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Hay Field Day

The annual Hay Field Day will be held on **Tuesday, July 19, at the Mountain Research Station**, Waynesville, NC, with registration from 9:00-9:30 am and program from 9:30 am to 4:00 pm. The field day will feature demonstrations of hay making equipment by regional dealers. Additionally, the field day will feature educational discussions featuring NCSU Specialists, Field Faculty, NCDA Agronomists and NRCS personnel.

Topics to be covered include: drill calibration, pasture fertility, cutting height and weed pressure in hay crops, rainfall runoff, stockpiled fescue and temporary fencing, pasture plant identification and weed control.

Educational demonstrations showing the effects of overgrazing and runoff in pastures will also be featured. Allied industry representatives will be on hand for a trade show. A hotdog lunch sponsored by Carolina Farm Credit will be provided. **Pesticide credits for categories N, O, D & X totaling 1.5 hours will be available.**

For more information contact the Mountain Research Station at 828-456-3943 or the Buncombe County Center of North Carolina Cooperative Extension at 828-255-5522. This event is a joint program of North Carolina State University, North Carolina Department of Agriculture and Consumer Services and the Haywood County Soil and Water Conservation District.

Buncombe County Friends of Agriculture Breakfast

All farmers and agriculture supporters are invited to the Friends of Agriculture Breakfast to be held on **Tuesday, August 9, 7:00 am, at the WNC Agriculture Center, Virginia C. Boone Mountain Heritage Building**. After breakfast we will have networking time for producers to learn about other operations and explore opportunities for collaboration.

Please call Melinda Roberts at 828-255-5522 by August 4 to register. If you aren’t sure if you can attend by that date, feel free to come anyway. We hope to see you there.

Persons with disabilities and persons with limited English proficiency may request accommodations to participate in activities mentioned in this newsletter. Please contact Steve Duckett at 828-255-5522 during business hours at least 3 days prior to the event to discuss accommodations.
Non-Native and Invasive Forest Plants Workshops for Landowners

The Non-Native and Invasive Forest Plants Workshops for Landowners is a series of six one-day educational workshops featuring presentations by experts in non-native invasive plants that impact North Carolina’s forests. Each workshop will engage regionally-based stakeholder groups in the planning and educational content. These workshops are designed for family forest landowners, but all forestland ownership types and professional forestland managers and advisers are welcome. Commercial and educational exhibits will be displayed at each workshop.

Workshop Dates and Locations:

- August 19, 2011 - Moore County Extension Center, Carthage, NC
- September 13, 2011 - Crowne Plaza, Asheville, NC
- October 18, 2011 - Duplin County Extension Ctr. Kenansville, NC
- February 7, 2012 - Sen. Bob Martin Center, Williamston, NC
- May 1, 2012 - Bur-Mil Park, Greensboro, NC
- May 8, 2012 - Wilkes County Community College, Wilkesboro, NC

Contact the NCSU Forestry and Environmental Outreach Program at 919-515-9563, or by email: forestry_outreach@ncsu.edu to register or for more information. For General Workshop Agenda see: http://www.ncsu-feop.org/NNI/

Would You Like to Add an Extra $30 Per Head Return to Your Calves?

Contributed by James Neel, Extension Beef Specialist, University of Tennessee

Would you spend a dollar to produce an average of 20 extra pounds and an extra $30 per calf at marketing? You can if you implant your calf crop with growth promoting implants. No other management practice will increase the market weight of feeder calves as economically as implanting with a growth promotant.

Growth promoting implants have been around since the 1960’s. Both research and on-farm demonstrations have shown that there is not a more efficient practice that cow calf producers can use to increase market weight of their calf crop. Implants cost approximately $1 per head. In implant demonstrations conducted on more than 100 farms, the average response was an extra 21 pounds of weight compared to non-implanted calves.

What would the extra 20 pounds of weight be worth this fall? What would feeder calves sell for this fall? During the week of March 18, 450-pound steer calves were bringing $1.58, and 550-pound steers were selling for $1.50 per pound in southeast auction markets.

Nevertheless, “heavier calves sell for less than lighter weight calves” say many producers. Heavier calves do fetch a slightly reduced market price in comparison to lighter calves; although, heavier calves bring in a “greater pile of money”; however, with the additional 20 pounds, the market price will not be significantly reduced. According to some producers, “Steer calves do not gain as fast as bulls”; however, research has revealed that by castrating and implanting bull calves, they will gain as well as bulls, resulting in higher values when marketed.

