



# The Bull's Eye

## *hitting the target*

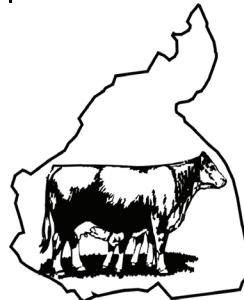


McDowell County Center

August 2013

### Inside This Issue

- Cattlemen's Association Summer Meeting 1
- McDowell Junior Livestock Show 1
- Cattle Management... 2-3
- Donkeys: Proctors..... 3
- Heat Stress..... 4-5
- How safe are your cattle handling facilities 5
- Foothills Pilot Plant 6
- Possible Fee for Soil Samples 6
- Steak & Tomato Salad 6
- Livestock Market Report 7
- Upcoming Events 8



### Cattlemen's Association Summer Meeting

I look forward to seeing each of you at our next cattlemen's meeting on **Thursday,**

**August 22 at 6:00pm at the picnic shelter of Pleasant Gardens Baptist Church.**

The church is located off Hwy 70W at 214 PG Baptist Church Road in Marion. We had a great turnout at our last meeting and I hope you can join us again.

The program will be on



coyote control and highway hauling laws. Our speakers will be **Danny Ray** from the NC Wildlife Dept. and **Josh Dowdle** from the NC Highway Patrol.

A meal sponsored by **Baker Automotive** and the McDowell

Cattlemen's Association will be provided. We need to have an accurate head count so please **RSVP by Friday, August 16** to 652-7874 so we will know how much food to prepare.

### Contact Us

McDowell County Extension  
60 E Court Street  
Marion NC 28752  
(828) 652-7874 Phone  
(828) 652-8104 Fax  
<http://mcdowell.ces.ncsu.edu>  
Greg\_Anderson@ncsu.edu

Distributed in furtherance of the acts of Congress of May 8 and June 30, 1914. North Carolina State University and North Carolina A&T State University commit themselves to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, veteran status or disability. In addition, the two Universities welcome all persons without regard to sexual orientation. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

### The 67st annual McDowell Junior Livestock Show

will be held **Saturday, August 3rd** at the McDowell Agricultural Center. Tell your friends, and come on out to see what these hard working youth have brought to the show this year. The event will start at 9:00am and usually ends around 2:00pm. The McDowell Cattlemen's Association will once again be cooking hamburgers and hot dogs for lunch as well as sausage biscuits for breakfast . Any help with this activity will be appreciated. Please call Dustin Laws at 442-7547 to volunteer. This is a great opportunity to support the association and help promote beef.



# Cattle Management and Care During Hot Weather

Adapted from James B. Neel Professor and Extension Beef Cattle Specialist  
Department of Animal Science, University of Tennessee

**Know that cattle do not have heat tolerance similar to humans.** Cattle cannot “handle” hot weather as well as humans. They become uncomfortable at about 85 degrees. Cattle cannot sweat similar to humans. They sweat only about 10% what humans do and this is done through their tongues and nostrils. As cattle become “hotter,” increased nasal and oral discharge and “panting” will be noticed. Keep this in mind when preparing to work cattle.

**Provide a source of cool, clean water.** Cool water is needed to cool the cattle’s internal organs. Internal temperature will have an impact on feed and especially, forage intake. Water from ponds will be elevated in temperature and therefore will be reduced in consumption as well not be as cooling. Digestion of forage will also generate elevated heat and consuming fescue will elevate it more. During hot weather, water consumption will increase. At 90 degrees, water consumption may be almost twice that at 70 degrees and 50 percent greater than at 80 degrees. Adequate, cool, water intake, along with shade, is probably the best way to reduce heat stress in cattle.

**Provide adequate shade.** Shade with air flow will increase the cattle’s comfort. Open-sided sheds or trees can reduce the radiant heat by as much as 40 percent .



**Work cattle at times other than during the “heat of the day.”** Working cattle during periods of elevated temperature will increase the stress caused by the heat. Work cattle before 9:00 am. During the late afternoon, generally the temperature is usually at its highest of the day. In addition, the cattle’s digestive system is filled with forage and their internal temperature will be higher than in the morning.

**Haul cattle early in the morning.** Haul cattle before it gets too hot and the cattle’s temperature increases. This is the time of the day when the sun has not had time to heat things up. Environmental temperature is likely to be the lowest during a 24 hour period early in the morning. Consider hauling fewer animals per load. Plan hauling to be able to quickly unload the cattle. If cattle have to stay in line on the trailer prior to unloading, they can become extremely hot from both their body heat and

the environment plus the trailers have limited ventilation that prevents air flow.



