UNIVERSITY OF FLORIDA
IFAS EXTENSION

Animal Science Newsletter

April 2004

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Prepared by Extension Specialists in Animal Sciences

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Dates to Remember

April

1	Grass Fed Beef (Will It Work For You?) - Paxton Agricultural Complex; Paxton, FL
3	State 4-H and FFA Livestock Judging Contest – UF Horse Teaching Unit, Gainesville, FL
5	Beef Basics: Session V - DeSoto County Extension Office; Arcadia, FL
10	State 4-H & FFA Horse Judging Contest - Gainesville, FL
12	Beef Basics: Session VI - DeSoto County Extension Office; Arcadia, FL
17	State 4-H & FFA Meats Judging Contest - Gainesville, FL
29	Animal Identification Workshop - UF Beef Teaching Unit; Gainesville, FL

May

4	Southeast DHIA Board Meeting - Hilton University of Florida Conference Center; Gainesville, FL
5	41st Annual Florida Dairy Production Conference - Hilton University of Florida Conference Center; Gainesville, FL
5-7	53rd Annual Beef Cattle Short Course Conference - Hilton University of Florida Conference Center; Gainesville, FL
16-20	34th Annual Florida International Agribusiness Trade Show and International Conference on Livestock in the Tropics - Kissimmee, FL
19	STARS Forage/Beef Field Day - Subtropical Agricultural Research Station; Brooksville, FL
24-26	IFAS/NRCS Nutrient Management Module 7 - Florida Practicum - USDA Service Center; Okeechobee, FL
27	2004 Corn Silage Field Day - Plant Science and Education Research Unit; Citra, FL

Registration for the 53rd Annual Beef Cattle Short Course is available online at **http://www.animal.ufl.edu/extension/beef/2004BCSC.shtml**. Registrations must be completed (or postmarked if mailed) on or before April 23, 2004, to take advantage of the discounted early registration fee. For additional information, please contact Bob Sand or Tim Marshall at (352) 392-1916.

Beef Management Calendar

April

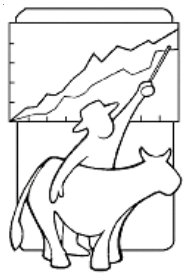
- ☑ Plant warm season annual pastures.
- ☑ Plant corn for silage.
- ☑ Check and fill mineral feeder.
- ☑ Check dust bags or apply treated ear tags.
- ☑ Check for external parasites and treat if necessary.
- ☑ Observe cows for repeat breeders.
- ☑ Deworm cows as needed if not done in March.
- ☑ Vaccinate against blackleg and brucellosis after 3 months of age and before 12 months of age.
- ☑ Market cull cows and bulls.
- ☑ Update market information and refine market strategy for calves.

May

- ☑ Remove bulls.
- ☑ Harvest hay from cool season crops.
- ☑ Plant warm season perennial pastures.
- ☑ Fertilize warm season pastures.
- ☑ Check mineral feeder.
- ☑ Check for spittlebugs and treat if necessary.
- ☑ Apply spot-on agents for grub and louse control.
- ☑ Check dust bags.
- ☑ Vaccinate and implant with growth stimulant any later calves.
- ☑ Reimplant calves with growth stimulant at 90-120 days, when you have herd penned.
- ☑ Dispose of dead animals properly.
- ☑ Update market information and refine marketing plans.
- ☑ Remove bulls May 21 to end calving season March 1.

June

- ☑ Last date for planting sorghum.
- ☑ Check mineral feeder, use at least 8% phosphorus in mineral an not over 2 ½ to 1 calcium to phosphorus ratio.
- ☑ Check pastures and hay field for spittlebugs, mole crickets, and army worms.
- ☑ Treat if necessary; best month for mole cricket control.
- ☑ Check dust bags.
- ☑ Watch for evidence of pinkeye and treat.
- ☑ Utilize available veterinary services and diagnostic laboratories.
- ☑ Get heifers vaccinated for brucellosis if not already done.
- ☑ Pregnancy check cows.
- ☑ Update market information and plans.
- ☑ Make first cutting of hay.
- ☑ Put bulls out June 1 for calves starting March 11.
- ☑ Reimplant calves at 90 to 120 days with growth stimulant.



Livestock Summary

The number of cattle and calves on farms and ranches on January 1, 2004, was down 1 percent from a year earlier and down over 8 percent from the cyclical peak on January 1, 1996. Last year marked the eighth year of herd liquidation, and there is no hint of movement toward increased female retention.

Although moisture conditions have improved somewhat this winter, forage conditions remain very uncertain for the 2004 grazing season. Even with the smallest cattle inventory since 1959, the present environment of uncertainty may not be very conducive to herd expansion.