Moreover, producers state “It is too much trouble to work the calves just for implanting”. Implanting should be completed when other practices such as vaccinating, putting in fly tags, dehorning, castrating and deworming are carried out. Performing this package of practices at the same time reduces the cost of each. Possibly one factor limiting implanting is that most commercial cow herds are not on a short calving season. Having an organized calving season simplifies the process for implementing money-making practices.

“Consumers do not want them implanted now”, is an additional criticism. Various niche markets desire calves that can be marketed as organic or natural. In this case, will you be compensated for the added value implanting would yield? In the above scenario, buyers desiring natural feeders should be willing to pay an additional $25 to $30 per head for the non-implanted animals.
Other producers are comfortable not reaping the benefits of implanting stating, “Calves are selling pretty well right now and I get a pretty good check”; however, the cost of production inputs have increased, and the margin of return can be augmented merely by implanting.

Implanting feeder calves is a practice that can produce added weight more easily and more economically than any other practice and should become routine. In fact, there has been no other time in the past five decades that implanting would’ve paid as much as it does now.

**Fly Control on Cattle is Critical**

*Contributed by Justin Rhinehart, UT Beef Cattle Specialist*

The economic loss due to fly infestation in cattle herds has been well documented. Depending on the type of fly and class of cattle, reported economic losses vary; but the consensus is that the problem can result in millions of dollars lost to decreased weigh gain and health treatments.

There are three major ways that flies reduce performance: through reduced grazing (because cattle are searching for a way to ease the irritation), as a result of sucking blood from the cattle, and through spreading disease. Horn and face flies are the two major flies that cause problems for Buncombe County producers. Horn flies are small, about half the size of a housefly, and usually concentrate on the withers, back, sides and the underline (where most of the biting occurs). Reduced weight gain from horn flies is caused by irritation (and the resulting decreased grazing time) and blood loss. Normal populations of horn flies usually average several hundred, but as few as 50 flies per animal can be enough to negatively impact performance. Thousands can occur and that many can consume enough of the cattle’s blood to make it become anemic. While most of the discussion around horn flies focuses on irritation and blood consumption, they can also transmit causes of blood-borne diseases like anaplasmosis.

Face flies more closely resemble houseflies. They concentrate around the eyes, nose and mouth where they feed on the mucosa found in those areas. Since face flies congregate around the eyes and can carry the causative agent of pinkeye, controlling them can help slow or limit the spread of pinkeye. The spread of pinkeye by face flies makes their economic impact two-fold. The disease reduces average daily gain in calves and performance of cows but also reduces the value per pound of calves at marketing due to eye problems.

Several methods, and many products within those methods, are available to control flies. These methods include slow-release ear tags, sprays, rubs, dusts, feed through and boluses. The most common methods in our area seem to be ear tags, sprays and rubs. The chemicals that these methods deliver include pyrethroids, organophosphates (Ops), organochlorines and endectocides.

There are several factors to consider when choosing a fly control program. First, young cattle require more attention than cows and bulls because prevention has a direct economic effect through average daily gain. They also are more susceptible to pinkeye.

Fly tags are convenient but should be used in combination with other methods to achieve full-season protection. Use sprays or rubs early in the season and ear tags as late as economically reasonable.

Self-applicators (face rubs and mops) can be effective ways to deliver concentrated doses of insecticide. These methods should be located in an area where the cattle come in frequent contact with them.

Horn flies quickly develop resistance to first generation pyrethroids. New formulations are slower to build resistance. Alternating with OP’s can mitigate resistance.

Feel free to call the Buncombe County Center of NC Cooperative Extension at 828-255-5522 if you need more information.
A Bird in the Hand

Contributed by Emmit Rawls, UT Agricultural and Resource Economics

For the past two years, we have seen a strong rally in feeder cattle prices in the first half of the year and a rush to market calves, or cash them in. Does it pay to deviate from a production and marketing plan? Several things have to be considered. Buncombe County beef producers have learned how to recognize a good price when they see it, and that has caused the early movement of calves to market the last two years.

