

Hardee Rancher Beef and Forage Newsletter



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Introductory Comments

This is the first newsletter to be published from the Cooperative Extension Service targeted to ranchers and grass farmers in at least three years. It is the primary intention of this newsletter to frequently update Hardee county cattlemen with information which may help to produce more forage and beef per acre at less cost. This newsletter will highlight innovative techniques and discoveries that appear to have application to south Florida cattle and grass production. The newsletter will also include a calendar of events related to forage and cattle programs throughout south Florida.

As the new County Extension Director in Hardee, my primary focus will be in the livestock area. **This office exists to serve the needs of Hardee county's agricultural community.** After ten years of college teaching and managing a college farm, I have spent the last twenty years as a general manager on ranches, feedlots, and slaughter houses in Florida, Texas, and Colorado. My intentions are to utilize this first hand experience by providing agricultural programming to local ranchers on techniques and proven management practices which work. We want to assist producers by providing answers and alternatives to real-world challenges.

Calendar of Events

December 1998	
3	SE Round Up Angus Bull Sale Sale at 12 noon - Selling 65 Angus Bulls Sumter County Farmers Market, Inc. - Webster, FL For A Free Catalog or Info, Phone: Jarvene Shackelford (601) 837-4904
3-4	FCA Quarterly Directors' Meeting Melbourne, FL
14	Charolais Bull Sale Sale starts at 1:00 P.M. - Arcadia State Livestock Market Hwy 17 N - Arcadia, FL For Information Call Phil Turner, Office: (941) 494-1808
28	Special Slaughter Cow & Bull Sale Sale starts at 1:00 P.M. - Arcadia State Livestock Market Hwy 17 N - Arcadia, FL For Information Call Phil Turner, Office: (941) 494-3737 or Mac Turner, Office: (941) 494-1808
January 1999	
14-15	10th Annual Florida Ruminant Nutrition Symposium Holiday Inn West - Gainesville, FL For Information Call: (352) 392-5930
21	16th Annual Florida Cattlemen's Institute and Allied Trade Show "Controlling the Cost of Production Through Better Management" Kissimmee Valley Agricultural Center - Hwy 192 East For Reservations Call: (407) 846-4646

Sexual Performance in the Cow Pasture - A Critical Look At The Bull

Reproductive performance has a more significant impact on economic returns on a cow-calf operation than any other single factor. Today's cattlemen are being bombarded by advertisements about growth rate and carcass quality and that's all well and good. But when we set out to purchase a bull or turn out a bull we already own, how much do we really know about his ability to settle cows? If the bull cannot find, follow and impregnate cows, then he is only worth salvage value at the local livestock market. Over the past twenty years as a ranch manager I have been responsible for managing sixteen bull sales in Florida, Texas and Colorado, as well as private treaty sales in excess of 1500 bulls. It has been my observation that not all bull buyers are alike. Many are simply too casual about bull selection. It's unnerving to witness a buyer show up at a sale after the sale has already begun, grab a sale catalog and shove it in his back pocket and sit down and within the next two hours purchase 30-40 commercial bulls. Don't misunderstand me. I was always happy to see them show up! On the other extreme, I have had the satisfaction of showing bulls for several days to

prospective buyers who not only wanted the individual performance data and ratios (birth, weaning, and yearling weights, EPD's, scrotal circumference, and semen evaluation scores) but who took the time to inspect sires and dams and full and half siblings. The same bull will not fit the individual needs of every buyer. Is the bull going to be used in a single or multiple-sire herd? Will the calves be sold at weaning or will heifers be kept for replacements? Will ownership be retained for backgrounding or the feedlot? Will the bull be used on heifers or mature cows? Each of these factors will determine the choice of breed and the relative emphasis placed on performance and EPD information and, ultimately, the price of the bull. However, every bull buyer has one thing in common. Each is searching for a bull who will impregnate cows as they come into heat and live to tell about it. We don't want the bull falling apart on us and we all want to just place the bull into the pasture and forget about him until it's time to pick him up at the end of the breeding season. We expect a very high percentage of the cows to be pregnant and to calve early in the calving season without assistance. That's all.