**Know the signs of heat stress.** Cattle that are panting, slobbering from their mouth and nostrils, have lack of coordination and trembling are stressed. A sign of extreme stress is cattle holding up their heads in an effort to breath. At this condition, their breathing rate may be 100 per minute or greater. Prior to these conditions, cattle will begin to move about attempting to locate cooler conditions in the area.

Continued on page 3

## Cattle Management and Care During Hot Weather

**Check the cattle during the day.** It is always “good husbandry” to frequently observe cattle. Make adjustments in management as needed to reduce the effects of heat. See preceding for signs of heat stress.

**Control flies.** Control face and horn flies in that they cause irritation and aggravation for the cattle. As a result the cattle will tend to “bunch” which disrupts their cooling.

**Hide color.** Cattle that have dark-colored hair coats will also be more susceptible to the heat than lighter color ones. Dark colored animals can become overheated by the sun due to the fact that black absorbs more of the sun’s heat. On the other hand, light colored animals may experience “sun burn.” Heat stress in cattle can create welfare problems for cattle and economic losses. Cattle producers should be aware of the conditions that create heat stress. Plan ahead and carry out those husbandry practices to reduce the effects of the heat and humidity and keep cattle as comfortable as possible.



## Donkeys: Proctors or problems

Many of us are utilizing donkeys as guard animals. They are useful to help deter attacks from dogs, coyotes and other predator animals. The problem comes when selecting the proper animal for the job. Many producers will select the cheapest donkey they can find, and that is usually a jack (intact male). A jack is a great guard animal as they will usually keep unwanted animals out of the pasture. The problem with a jack is they can get VERY AGGRESSIVE with calves, and humans. Jacks have been known to bite, kick, and, often injure and kill the animals they are there to protect. Not a good scenario. If you are looking for a donkey to use for a guard animal, please consider a gelding (castrated male) or a jenny (female). They will be a good guard animal and less likely to injure you or your livestock.

# *Heat* Stress's Reproductive Ramifications

Animal agriculture loses around \$2 billion a year due to heat stress. History has taught us that heat stress does not have to last a long period of time to have a profound impact on production. These economic losses were a result of heat stress reducing such things as milk production, heifer growth, increasing cow and calf mortalities, health-care costs, and reductions in reproductive performance.

Reproduction is the main factor limiting production efficiency in the cow/calf industry. Infertile females can be categorized into three groups: females that fail to become pregnant, become pregnant but fail to calve, or become pregnant late in the breeding season and fall out of the annual production cycle. At an 85% pregnancy rate each exposed female that fails to become pregnant cost the producer an estimated \$94. In addition for each 1% deviation from an 85% pregnancy rate, a \$6.25 increase or reduction in that value is seen (ex: 84% = \$100.25 and 86% = \$87.75).

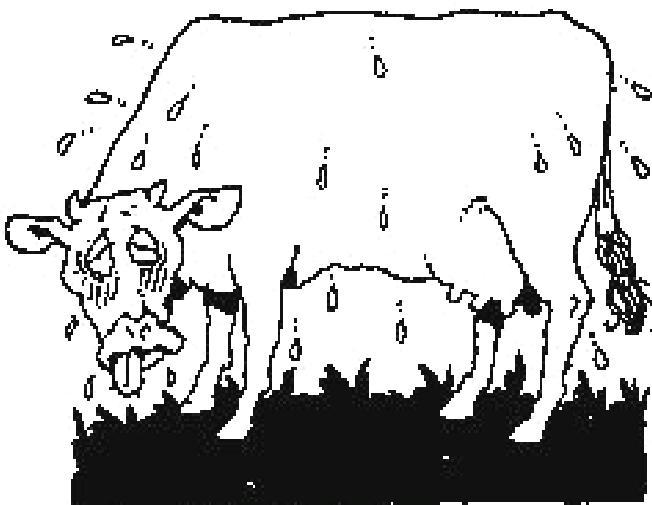
In a time of drought, many factors compound the impact of infertility within a herd. Heat stress is an issue that has been recognized within the dairy industry for decades, but is often overlooked in the beef industry, until a time of drought. The impact of heat stress can be seen in males and females, and without proper management could have devastating reproductive ramifications.

