

Hardee Rancher Beef and Forage Newsletter



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April/May 1999

UP COMING EVENTS

April 1999		
6, 8, 13 & 15	Beef Cattle Management Short Course	Wauchula Hardee County Extension
29	Producing Calves That Stay Healthy	Hardee Livestock Market
May 1999		
4-5	Dairy Production Conference	Gainesville
5-7	Beef Cattle Short Course	Gainesville
11-13	Reproduction Management School	Wauchula
June 1999		

1-5	Citrus Production and Management	SFCC - Avon Park
8-10	Forage & Pasture Management School: Session I	Sebring
13-18	Soils & Fertilizers	SFCC - Avon Park
16-18	FCA Annual Convention & Trade Show	Marco Island
July 1999		
13-15	Forage & Pasture Management School: Session II	Sebring
20	Beef Cattle Health Management Program	Wauchula Hardee Agri-Civic Center
August 1999		
10-12	Forage & Pasture Management School: Session III	Sebring

Do You Keep The Cows Or Do The Cows Keep You?

If you are a South Florida rancher and consistently wean a calf crop of 85% or better, my hat is off to you. Very few of our producers are able to accomplish this, particularly in the larger herds. Calf crop weaned (total calves weaned divided by total females exposed) is the single most important index affecting potential profitability in the cow-calf business. If you are in the cattle business to earn a profit, consider this. Would you retain an employee who steals from you or shows up for work three months late? Then why keep a cow who doesn't raise a calf each year? Would you keep a bull on the ranch who couldn't or wouldn't make your cows pregnant? Are you absolutely certain that each of your bulls is fertile and capable of mating with 25-40 cows within a reasonable amount of time, let's say 120 days?

Profitable ranching begins with getting each female pregnant each year. What follows are some of the more important considerations each manager or owner has to work through in order to accomplish this.

Production Goals For South Florida Cow-Calf Producers

Breeding Season Length: Cows - 120 days Heifers - 80 days
Pregnancy Rates: Cows - 95% Heifers - 85%

Abortion Rate - Less than 3%
Dystocia Rates: Cows - Less than 5% Heifers - 10%
Stillbirth Rates - Less than 2%
Birth to weaning losses - Less than 5%
Cow Mortality - Less than 1%
Calf Crop - Average Daily Gain - 2.5 lbs. or more
205 day adj. Wean wt. = >50% of dams weight
90% calf crop weaned

Key Points To Consider

Controlled Breeding Season

Any system of management is better than no system at all. If you run the bull with the cows all year long, then you really don't have a system. A true manager is able to control, direct and make the right things happen most of the time. A well defined breeding season has the following advantages over a twelve month season:

1. Herd bulls can be conditioned, evaluated and immunized prior to the breeding season.
2. A majority of the open cows will show a heat when the bulls are present and become pregnant.
3. Calving is restricted to a definite period during which cows may be closely monitored.
4. Calves can be weaned and sold to coincide with high market. If the market is down, calves can be held for a later market or go into a retained ownership program. The calves will be more uniform in size and age.
5. Summer calves can be avoided thereby eliminating lighter weaning weights.
6. Vaccinations to prevent reproductive disease are administered to non-pregnant cattle before the breeding season.
7. Labor requirements are reduced because fewer cattle gatherings and workings are needed and management practices such as pregnancy checking and vaccinations are conducted at appropriate times.
8. Less early embryonic death loss occurs because cattle are not being worked as many times per year and when most vulnerable to pregnancy interruption.
9. Calves can be weaned at one time when 5-9 months old reducing the lactational stress associated with allowing a calf to nurse too long inhibiting her dam's rebreeding.
10. Heifer calves left on the cow too long may become bred while too immature to handle a pregnancy.
11. The majority of the cow herd is in the same stage of production which allows for more efficient use of

pasture and forages reducing the cost of supplemental feeds.

12. If supplemental winter feeding becomes necessary, then most of the cow herd is in the same stage of either pregnancy or lactation and only those cattle needing supplement receive it. Why waste precious money and labor feeding cattle which don't need it!