Consider this. Nationally, the percent calf-crop is approximately 70 percent. Only 70 calves are weaned per 100 cows exposed to the bull during the breeding season. In other words, 30 percent of the nation's cowherd is failing to contribute to income. Many factors contribute to low fertility, but more individual emphasis needs to be placed upon sire selection and evaluation simply because of the multiple offspring sired by the bull. Surveys indicate that up to 20 percent of the bulls tested are either questionable or unsatisfactory potential breeders and many bulls are never tested. Due to space limitations let us discuss only the more important considerations involved in selecting and evaluating bulls for reproductive performance. First, and to me the single most important consideration, is the **reputation and integrity of the breeder**. Does the breeder stand behind the bull? Will the breeder refund your purchase price and/or replace the bull with another of comparable value if the bull fails to perform? Does the breeder develop the bulls in large pastures with high forage diets or are the bulls raised in small traps with self feeders? Have you taken the time to visit the breeder and inspect the bulls prior to the sale? Does the breeder allow private treaty sales prior to the annual bull sale? If so, the cattle may be picked over by sale time. Can the breeder provide you with all the production/pedigree information on demand? Is the ranch picked up and neat? What is the condition of the ranch vehicles? Is the working area of the cowpen and chute area washed down? What do the scales look like? Is there a small portable scale in the truck used to check calving cows? How does the breeder obtain birth weights? Are they estimated? Are calves creep fed? Are the dams of the bulls you are considering on a twelve month calving interval? Are visitors welcomed and does the ranch management give you their undivided attention? What does all this have to do with the bull you may purchase? Everything. The next time you visit your doctor, look around! Next, a breeding soundness evaluation (BSE) needs to be performed. This is useful in identifying bulls which have physical problems or poor semen quality. A BSE consists of a close examination of temperament, eyes, feet and legs, sheath, penis, prepuce, scrotum, and palpation of the testes and spermatic cords for firmness and bilateral symmetry. It also includes a measurement of scrotal circumference and semen evaluation for concentration, motility and morphology. Scrotal circumference varies with the breed but a yearling scrotal measurement needs to be provided as well as the scrotal measurement taken when the bull is semen evaluated within 30 days of sale. Larger scrotal circumference is positively correlated with higher volumes of spermatozoa as well as earlier puberty in heifers. Be familiar with the figures within your breed of choice. After a bull has satisfactorily passed a BSE examination, there may be problems which do not become apparent until bulls are exposed to some form of mating assessment. In most instances, bulls receive no form of assessment prior to sale or use. Three traits need to be measured and tested at this point:

- A. Libido-The willingness and eagerness of a bull to attempt mount and service.
- B. Mating ability - The ability and competence of the bull in fulfilling this aspiration.
- C. Serving capacity - The number of services achieved by a bull under stipulated conditions.

Some studies have indicated that bull libido assessment provided greater prediction of bull fertility than did

semen evaluation alone. Higher libido bulls will service more cows more often and will result in more pregnancies when the bulls are placed under sufficient breeding stress. If sex drive in bulls is measurable and predictable, then why don't seedstock producers provide this service? Because commercial bull buyers have not yet demanded it! There was a time when performance, EPD's and ultrasound information was not provided. I have some very old sale catalogs where the only information provided was the bull's pedigree. The pedigree tells us how the animal should perform but the performance and libido scores provide us with what has actually occurred to date. Commercial bull buyers are spending money on bulls which have not been tested and screened for libido and serving capacity. From personal experience I can attest to the fact that four good cowboys can set up and handle the testing requirements needed to libido test 100 bulls per day. The actual observations and scoring need to be performed by a licensed veterinarian trained in this specialty. The testing can be videotaped and filed by the seedstock producer as evidence that this screening has been done. Bulls failing the test are retested in four weeks. Those retested bulls failing the second test or scoring poorly need to be immediately slaughtered. Lastly, consider a few points which are often overlooked. Prolonged nursing has been shown to retard sexual expression. Bulls fed a high concentrate ration may have lower libido scores. The standard recommendation of turning out one bull per 20-30 females does not represent optimal bull usage and it allows sub-standard bulls to go undetected. Bull to female ratios as high as 1:60 have obtained good reproductive efficiency. Blood typing to determine paternity has shown that dominant bulls can sire the majority of calves in multi-sire groups. Dominance is expressed more strongly in older bulls and appears to be more related to seniority than to age or weight. Dominance and sex drive may be separate traits. The dominant bull could impair herd fertility through failure to service females while preventing less dominant bulls from serving. This problem is more acute when older and younger bulls are used in the same breeding pasture. In multi-sire mating programs, more efficient breeding and exploitation of sires would occur if bull groups were young (preferable < 3 yrs), of similar age, size and genotype. In conclusion, bull fertility is best predicted when bulls are assessed for a number of traits, including sex drive. There may soon come a day when a fertility index for bulls which combines a number of critically important traits becomes a standard management practice. This would provide considerable advantage over single trait measurements. It will become a reality when the all important commercial bull buyer demands it.

