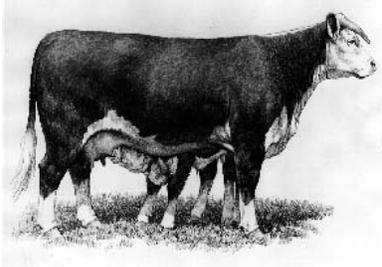


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# Cattle Round Up

May - June 2014

## Rockingham & Guilford Counties Extension Beef Newsletter



### Cattleman's Programs

Summer is upon us which means more sunshine and longer working hours. With that said we go into the summer working pattern and programs. These programs will resume in August/September. Please let me hear from you if you have any program topics that you would like to hear more about.

### Pinkeye in Cattle - *INFECTIOUS BOVINE KERATOCONJUNCTIVITIS*

Infectious bovine keratoconjunctivitis, commonly called pinkeye, is a contagious bacterial eye disease. This disease spreads rapidly and causes economic losses. A 1993 study estimated U.S. losses of \$150 million from decreased weight gain, milk production, and treatment. Pinkeye was second to scours as the most prevalent condition affecting unweaned beef calves over 3 weeks old in 1996, according to the 1997 report of the National Animal Health Monitoring System of the USDA: APHIS: Veterinary Services. Pinkeye (1.3% infection rate) and footrot (0.8% infection rate) were the two most prevalent conditions affecting all breeding beef females (replacement heifers and cows), according to the same report. Young stock are most susceptible to pinkeye, but the disease may be found in cattle of all ages. Many older animals may have a natural immunity to pinkeye because of previous exposure. Pinkeye is most frequently found in grazing and feedlot cattle. Summer herd outbreaks involving up to 80% of young cattle and lasting 3 to 4 weeks are common.

Pinkeye is characterized by a reddish inflammation of the eye ball, swollen eye membranes (the conjunctiva), tearing, frequent blinking, and sensitivity to light. A white raised or ulcerated area appears on the center of the eye ball within 1-2 days. Left untreated, the entire cornea becomes thickened and opaque, resulting in a white color and blindness. The ulcer on the cornea may penetrate to the eye interior, and the eye may even rupture. Body condition loss and severe pain are common. On rare occasions, severely infected cattle stop eating and die of starvation.

The main cause of the infectious pinkeye syndrome is the bacterium *Moraxella bovis*. Tear secretions in cattle appear to be deficient in an enzyme that kills bacteria (lysozyme). Recent work has shown that infected carrier animals may be a major source of infection. A carrier is an animal that may or may not have suffered from pinkeye in the past and may show no outward signs of disease. Nevertheless, in the presence of a number of predisposing factors, this animal is still able to spread the *M. bovis* bacterium.

High numbers of face flies (*Musca autumnalis*) are associated with higher rates of pinkeye. These flies cluster at the edge of the eyes to feed on tears and are very irritating to cattle's eyes. Face flies also carry and transfer the bacteria *M. bovis* from infected to non-infected animals. The house fly (*Musca domestica*) and the stable fly (*Stomoxys calcitrans*) also may spread pinkeye infections.

Other contributing factors include eye irritants such as ultraviolet sunlight, dust, mechanical irritation from seeds, tall pasture grasses, awns on small grain seed heads, and dust. Rough forages such as fescue,

irritants, pollen and chaff, as well as serve as mechanical irritants. The incidence of foreign body irritation is greatly increased when animals eat out the middle of round bales, leaving a hay shelf over their heads. The same situation occurs when hay is fed in overhead feeders. This is especially true with hay made from small grains.



Recent field surveys have shown the incidence and severity of pinkeye varies among and within breeds of cattle. Cattle with pink eyelids (such as Hereford and Hereford crosses) were more susceptible to pinkeye than Angus, Charolais and dark-faced breeds, possibly because more ultraviolet rays enter the eye. Some researchers recommend that only bulls with fully pigmented eyelids be used as herd sires since eyelid pigmentation is moderately heritable (26 -34 percent).