Cow calf producers and even stocker/backgrounders should consider the economics of marketing versus retaining cattle to some heavier weight or other production alternative. First, the cow calf producer can market at weaning, which can be anywhere between about three and ten months. Producers who have marketed very light calves based on prices higher than the recent past, take the “bird in hand” approach. While that price is assured, weights are going to be considerably lighter than a more normal market weight at 7 to 9 months of age.

Marketing decisions based on recent price history also ignore the strong seasonal tendencies of prices and the cost of gains on grass, assuming a normal grazing season. Furthermore, cattle buyers prefer weaned calves that have been preconditioned using acceptable vaccination protocols including modified-live respiratory vaccinations.

The availability of qualified labor and likelihood of sickness and increased death loss have made feedlot buyers wary of buying stockyard calves that have had little or no health management program. Data from the Tennessee Beef Evaluation program has shown that calves that have to be treated following arrival at the feedlot make considerably less money than calves that do not have to be treated. Preconditioned calves have less than one-half the incidence of sickness compared to calves that have not been preconditioned.

Returns from a post-weaning program, whether a shorter 45 day program or one longer where 200 to 300 pounds are added, come from three sources: value of gain versus cost of gain, seasonal changes in prices and marketing method. First is having the gain in value of the calf exceed the cost to add the weight. Value of gain is simply the gross dollars an unweaned calf might have received subtracted from the gross dollars or sale price times weight at the end of the post weaning period. The seasonal or month-to-month price movement can certainly affect the value of gain. The fall-to-spring price increases are well documented. Most years also see prices improve in August versus June and July. Heavier feeders usually sell for a lower price than lighter ones, so this also affects the value of gain; therefore, value of gain and cost of gain are two important keys to profitability in a post-weaning program. Regarding the risk of a price decline, the Livestock Risk Protection insurance sold by crop insurance agents is a safe means of protecting from falling prices during the post weaning period.

In addition, the marketing method selected is a significant factor in allowing one to capture the value that has been added in a post-weaning program. We have more opportunities to market calves in special preconditioned sales in the state than ever before. Some are age and source (PVP) verified, but most are not. Graded sales or alliance sales where calves are graded and commingled are the way most producers can capture the full value for production and management practices conducted to precondition calves. Such sales that do not commingle calves to make truckload or near truckload offerings will not capture the full value of preconditioned calves. Some alliance sale programs will capture up to $75.00 per head over weekly auction prices. When considering a marketing plan simply to catch the “bird in hand”, look forward as well as back. With lower cattle numbers, prices are expected to continue strong for the next two or three years.

Scrotal Circumference in Bulls Linked to Puberty in Replacement Heifers

Contributed by Dr. John C. Spitzer – Professor, Reproductive Physiology, Clemson University

Reproductive efficiency certainly plays a major role in determining profit potential for beef herds. Since most heifers are now bred as yearlings, age at puberty is of critical importance to reproductive efficiency. Nutrition (more correctly, target weight) plays a large role in determining age at puberty; however, cattle with inherent ability to reach puberty at earlier ages will most likely reach puberty with less investment of feed dollars and management effort than cattle with a later inherent age at puberty. Puberty in heifers is a heritable trait (probably 30 to 40% heritable) that can and should be selected for directly.

Did you know that you can receive this newsletter via email?
If you are interested, please contact us either by phone at 828-255-5522 or email at deanna_jordan@ncsu.edu.
For a long time now, we have "preached" about scrotal circumference in bulls and relationships between scrotal circumference and measures of male fertility. Overwhelmingly, data indicate bulls with larger testicles produce more semen, and all measures of semen quality improve as scrotal circumference increases. Additionally, scrotal circumference appears to be a more accurate predictor of when a bull reaches puberty than either age or weight. In a study from the Meat Animal Research Center in Nebraska, bulls reached puberty at a fairly consistent 28 cm scrotal circumference, regardless of breed or breed influence. In fact, age at puberty and scrotal circumference are essentially the same trait; therefore, if we increase scrotal circumference, more bulls will reach puberty by the time they are yearlings. Fortunately, scrotal circumference is a very heritable trait (probably 50 to 60% heritable). Again, scrotal circumference (puberty) in bulls can and should be selected for directly.