The Liver Fluke: A Growing Concern In The Cattle Industry

The common liver fluke, *Fasciola hepatica*, is a parasite of increasing concern to the cattle industry. Fluke associated liver condemnation rates were reported as 5% in 1973, to 17.24% in 1989-90, and 19.2% in 1994. Condemnation rates, in some areas, have been much higher. Adult liver flukes are about 20-30 mm long and 7-14 mm wide. They are leaf-shaped, broader anteriorly than posteriorly, with an anterior cone-shaped projection that bears the anterior ventral sucker and mouth. Liver flukes are prolific egg layers, producing an average of 19,000 eggs per day. The eggs are deposited in the bile ducts of the host, pass through the gall bladder to the small intestine and are voided with the feces. Due to sporadic emptying of the gall bladder, fluke egg counts on any given day can be a poor indicator of the actual level of infection. When an egg comes in contact with water, and with proper environmental temperatures, each egg will produce a larva, called a *miracidium* in 4-15 days. The miracidium can gain access to the intermediate host, the lymnaeid snail, in one of two ways: 1.)The snail may eat the egg, and the miracidium will hatch out and begin its development within the snail. 2.)The egg will hatch in water or a moist environment, and the miracidium would actively swim and seek out a snail, actually penetrating the skin of the snail. Several factors are necessary for infection with liver fluke (fascioliasis) to occur. Presence of an infected animal in the area is necessary. It should be noted that the liver fluke is capable of infecting and reproducing in several animal species other than cattle. Numerous lymnaeid snail species which are distributed across the United States and worldwide can act as the intermediate host of *Fasciola hepatica*. In a three-month period a single snail is capable of producing up to 100,000 descendants. Several environmental conditions are necessary for propagation and development of both the lymnaeid snail and the developing larval forms of the fluke. Moisture is necessary for the amphibious snail, and also for the swimming cercariae. The ideal temperature range for optimal development of both snail

and fluke larvae is 59-68 degrees F (15-20 degrees C). The snails also prefer a slightly acid pH. Eight to ten weeks after cattle ingest metacercariae, adult flukes will be present in the bile ducts of the liver. The multi-site feeding pattern in combination with the irritation from the spines on the fluke's cuticle irritate the bile ducts, which cause thickening of the bile duct walls and impairment of liver function. If sufficient numbers of flukes are present, they can cause a primary anemia from their blood feeding. Adult liver flukes in the bile ducts lead to very classical clinical signs: there is gradual loss of condition, progressive weakness, anemia and hypoproteinemia with development of edematous subcutaneous swellings, especially in the intermandibular space and over the abdomen. The main effects are low weight gains in young cattle, decreased milk production and condemnation of infected livers. Liver condemnation due to fascioliasis causes and economic loss to the packer that is passed on to the cattle finishing unit; this economic loss is becoming a more important concern in the cattle industry due to increased liver condemnation rates.

Treatment and Control

The economic impact of *Fasciola hepatica* on both liver condemnation and productivity has been well documented in numerous studies and publications. Consideration of the cow's role as a source of fluke infection for their calves is also necessary. Cows infected with liver flukes can be a continuous source of contamination for the pasture. Fluke control in all cattle can aid in the control of egg shedding and pasture contamination. Cows can be treated with IVOMEK Plus at any time of year, since they may have had acquired liver flukes over several seasons. Southern calves should be treated in September with IVOMEK Plus. IVOMEK Plus Injection provides a convenient formulation to control a wide range of internal and external parasites, including sucking lice, mange mites, grubs and nematode parasites plus mature liver flukes. This product provides unsurpassed broad-spectrum control of cattle parasites, including the added insurance of adult liver fluke control.

Source: Merck Technical Bulletin

Improve Cattle's Health With Fall Parasite Control

Fall is an ideal time to treat cattle infected with damaging internal and external parasites acquired during summer grazing. Reducing the parasite load during fall weaning increases immune response, which helps calves respond better to vaccination programs and other treatment protocols. External parasites, particularly lice, may become a problem for some producers this winter. Biting and sucking lice found on the skin surface around the neck, withers and root of the tail might cause animals to itch and scratch themselves on fences or other objects. Heavy infestations could cause severe hide damage, hair loss, anemia and decreased weight gain and milk production. Internal parasites also may affect your productivity this season. The brown stomach worm is the most economically devastating internal parasite of cattle. This nematode can cause the disease, *Ostertagiasis*, which often occurs in young calves causing significant weight loss. Good management practices, including fall parasite control treatments, will ensure a healthy herd throughout the long winter months.

Source: Drovers, Nov. '98

16th Annual Florida Cattlemen's Institute And Allied Trade Show

The theme for this year's 16th Annual Florida Cattlemen's Institute and Allied Trade Show will be **"Controlling the Cost of Production Through Better Management"**. This year's Institute and Allied Trade