Disease Prevention and Control

1. All females in the breeding herd should be annually vaccinated when non-pregnant 2-4 weeks before the breeding season. If not all cows have calved when prebreeding vaccinations are given, administer killed vaccines. Consult your veterinarian for specific products and which diseases to immunize against. Take care not to introduce newly purchased cattle into your herd during the breeding season. Any new additions should be isolated and carefully observed.

2. Do not place a newly purchased bull in with your cows the minute you get home from the sale. The bull should be given 60 days to acclimate to his new surroundings. This is critically important on bulls coming in from out of state. Most sale bulls are over-conditioned and need to be carefully observed and grow accustomed to a new feeding regime. Do not assume the new bull has received his annual complement of vaccinations. Deworm the bull upon arrival at your ranch.

3. It is prudent that the bull also be reevaluated for semen quality prior to being turned in with the cows. I know a lot of commercial cattlemen will scoff at this idea. Go ahead and scoff! Read the fine print in any sale catalog and you will read that bulls 18 months and older are guaranteed to have passed a semen test and to have been confirmed satisfactory **potential** breeders by a licensed veterinarian within 30 days prior to sale date. Not all veterinarians are equally competent to collect a representative sample and some bulls pass a semen test by "the skin of their teeth". The pressure placed upon ranch staff who in turn pressure veterinarians to pass bulls which are marginally satisfactory can result in a bull on your ranch which is sexually immature, etc. It is much safer and less expensive in the long run to detect a "dud" before he is turned out.

Cow Body Condition

Reproductive performance is poor in cows with low energy rations in the last trimester of pregnancy. Conversely, cows with adequate or high levels of nutrition have excellent reproductive performance. Cows need approximately 25% more energy and 40% more protein after calving than in late gestation. For most of the forages in south Florida this means energy should be the primary supplement with some protein supplementation as well. Cows which lose weight between calving and rebreeding are delayed in having their first heat and have lower first service conception rates. A balanced mineral program is also imperative at this time as well as Vitamin A.

Separate thin cows and place them with first calf heifers because both groups need extra energy in the ration. The manager needs to visually body condition score each cow in the herd on a 1 to 9 scale with 1 being extremely thin and 9 very obese. The comfort range is 4 to 7 with preference for 5 to 6.

Cattle on an inclining plane of nutrition (positive energy balance) have a greater chance of becoming pregnant than thin cattle losing weight. Inadequate nutrition will result in delayed rebreeding, later calving dates and a decreased calf crop percentage.

First calf heifers are particularly difficult to rebreed after calving. Lactational and growth demands can cause an extended interval from calving to first heat ranging from 120-150 days. If heifers are thin at calving, a majority may not return to heat during the breeding season. Most wrecks that occur will happen with heifers being bred with the second calf. It is a good practice to separate and breed heifers 30 days earlier than cows

and to feed them properly so they can breed back at the same time as mature cows. Getting first-calf heifers rebred on a yearly calving schedule is one of the greatest challenges facing the cow-calf manager.

Heifer Development, Selection and Breeding

Developing replacement heifers is a critical element to improving reproductive performance in a herd. Many managers fail to recognize how important it is to keep heifers growing after weaning. The emphasis should be placed on skeletal growth more than just weight gain. The period from weaning at 5-9 months of age to breeding at 15 months is critical if you expect a high percentage to conceive. Heifers need to weigh 65% of their expected mature weight at the beginning of the breeding season.

Heifers selected for breeding should be born during the first half of the calving season. These heifers should be older, heavier and out of the more fertile cows. They should have a better chance of reaching puberty and conceiving early. Select at least 50% more heifers to breed than needed for replacements. Not all will become pregnant and you won't be happy with all that do.

Breed heifers to a bull known to sire small calves at birth. A live calf in the weaning pen is far better than a calving problem which may result in a crippled or stunted heifer or worse. The performance of a first-calf heifer is a reliable indication of her future usefulness. During the first production cycle, the most important factor is for a heifer to produce a live calf and breed back within 90 days.

Must Do's During The Breeding Season

1. Keep a vigilant eye on cows to see if they are cycling. Observe bulls closely to insure that they are getting the cows bred. Remove crippled bulls and replace immediately.
2. Monitor pastures closely to keep cows distributed over feed resources. Nutrient levels must be kept high. Cattle cannot be expected to become pregnant on fresh air and sunshine.
3. Keep the mineral box fresh at all times.
4. Every cow that has lost a calf or did not calve should be marketed immediately. Why keep a loser?