How do these two thoughts - puberty in heifers and scrotal circumference - relate? In the early 1970's, studies reported in both sheep and mice indicated that as testicular size of a sire increased, his daughters ovulated more eggs and both twinning rates in sheep and litter size in mice were higher. This really should not be surprising, since the gonads (ovaries in female and testicles in male) are stimulated by the same hormones and appear to be under the same genetic control. These studies prompted researchers in Montana, Colorado and North Carolina to look at relationships between scrotal circumference in bulls and reproduction in sisters and/or daughters. While the North Carolina group did not look at puberty directly, they did look at which replacement heifers became pregnant when placed with bulls during the normal breeding season as heifers neared yearling ages. They found a correlation of -0.39 between scrotal circumference and age at first breeding (correlations range between 1.0 and -1.0). In this case, a "negative correlation" is favorable since it indicates that as scrotal circumference in bulls increases, age at first breeding in their sisters and/or daughters decreases. Colorado and Montana researchers actually measured age at puberty directly and reported correlations of -0.71 to -1.0, respectively. Again, the negative correlation is favorable in this situation.

What does all of this mean to you as a beef producer? I will not bore you with calculations of formulas involved with statistics, but here is what you can expect to occur. If you buy a bull with a scrotal circumference 4 cm larger than average, his sons will have a 1 cm larger scrotal circumference and his daughters will reach puberty 15 days earlier. Buying a bull with 4 cm larger scrotal circumference is a pretty easy way to select for heifers which reach puberty earlier.

**Improve Pasture Use Through Rotational Grazing**

*Contributed by Gary Bates, UT Plant Sciences*

Abundant forage growth is always a wonderful thing to see in pastures. Following basic recommendations like fertilizing based on soil test, controlling weeds and planting clovers will help provide this growth. Don’t follow good forage production procedures and then use poor forage harvest procedures. One of the mistakes that occurs every year in our pastures is the poor utilization of excess pasture growth.

The initial growth of a tall fescue plant during the spring is very good quality forage. The plant grows new leaves that are high in protein and energy; but as the spring progresses, the plant produces a seedhead. The main goal of that tall fescue plant changes from trying to grow leaves to filling the seeds in order to reproduce. The amount of leaf growth drops because energy is going to the seedhead instead of the parts of the plant that produce leaves. The quality of the forage also drops. The leaves are growing older, the protein and energy level is decreasing, and the fiber level is increasing. The result is lower quality forage.

The problem of low quality and reduced leaf growth in the late spring and early summer is caused by the excess forage growth. The plants are growing faster than the cattle can eat them. The difficulties caused by this excess growth can be minimized if good grazing management principles are used.

If cattle are given a large area to graze, the majority of their grazing will occur close to water and shade. The areas of the pasture far away will not be grazed, resulting in waste in these portions of the pasture. If the cattle have enough forage close to the water and shade, forage on the edges of the pasture will get mature, drop in quality, and forage will go to waste. A good grazing management program means pasture size is reduced, and cattle are concentrated on a smaller area, where they are not allowed the opportunity to be selective as to where they graze. They are forced to graze over the entire pasture and remove all of the forage. After they remove the forage in this smaller pasture (or paddock) they are moved into a new paddock, and the process starts all over again.

Decreasing pasture size and concentrating cattle on a smaller area of land will improve forage utilization, decrease stand loss from overgrazing, and improve per acre production. For additional information on pasture management, contact Steve Duckett at 828-255-5522.
Rain Barrel Sale!

Because people are still asking about rain barrels, we will be offering them for sale. The 80-gallon barrel from Rain Barrel USA (a North Carolina company) measures 37 inches high and 28 inches wide. It is made of 20% recycled high-density polypropylene. The heavy concave lid channels water flow into the barrel. The screened entry blocks leaves, debris and insects; the dark green color discourages algae growth. The barrel has two overflow ports to move water away from your home, and it comes complete with fittings and installation instructions. You can find more information at: http://www.rainbarrelusa.com/80%20Gallon.html

80 gallon barrel - $110 + tax
Payable by cash or by check made payable to “Buncombe County”

To purchase a barrel, come to the Buncombe County Center of NC Cooperative Extension, 94 Coxe Avenue, Asheville, NC 28801 (corner of Coxe and Hilliard) or call 828-255-5522.

2011 Coming Events

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<td>Aug 9</td>
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