producers alike: "When I see a calf with pink eye and treat it, it normally gets better in 7 days. When I see a calf with pink eye and don't treat it, it will sometimes get better in a week." Though this statement is true enough, it may not be for all calves. For calves not treated, every so often one will likely not recover, and could potentially lose sight out of the affected eye. Furthermore, forgoing treatment early in an outbreak may extend the reach of the outbreak resulting in more cattle with pink eye. The decision to treat or not treat calves is one up to the individual producer and should be evidenced based on the history of pink eye in the herd and the ability of the herd to

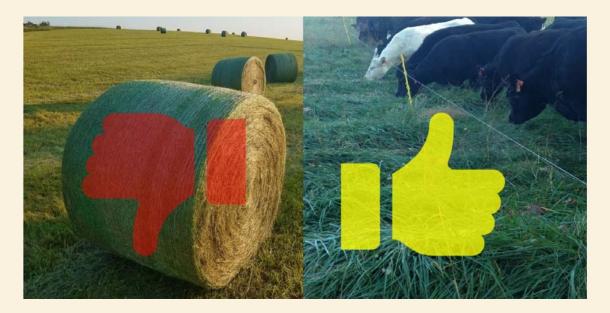
overcome an infection without treatment.

<u>Shade</u>—Alright. Admittedly, I am starting to grasp at straws, but would you agree with me that at least some of the time, pink eye cases seem to spike near a heat wave? It seems reasonable to me that cattle that are working through some heat stress *might* contribute to pink eye severity. Though certainly cattle with ample shade and water could just as easily have a severe outbreak of pink eye, I would warrant that the cases would not be worsened if they did have a strong supply of shade and water. Shade works to relieve heat stress and reduce UV light irritation around they eyes. However, there is one major caveat to this recommendation. Cattle tend to group in numbers where shade is found. This "clustering" could indeed make pink eye worse. Therefore, if you are providing shade, make sure it is enough for the heard to space out adequately. Social distancing can work for cows too!

Disclaimer: Commercial products are named in this publication for informational purposes only. Virginia Cooperative Extension does not endorse these products and does not intend discrimination against other products which also may be suitable. References omitted but available at request.

Consider Grazing Fall Grass instead of Baling Hay

Bobby Clark, Virginia Cooperative Extension



August 2020 brought abundant rain to most of the Shenandoah Valley. Pastures and Hay fields responded with lots of growth. If this land is fenced (or if it can be easily fenced) livestock producers should consider grazing this growth instead of baling the hay. Many fenced hay fields have been baled for the last two weeks. If cattle can access this land; grazing is likely more profitable than baling hay.

Consider a farmer with 30 cows and 80 acres of ground. There is a 15-acre hay field with 2,000 pounds of growth on August 25. Should the farmer bale the field or graze it?

Haying Option: An average cost to Mow, Ted, Rake, Bale and store hay that will yield about 1 ton per acre is about \$100 per acre (Mow \$15/A + Ted \$10 + Rake \$10 + Bale \$10.5/Bale + Store \$5/A.). We also need to replace the nutrients removed. This could easily be achieved with about 1.5 tons of chicken litter per acre that will likely cost about \$35/Acre. The total cost is about \$135 /Acre or \$1,518 for the field. This hay will last this farmer about 25 days and the farmer will spend about \$15 each day feeding the cows for another \$385. Thus, the total cost is about \$1,900.

Grazing Option: The farmer turns the cattle into the 15-acre in late August and lets them graze. Likely the cows will only consume about half of the 2,000 pounds of dry matter per acre. Therefore, it only lasts the cattle 15 days. We estimate this cost the farmer about \$100 (to cover patching the fence or keeping an eye on the cows or watering the cows). This farmer needs to buy hay for 10 days to be equal to the Haying option (11.5 rolls of hay) that cost about \$40 per roll... or \$450. Plus 10 days of feeding at \$15 per day. The grazing farmer feeds his cows those 25 days for \$700 (\$100 grazing cost, \$450 for the hay + \$150 feeding cost).

Both farmers get to graze the re-growth on the hay field so this is likely equal.

The bottom line for this farmer with 30 cows and 80 acres is that grazing his 15-acre hay field would save him about \$900 compared to baling and re-feeding the August growth. This farmer also gets additional re-growth on the rest of his pasture (65 acres) because he is able to rest those fields an additional 15 days in the fall growing season

Many hay advocates will argue that the hay baled as second cutting in late August/early September is excellent quality and will help their cows in the winter. Most of the growth that they bale in in August/September is almost all vegetative. It will stay vegetative through frost, and will undoubtedly be much cheaper than feeding hay early in the winter. It will likely be real high quality through mid-December no matter if it is fescue, orchardgrass or bluegrass. If the forage is mostly fescue it will hold up through even longer in the winter.

Other recommendations:

- Hold fields with the highest percentage of fescue for the last grazing. Hopefully this will be after Christmas. Fescue retains its quality better than any other grass.
- Fields that have volunteer johnsongrass, foxtail or crabgrass should be grazed prior to
 frost. Cattle prefer to eat this grass over the fescue. Once it frosts on the
 johnsongrass, foxtail or crabgrass; cattle do not like to eat it. So, get the good out of it
 while you can. Also, when johnsongrass is in the wilted stage it might have prussic
 acid in it (which is toxic to cattle). Once it is dry (like johnsongrass in a dry hay bale) it
 is no-longer toxic.

The bottom line is that grazing fall growth is less expensive than baling and re-feeding.

Extension Survey of Hay Feeding Practices

WE NEED YOUR HELP!

Virginia Cooperative Extension is asking producers to please fill out a survey on their hay feeding methods. This survey is being completed across *14 states in the Southeast*, and will be used to help better understand real-world practices and to guide research.

All information will be kept confidential. to the extent allowed by applicable State and Federal law. By completing the survey, you are agreeing to allow the use of your responses for educational purposes, but all information will be kept confidential. We appreciate your taking the time to complete the survey--Thank you!

Hay feeding survey:

https://uaex.co1.qualtrics.com/jfe/form/SV_40Ky5pojc71TZs

h

Questions? Feel free to contact me.

Matt Booher, Extension agent--Rockingham County 540-564-3080 (office) 540-325-7503 (cell)

mrbooher@vt.edu