Pinkeye is often confused with the presence of a foreign body in the eye, physical injury or other diseases. Early cases of cancer eye and Infectious Bovine rhinotracheitis (IBR) can look like pinkeye. Veterinarians are best able to recognize and differentiate cattle eye disease problems. The veterinarian will also provide professional advice regarding the treatment of pinkeye.

Carefully follow all treatment advice and prescription label instructions. Recheck all withdrawal times with your veterinarian. A veterinarian – client – patient relationship is necessary for the use of all prescription drugs and “off-label” prescriptions (drugs used at dosages and for purposes other than defined on the label).

Using over-the-counter aerosol sprays and powders often further irritates infected eyes. These products cause increased tear secretion that washes away the antibiotic. Eye drops or ointments are better alternatives for mild or early cases of pinkeye. They are non-irritating and do not result in excessive tear secretion. Repeated doses are necessary to sustain adequate drug levels. Most strains of *M. bovis* appear to be sensitive to tetracyclines, penicillin, erythromycin and neomycin. The bacterium is usually resistant to cloxacillin (commonly found in dry cow mastitis ointments). Injection of a mixture of antibiotics such as penicillin, streptomycin or gentamycin, under the lining of the affected eyelids is recommended in herd outbreaks where repeated treatments are impractical. Often one injection is sufficient, but the treatment will need to be repeated in three or four days for severe or advanced cases of pinkeye. An intramuscular treatment is generally not recommended because very high dosages of an antibiotic are required to ensure adequate levels of the drug reach the eyes and tear glands.

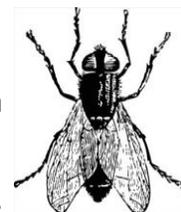
Treatments for severe corneal ulceration include performing eye surgery to protect the affected eyeball from further injury and promote healing, or creating a 3rd eyelid flap or the gluing of protective plastic covers onto the skin around the eyes to avoid further eye irritation. Consult your veterinarian for assistance in these methods to enhance the healing process. In addition to medical treatment, good management and nursing care is required to bring about full recovery. General recommendations include: housing in shaded areas (to avoid direct sunlight); provision of adequate feed and water; reduction of dust, flies and other physical causes of eye irritation.

While many optical antibiotics are available for pinkeye, treatment is not always successful in saving vision. Success depends on finding and treating cases early in the course of the disease. Complete recovery may take 3 to 5 weeks. Since face flies carry the bacteria that causes pinkeye from one animal to another and also irritate the eye, fly control is extremely important once pinkeye has been diagnosed. Spraying cattle with a fly knockdown spray will reduce new pinkeye cases.

The best protection against pinkeye is prevention. Vaccination against pinkeye is economically justified if the vaccine protects against multiple strains. Fly control is an important part of a pinkeye prevention program. Tall grasses can be kept short through pasture management, to prevent eye irritation while the cattle are grazing.

### Horn Fly and Face Fly Control

Through the years, cattlemen have witnessed the irritation that horn flies, face flies, stable flies and horse flies cause for cattle. Additionally, face flies serve as a primary means for spread of pink eye from an infected animal to other animals within a herd. The use of insecticide ear tags has been shown to greatly reduce the fly numbers in herds using them, but even better control is possible when sprays or self-applicating devices are used in combination with the insecticide ear tags. Listed below are products recommended for beef cattle according to NC Ag Chemical Manual:



### For Beef & Dairy Animals

coumaphos (CoRal), cyfluthrin (CyLence), diflubenzeron bolus (Vigilante), diflubenzeron oral larvicide (Clarify), eprinomectin (Eprinex) pour-on, methoprene bolus (Inhibitor), methoprene mineral mix, moxidectin (Cydectin) 0.5 PO, permethrin EC or PO, pyrethrins 0.1 OS + synergist, spinosad (Elector) 2.5 pour-on/spray, tetrachlorvinphos (Rabon) oral larvicide

SELF-APPLICATING DEVICES - coumaphos (CoRal), 1 D 1 OS 5.8 EC 11.6 EC, permethrin, tetrachlorvinphos (Rabon) 3 D, tetrachlorvinphos+dichlorvos, (RaVap) 23 EC