## Bulls

While most people consider the impact of heat stress on female fertility, the impact of heat stress in our bull herd during the breeding season should also be taken into account. Semen quality is shown to decrease when bulls are exposed to ambient temperatures of 86°F for 5 weeks or 100°F for 2 weeks. This is seen with a decrease in sperm concentrations, motility, and an increase in abnormal sperm cells in each ejaculate. Following a period of heat stress sperm quality does not return to normal for approximately 2 months.

## Cows and Heifers

Following a summer of heat stress and drought it is likely that producers will see a reduction in reproductive performance. Overcoming a low plane of nutrition due to drought stricken pastures is compounded by heat stress, causing a reduction in fertility. The effects of heat stress can be seen throughout all stages of the pregnancy but are most prevalent early in gestation.



continued on page 5

# *Heat* Stress's Reproductive Ramifications

continued from page 4

Heat stress will reduce the quality of oocytes (eggs) available for fertilization, resulting in a reduction in conception rates. Embryos of heat stressed cows have reduced developmental competence in early stages, but heat stress can also have a major impact on embryo growth up to 17 days. Pregnancy is recognized by the females on day 18 of her 21 day estrous cycle. Thus, with a reduction in embryo growth, the maternal recognition of the pregnancy may be compromised. In addition, the uterine environment is compromised due to redirection of blood flow, away from the core of the body, as a cooling mechanism. This also contributes to early abortions. In addition, heat stress will reduce the dominance of ovulatory follicles and can cause an increase in twinning during the subsequent calving season.



With heat stress causing a reduction in embryo quality and oocyte competence, in addition to a reduction in semen quality and viability, producers are likely to see a reduction in reproductive performance following a summer of record temperatures and extreme drought. Providing shade, cool clean water, and increasing the bull to cow ratio may be management practices that should be considered when cattle are experiencing heat stress.



## How safe are your cattle handling facilities

Are your facilities in a state of repair that will allow the cattle to be worked easily and with reduced potential risk of injury to both you and your cattle? Producers working cattle should be aware that there is the possibility of personal injury, especially if the facilities are not in a good working order. Most cattle

are normally calm but, when brought into an unfamiliar environment and frightened, they are capable of causing injury to the workers and themselves. Mature cattle are heavy, strong and easily excitable. Facilities that are in a poor condition or constructed out of panels or gates tied together with rope or twine are dangerous. If there is a weak spot in a facility, a brood cow will find it. If they detect a weak spot in the facilities, they will quickly determine if they can break out. If facilities are in a good shape and do not indicate a possible break out site, the cow(s) will settle down and can be worked easily. Before working cattle, check the facilities. Be sure they are safe and strong and the risk of injury is low. If needed, make repairs before you work the cattle. Don't attempt to work cattle if your facilities are not in a good state of repair.

## Foothills Pilot Plant

Some of you might not be aware of Foothills Pilot Plant and what they have to offer. The plant is located in McDowell County south of I-40 off of Hwy 226.

Foothills Pilot Plant (FPP) is a non-profit facility created for poultry and small meat animals processing to serve independent growers seeking USDA inspection of their meat products. They process chickens, turkeys, rabbits, ducks, and other specialty fowl on a fee for service basis. FPP also serves as a center for learning best practices for small flock production of poultry and small scale production of meat rabbits.

With the growing demand for local foods this is a great opportunity to diversify our farming operations by adding poultry and/or rabbit production.

Call Amanda Carter, General Mgr at 828-803-2717 for more information.

## Possible Fee for Soil Samples

The current House and Senate appropriations bills both contain a provision to implement a soil-testing fee. If passed, there will be \$4 fee for all soil samples processed by the NCDA &CS Agronomic Division during its busiest season: December through March. There will still be no fee from April through November.



## Steak and Tomato Salad

12 ounces grilled beef steak, cut into slices

4 cups arugula leaves, torn into pieces

6 small vine-ripened tomatoes, sliced

1/3 cup balsamic vinaigrette

Salt and pepper

1/4 cup Parmesan cheese shavings



Arrange arugula and tomatoes on serving platter; drizzle with dressing. Top with steak slices; sprinkle with salt, pepper and cheese shavings.

Nutrition information per serving

using top sirloin steak: 266 calories; 12 g fat (3 g saturated fat; 2 g monounsaturated fat); 53 mg cholesterol; 351 mg sodium; 9 g carbohydrate; 2 g fiber; 30 g protein; 8.3 mg niacin; 0.7 mg vitamin B6; 1.5 mcg vitamin B12; 2.4 mg iron; 31.7 mcg selenium; 5.3 mg zinc.