FDA Approves Irradiation for Beef

The Food and Drug Administration has approved a new tool the beef industry will use to protect the wholesomeness of beef. Irradiation, also known as cold pasteurization, can destroy harmful bacteria on food without compromising the flavor or nutritional value. Research shows that irradiation of ground beef does not adversely affect flavor, aroma, color or shelf life.

This process will allow meat packers to kill bacteria at the end of the production line after the meat is sealed and packaged and cannot be contaminated further. This is particularly important with ground beef, where bacteria can easily get beneath the surface during grinding. (Source: Beef Business Bulletin)

Time For Spring Fertilization

Producers should be aware that soil testing is not recommended for bahiagrass **pastures** in central and south Florida because field research has shown no yield benefit to phosphorus (P) and potassium (K) fertilization of grazed bahiagrass in this region. South and central Florida, as used here, refers to that part of the state south of an imaginary line drawn east-west through Orlando.

Liming and nitrogen (N) fertilization remain the only two important considerations that influence bahiagrass yield and cattle production in the region. The target pH for bahiagrass pasture should be **5.0** and nitrogen around **50-100 lb/acre** should be applied between mid-February and March. Since N fertilization does not require soil testing, the only sample you may need to send to the UF/IFAS Extension Soil Testing Laboratory will be for liming recommendation. This can be done at 3-4 year intervals.

A note of caution - new plantings of bahiagrass should be fertilized differently from established pastures because their root systems are not fully developed to take advantage of residual P and K in the soil hardpan. For new plantings, obtain a soil test recommendation for lime, P and K. Then lime soil to a pH of 5.0 or higher. Apply 30 lb N/acre, all of the P and 50% of the K as soon as the seedlings emerge. Apply 70 lb N/acre and the remaining K 30 to 50 days later.

If you have questions, consult with your County Cooperative Extension office.

Source: Range Cattle REC Newsletter

Injection Sites

Animal health products are administered in a variety of ways. They give some orally, some topically, but many are given by injection. Injections can be given in one of several different manners; under the skin, in the skin, in the muscle, in the vein, into the rumen, and into the body cavity. The effectiveness of any health product is dependent upon proper administration according to label directions.

Selection of the most appropriate site for the administration of injectable medications or vaccines should always consider the following:

1. Carcass value
2. Ease and safety of administration
3. Important anatomical structures such as nerves, arteries, and veins

Injection Site Selection Based On Carcass Value Considerations

Injection site lesions or abscesses are a costly problem for packers and meat cutters. Besides the economic loss associated with trim loss and discarded meat, the downtime required for cleanup and disinfection of contaminated processing equipment when abscesses are sliced is expensive. Beef quality assurance was the cattle feeding industry's original response to this problem in 1986. Today, it is recognized that many of these lesions are not the fault of feedlot management practices, but are in fact often the results of treatment practices implemented by cow/calf producers, backgrounders, and dairy operators. Regardless of who gave the injection, the damaged tissue must be trimmed out and discarded; trimming expensive cuts of beef can be costly to the industry.

Injection Site Selection based on Ease and Safety Considerations

Restraint is required for the safe and proper administration of injectable products. Cattle are usually handled through a chute or other similar restraint device. The specific design of these devices will dictate the sites likely to be most convenient for making injections. Regardless, failure to properly restrain the animal prior to attempting an injection risks the potential for excessive damage at the injection site or injury to the animal, operator, or both. Therefore, restraint is the first step to the safe and proper administration of any injectable product.

Follow Label Directions To Avoid Injection Site Lesions

Always follow label directions when administering animal health products. Pay particular attention to dose and route of administration. If label directions provide an option for administering an injectable product by either a subcutaneous or intramuscular route, always choose the subcutaneous route. Remember that some irritation at the site of injection is unavoidable. In fact, with vaccines it is actually desirable and indicates the stimulation of an immune response. On the other hand, the occurrence of severe adverse reaction which results in excessive tissue damage and abscess formation is highly undesirable. If a label instructs the user to administer the product in the muscle, by all means, inject it in the muscle.