EAR TAGS - abamectin (XP820), beta-cyfluthrin (CyGuard), coumaphos + diazinon (CoRal Plus, Corathon), cyfluthrin (Cutter Gold, CyLence Ultra), cypermethrin (Python, Magnum), diazinon (40%) (Patriot), diazinon (20%) (Optimizer), diazinon + chlorpyrifos (Warrior), lambda-cyhalothrin (Saber), permethrin (GardStar), pirimiphos-methyl (Dominator)

**Beef Animals** - lambda-cyhalothrin Aim Capsule, gamma cyhalothrin (Stangard) pour-on, ivermectin bolus, spinosad (Elector) 2.5 pour-on spray, tetrachlorvinphos (Rabon) 50 WP

SELF-APPLICATING DEVICES tetrachlorvinphos+dichlorvos (RaVap) 23 EC

INSECTS FOUND IN FORAGE AND PASTURE

<http://www.ces.ncsu.edu/depts/ent/notes/forage/past&for/past&for.html>

### **Beef Cattle Working Facilities**

I get a lot of questions about beef cattle working facilities and I am often asked about helping with designing them. As much as I enjoy doing these, they are very time consuming and thought provoking. Every cattleman needs a way to safely catch and restrain animals in his herd. This important if an animal gets sick, injured, or needs veterinary attention. There are also herd health management practices that require animal handling. Facilities that are good are easy to use and reduce the risk of injury to cattlemen and livestock. Poor facilities are frustrating, slow to use, no fun for cattle or cattlemen.

A good handling facility need not be a burdensome expense. When animals can be conveniently handled, herd health programs are easier to implement. Research has shown properly managed calves routinely sell for \$50 to \$100 per head more than neglected calves. At this rate construction costs can be recaptured in 2 to 5 years. Well-constructed facilities should be serviceable for 25 to 30 years.

The primary reasons for constructing a corral and working facility are to observe cattle closely, perform routine health functions, and improve labor efficiency. A good working facility is merely an extension of a well-planned corral which matches the site and existing structures. The importance of site selection cannot be over stressed. Consider drainage, prevailing winds, nearby all weather roads, and utilities, i.e. electricity and water. A corral is often built to meet current needs, but it should also provide for easy expansion.

**Important Behavioral Characteristics** - Cattle have basic instinctive behaviors. They are prey animals. Their behaviors are based on herd survival. They do not like going into places where they cannot see an escape route. They do not like sudden movements, or loud noises. Above all, they do not like to be singled out from the herd.

When designing facilities avoid dead ends. A dead end is a point where the path stops and there is no route of escape apparent to the animal. Coming abruptly upon a closed gate will cause the animal to try to return from whence it came. Other animals coming up behind it will feel trapped. Then the group will begin to vigorously try escaping by climbing the fence, charging the gate, or turning around.

Avoid movement from brightly lit areas to darkened places. It takes time for eyes to adjust when going into dimly lit barn interiors. Also avoid shadows, especially bars of shadows, falling across the line of travel. Shadows can be disorienting and cause uneasiness. This just heightens the defensive alertness of animals and makes them more likely to fight or run when they encounter unexpected movements or noises. If shadow lines are unavoidable at least insure they do not occur where animals have the opportunity to make a choice. For example, if the shadow falls where the animals transition from a holding pen to a working chute it will be more difficult to get them into the chute. In this case it would be better to extend the shaded to include both the pen and the chute.

The recommended direction of travel in a chute should be either north or south because traveling directly into the sun blinds cattle and makes them balk. Chute travel should also be uphill if possible as cattle are more likely to balk going downhill.

By the same token, if you plan to build a catwalk, place it on the inside of the curve and where the height is about 40-42" below the top rail of the chute fence. This takes advantage of the animals natural inclination to travel around a threat (you) and positions you at a height to easily see and move the stock comfortably.

#### **Other Considerations**

Cattle have a very strong affinity for the herd. It is much easier to coerce an animal to go where it sees a herdmate than to drive it into a place alone. If cattle are traveling in a curved chute they can see at least some of their herdmates safely before them and will readily move forward. Right angle turns cause problems. They balk until they can determine their herdmates are still safely before them.