**BUBBA  
APPROVED**

# Livestock Market Report

WNC Regional Livestock Center, Canton

Weighted Avg for Monday, July 15, 2013

## Feeder Steers

		Medium and Large 1 - 2		
Head	Wt Range	Avg Wt	Price Range	Avg Price
1	250-250	250	157.00	157.00
1	320-320	320	155.00	155.00
1	380-380	380	144.00	144.00
3	405-430	417	135.00-147.00	142.21
1	485-485	485	143.00	143.00
4	500-515	509	113.00-130.00	123.72
3	560-595	582	114.00-125.00	118.43
4	625-635	630	115.00-125.00	122.27
1	660-660	660	124.00	124.00
5	710-745	730	122.50-128.00	125.16
4	765-788	782	122.00-123.00	122.24
1	870-870	870	114.00	114.00



## Feeder Heifers

		Medium and Large 1 - 2		
Head	Wt Range	Avg Wt	Price Range	Avg Price
1	295-295	295	142.50	142.50
3	365-390	380	130.00-135.00	132.37
5	405-435	418	120.00-134.00	129.44
7	460-498	490	120.00-128.50	127.04
5	505-545	521	110.00-128.00	121.25
1	570-570	570	119.00	119.00
6	600-645	621	105.00-121.00	117.56
7	655-680	666	110.00-119.50	117.03
2	805-845	825	86.00-90.00	87.95
1	935-935	935	80.00	80.00

## Feeder Bulls

		Medium and Large 1 - 2		
Head	Wt Range	Avg Wt	Price Range	Avg Price
1	415-415	415	125.00	125.00
1	475-475	475	120.00	120.00
3	510-545	528	115.00-134.00	124.46
4	575-595	588	105.00-120.00	113.08
2	600-620	610	105.00-120.00	112.38
3	650-690	672	106.00-122.00	111.85
2	715-720	718	95.00-105.00	100.02
1	920-920	920	105.00	105.00

## Slaughter Cows

		Breaker 75-80% Lean		
Head	Wt Range	Avg Wt	Price Range	Avg Price
3	1220-1295	1253	73.00-77.00	75.03
1	1385-1385	1385	86.00	86.00 High Dressing
4	1495-1955	1694	76.00-79.00	76.85
5	1430-1695	1536	81.50-89.00	83.88 High Dressing
Boner 80-85% Lean				
1	855-855	855	73.00	73.00
15	900-1395	1147	70.00-79.00	75.19
8	1000-1380	1200	80.00-84.50	82.33 High Dressing
4	995-1360	1174	60.00-69.00	66.21 Low Dressing
3	1405-1480	1443	72.00-77.00	74.99
2	1550-1550	1550	82.00-83.00	82.50 High Dressing
Lean 85-90% Lean				
1	755-755	755	67.00	67.00
1	620-620	620	50.00	50.00 Low Dressing
1	998-998	998	60.00	60.00

## Slaughter Bulls

		Yield Grade 1-2		
Head	Wt Range	Avg Wt	Price Range	Avg Price
2	1170-1330	1250	92.00-98.00	94.81
1	1415-1415	1415	105.00	105.00 High Dressing
1	1390-1390	1390	90.00	90.00 Low Dressing
8	1580-2080	1828	100.00-113.50	106.26 High Dressing



McDowell County Center  
60 E Court Street  
Marion NC 28752

For up-to-date event schedule  
check our Events page at:  
<http://mcdowell.ces.ncsu.edu>

*Mark Your  
Calendar!*

### **PLACES TO BE**

- August 3 - McDowell Junior Livestock Show, Marion, NC
- August 16 - RSVP for McDowell Cattlemen's Association Meeting
- August 22 - McDowell Cattlemen's Association Meeting
- September 6-15 - Mountain State Fair, Fletcher, NC
- September 19 - Feeder Calf Sale, Statesville, NC
- September 26 - Feeder Calf Sale, North Wilkesboro, NC
- October 17-27 - NC State Fair, Raleigh, NC
- November 7 - McDowell Cattlemen's Association Meeting

Compiled and edited by:

A handwritten signature in cursive script that reads "Greg Anderson".

Greg Anderson  
Extension Agent  
Ag & Natural Resources

Secretarial support by: Cheryl Mitchell

For accommodations for persons with disabilities, contact the McDowell County Center at 828-652-7874, no later than ten business days before the event.