Recommended Sites for Intramuscular Injection

Preferred sites for medications or vaccines requiring intramuscular administration are the neck, triceps, tail-head, and "inside" round (least desirable). A 1 inch 16 or 18 gauge needle works well in calves and yearlings, whereas, a 1 ½ inch 16 or 18 gauge needle is recommended for use in adult animals.

Proper IM Injection Site Selection Will Prevent Animal Injury

One of the most important functions of the body's bony skeleton is protection of vital tissues and organs. Just as the brain is protected by the skull and the heart and lungs by the rib cage, major nerve trunks, arteries, and veins are located in close proximity to bone for protection from injury. Consequently, whenever the needle used for injection strikes or comes close to bone, it is likely near some very important anatomical structures that should be avoided.

For more information on immunization procedures attend a Beef Cattle Health Demonstration at the Hardee Livestock Market on April 29, 1999 at 6:00 P.M.

Youth Livestock Ethics

This I believe:

1. The boys and girls are more important than the project.
2. 4-H and FFA are not trying to replace the home, the church, or the school - they only supplement them.

3. Youth are their own best exhibit.
4. No award is worth sacrificing the reputation of a member or a leader.
5. Competition is a natural human trait and it should be recognized as such in club or chapter work. However, it should be given no more emphasis than any other fundamental.
6. Learning how to do the project is more important than the project itself.
7. Many things are caught rather than taught.
8. A blue ribbon boy with a red ribbon pig is more desirable than a red ribbon boy with a blue ribbon pig.
9. To "learn by doing" is a fundamental characteristic of the 4-H and FFA programs.
10. Generally speaking, there is more than one good way of doing most things.
11. Every member needs to be noticed, to be important, to be an achiever, and to be praised.
12. Our job is to teach members how to think, not what to think.

Source: National Livestock Ethics Council News, Summer 1998

- Outlook 1999 -

Beef Cattle

John Holt

Most price forecasters expected calf prices in Fall 1998 to be at least \$20 per hundredweight higher than they actually were. That wreck had its origins in weaknesses in the slaughter markets, which never reached the predicted \$70 per hundredweight. Cheaper feed encouraged feedlot managers to defer marketings, and the resulting heavier slaughter weights increased beef production. Also, an economic tail-spin in the Asian countries softened prices for hides and other beef cattle by-product exports. Feedlots, on average, lost money in the past year, and they lack both the will and the wherewithal to pay big premiums for feeder cattle. Competing meats will remain at near-record levels in 1999, so competition for the consumer's meat dollar remains fierce.

With that ongoing chorus of bad news continuing into 1999, what could offer hope for Florida feeder calf markets? Fortunately, feed supplies are abundant and cheap. That is, of course, bad news for grain farmers, but it supports feeder calf markets. Calf crops have been decreasing for the past two years, and so the supply

of weaned calves should be tight next fall. In addition, western states have sold down their cow-herds and, if there is average rainfall next year, will experience a demand-kicker for stocker cattle to go on grass. Thus, if the slaughter market can stay in the mid to upper sixties next year, then Florida calves should sell in the mid-seventies or better next fall.

Agricultural Land Values

John E. Reynolds

The average value of agricultural land increased 6 percent in the United States and 3 percent in the Southeast from 1997 to 1998. Because of the decline in citrus land values, the average value of agricultural land in Florida only increased by 1 percent from 1997 to 1998. Agricultural land values continue to vary by type of land and location in Florida.

Citrus land values in the southern regions and agricultural land values in the northern regions have followed the trend of the past several years according to 1998 Florida Land Value Survey results. Citrus land values have declined each year since 1990. The value of agricultural land has been increasing since 1992 in the Northwest and since 1993 in the Northeast. The largest changes in agricultural land values during the past year occurred in grapefruit groves (declines of 21-25 percent). Irrigated cropland values declined about 4 percent while nonirrigated cropland and pastureland values remained unchanged or increased slightly in the southern regions. In the northern regions, cropland and pastureland values increased 2-8 percent.

Agricultural land values are expected to increase from 2-6 percent from 1998 to 1999. According to participants in the Florida Land Value Survey, agricultural land values are expected to increase 5.1 percent in the Northwest, 6.5 percent in the Northeast, 3.8 percent in the Central region and 2 percent in the South.

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