show will be held on January 21, 1999 at the Kissimmee Valley Agricultural center on Highway 192 East. The motel will be the Holiday Inn Express located just east of the Agricultural center on Highway 192. For reservations call 407-846-4646 and let them know that you will be attending the Florida Cattlemen's Institute and Allied Trade Show for their special rate of \$39.00 per night. The institute will begin with the trade show opening at 8:00 a.m., followed by the welcome given by Dr. Mike Martin, the new Vice-president for Agricultural and Natural Resources at the University of Florida's Institute of Food and Agricultural Sciences (IFAS). Dr. Martin comes to us by way of the University of Minnesota. This will be an excellent opportunity to hear and meet Dr. Martin. The keynote speaker for this year's Institute is Allan Nation. Allan has been the editor of The Stockman Grass Farmer Magazine since 1977. This magazine, based in Jackson, Mississippi, is the only North American publication specializing in intensive grazing and pasture production systems for beef, sheep, and dairy cattle. As the son of a commercial cattle rancher, Mr. Nation grew up in Greenville, Mississippi, and has traveled the world studying and photographing grassland farming systems. He is a frequent speaker in the United States, Canada, Mexico, Ireland and New Zealand on grassland farming topics. Allan will be speaking on "*Harvesting Sunshine to Lower Production Cost*" at this year's Institute. He is the author of Pasture Profits with Stocker Cattle, Quality Pasture, Grass Farmers, and Paddock Shift. With the industries economic situation, you will not want to miss this talk on lowering production cost for your operations. Interested individuals/companies who would like to exhibit their products at the trade show should contact Dr. Mike Fanning, Extension Livestock Specialist, at 941-658-3400, or Mr. Terry Weaver, Chairman of the FCA Allied Membership Committee at 941-465-5856. For any cattlemen interested in exhibiting cattle, contact Doug Mayo, Extension Livestock Agent, at 941-533-0765.

South Florida Beef - Forage Program Has New Website on Internet

The South Florida Beef-Forage Program has a new website designed especially for cattle ranchers. This group of livestock extension agents has developed this page which is dedicated to making timely and practical information available to cattle producers in South Florida via the Internet. The URL or Internet address is: <http://www.ifas.ufl.edu/~sfbfp/beef.html>. So far, 12 separate categories of information have been established. A members link gives users access information for the livestock agent in each county along with a brief description of their programing focus and background. A calendar of events link gives an ever-changing listing of upcoming extension programs, cattle sales and dates for organizational meetings. There is a discussion group which allows producers to e-mail all the extension personnel as well as all the other producers that are members of the cattletalk discussion group. This provides a means for getting a number of opinions on issues pertaining to cattle production and management. Each agent submits their newsletters, so users have access to a wide variety of current information. There is a link which features contact information by county for people who provide a wide array of custom services such as crop dusting, hay for sale, tractor work, grass planting material, by-product feeds, day workers and many others. University of Florida publications are available for both cattle and forages on the publications link. Producers can quickly locate the fact sheets they need right at their desktops without having to go by the extension office or wait for them in the mail. Cattlemen can also link to breed sire summaries and search each breed for EPD and performance information. This extensive web site brings together a tremendous resource of both local, state and nationwide information to help ranchers make better more informed decisions. The response from cattlemen has been very good. Many owners and ranch managers have made this site their home page and access it every week. The page has currently received over 1600 hits and has been increasing steadily.

Service Directory Grown to Cover South Florida

We are developing a list of names and contact information for companies who provide custom services for cattle industry in Hardee County. The other agents in the South Florida Beef-Forage Program have been

assembling this information as well, and now have developed a directory of service providers from all across the state. This information is easily accessed through our web site at <http://www.ifas.ufl.edu/~sfbfp/beef.html>. There are numerous types of businesses which provide hay cutting, day workers, fence repairs, horse shoeing, grass planting materials, ag chemicals, feed wholesalers, citrus pulp, tractor work, seed dealers, hay, A.I. service, cattle hauling and many others. This is a tremendous resource for cattlemen and an excellent way to let people know what you can do. This is a free service so complete the enclosed form and return it to the address at the top of this newsletter. The Hardee County directory will be enclosed with a subsequent newsletter.

4-H Shooting Sports

Recently, myself and three volunteers from Hardee County attended training in Ocala to qualify us to teach shooting sports. Shooting sports includes pistol, rifle, shotgun and archery. We hope to start a new 4-H Shooting Sports Club in the near future, probably sometime in January. If you or your child are interested in becoming involved in this club, please contact the Extension Service office at 773-2164. This club will be for boys and girls alike. We are excited about getting this club started, so please let us know if you are interested.

If you know of anyone who would benefit from receiving this newsletter, please call the Extension Service Office at 773-2164 with their name and address. Also, I would like your feedback on the newsletter. Let me know if the articles are helpful to you, and what other information would be beneficial to your operation. This newsletter is intended to bring you up to date information to aid you. Keep me informed on the types of articles you would like to see.

Sincerely,
Lockie A. Gary
County Extension Director

STAFF CONTRIBUTORS

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For questions or comments regarding this publication contact



[Lochrane A. Gary](#)



Back

[Back to the Cooperative Extension Newsletters Page](#)

Back

[Back to the South Florida Beef-Forage Program HomePage](#)