The herd instinct is stronger than the fear of confinement. Design chutes so cattle can see other cattle where you

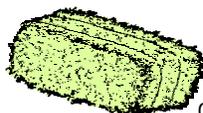
want them to go. Guard against letting them seeing cattle where you don't want them to go. For example, line the walls of the chute with plywood to prevent them from seeing herd mates on the other side of the chute wall.

### Safety Concerns

Chute walls should be no more than 26 inches wide or 28 inches for large framed breeds such as Charolais or Simmental. If they are any wider cattle will be able to turn around. The walls may be parallel to each other or closer at the bottom than at the top. For most breeds 5 foot corral walls are adequate, but 5 1/2 to 6 foot can be used for taller breeds.

Concrete surfaces should be roughened to allow animals a good foot hold. Just sweeping wet concrete will not be enough to retain traction over a number of years. Pressing the edge of a board into the concrete every 3 to 6 inches will create grooves which be serviceable over a much longer time.

Corral and Working Facilities for Beef Cattle - <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1998/BAE-1219web.pdf>, Corral for beef cattle - <http://www.ag.ndsu.edu/aben-plans/5974.pdf>, Beef Cattle Handling Safety - <http://www.extension.org/pages/63135/beef-cattle-handling-safety#.U3I3HvldVIE>, Small Corral & Breeding Chute - <http://www.ag.ndsu.edu/aben-plans/6152.pdf>, Corrals with working facilities - <http://www.ag.ndsu.edu/aben-plans/6230.pdf>, Small Beef Cattle Corral - <http://www.ag.ndsu.edu/aben-plans/6404.pdf>



**HAY DIRECTORY** - Every livestock and Horse owner knows that past few years Hay has been a precious commodity. You also know that A Hay Directory is maintained by the North Carolina Cooperative Extension Service for the Rockingham and Guilford County area. This directory is intended as a service to both hay producers and buyers in the area. At this point all I have been able to do is to send folks who have called requested hay is last falls hay directory. Since that is in low supply I would like to ask that if you have hay, **Please** call and let me know so I can tell folks who does have hay. So if you have hay or if you are in need of hay or would like to be added (or removed) from this Hay Directory please call me at **1-800-666-3625** or **342-8235** and let me know your name, address & phone #, type of hay, number of bales, (square or round bales) and weight per bale.



**Forage Management Tips** - May - June - \*It is so important to get the maximum use of available grass, utilize cross fencing. This will stretch out your forage and decrease wastage. \*Take soil samples for fall plantings. *Come by and pick up your free soil sample boxes and sheets.* \*Fertilize cool season grasses if not already done so, don't apply nitrogen to fescue after mid May until August. \*Finish grazing cool season grasses before grazing warm season. \*WATCH FOR GRASS TETANY \* Harvest fescue and orchardgrass as soon as seedheads begin to flower.\*Fertilize warm season grasses when dormancy breaks\* Apply nitrogen to warm-season grasses after each cutting (or 4 to 6 weeks) \*Graze bermudagrass to a 2-4 inch stubble and harvest excess every 4-6 weeks. \*Control weeds, spray while they are small for best control. \*Be aware of potential of Nitrate & Prussic Acid poisoning from animals grazing stunted, highly fertilized summer annuals, \*Keep good forage records.\*Drag pastures to spread manure

**Cattle Management Reminders- All Cattle** - \*Check Cattle regularly \* Provide (and check) clean fresh water & complete mineral mix \*Maintain Body Condition of cows and heifers \*Watch for bloat \*Make marketing & culling decisions.\*Keep good health and forage records. \*CONTROL Flies \*Clip pastures to prevent pinkeye Fall Calving - \*Make initial heifer replacement selections. \*Pregnancy check and cull open females.\*Evaluate bulls based on calf performance. \*For cows to be culled due to age/performance, wean calves and sell cows Spring Calving - \*End breeding season for heifers in May and cows in June. \*Sell stockers. \* Vaccinate and deworm calves

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