Declining feed grain stocks and strong domestic export demand is resulting in higher feed costs. This rise in feed costs will put additional pressure on cattle feeders. After spring grazing season begins, assuming near-normal grazing conditions, cow slaughter is expected to drop well below year-earlier levels.

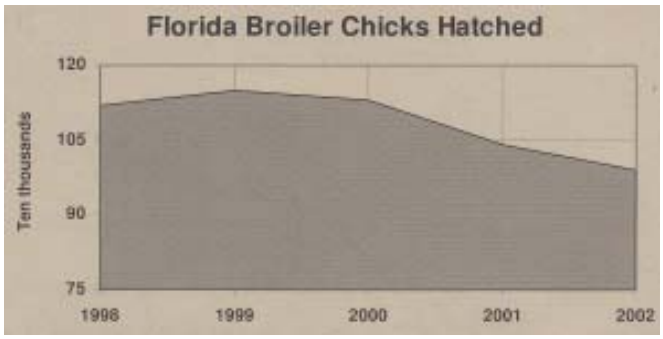
Cattle inventories are down 5% since 1998, removing some pressure on hay stocks, but poor forage conditions going into winter and increased snow cover are increasing supplemental feeding in many areas. Weather conditions and supplemental feeding needs will be the key to prices on hay over the next couple of months. Hay quality has been an issue, particularly for other hays, and the prices are likely sending mixed signals of fairly strong demand,

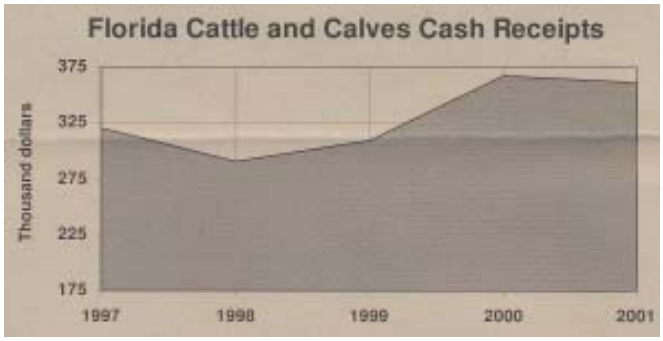
but poorer quality.

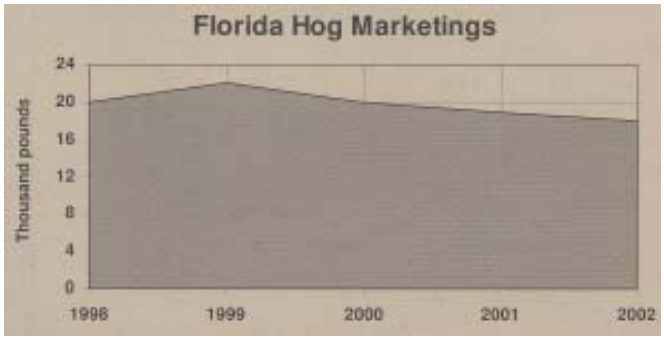
After hitting a record 2.57 billion pounds in 2003, beef exports may only reach 220,000 pounds in 2004 if bans currently in place remain for the entire year. U.S. exports remained strong enough to end 2003 at a record high level in spite of the post December 23 ban on U.S. beef and live animals.

Significantly reduced exports are likely this year because all major markets except Canada have banned U.S. beef and live animal exports after the discovery of a cow with bovine spongiform encephalopathy (BSE) in Washington State on December 23, 2003. Initially cattle/beef prices declined sharply, but the markets realized that domestic consumer reaction was muted and consumer beef demand remained relatively strong. Any opening of export trade would tighten beef supplies resulting in stronger prices.

Livestock Trends







SOURCE: The Florida Agri-Journal
Researched by Sherilyn Burris
Information Specialist I
Division of Marketing
Release - March 5, 2004

-RSS-

2004 Corn Silage Field Day

Thursday, May 27, 2004

University of Florida
Departments of Animal Sciences and Agronomy
Plant Science and Education Unit; Citra, FL

AM

8:00 **Registration** at Plant Science Unit - Citra - Coffee, milk and donuts provided by the Florida Farm Bureau Federation

8:15 **Introduction** - Drs. Jerry Bennett and Glen Hembry

8:20 **Demonstrations in the Field** - Dr. Carrol Chambliss, Mr. Jerry Wasdin, and Corn Seed Representatives
- Varieties
- Roundup-Ready varieties
- BT Varieties
- 15 inch rows
- Twin rows

9:15 **Fertigation/Timing of N Application & Other Nutrient Management Recommendations** - Drs. Carrol Chambliss, Danny Colvin, David Wright

10:00 **Break** - Provided by Agriliance

10:15 **Triple Cropping Forage Systems for Greater Sustainability** - Dr. Ray Gallaher

10:35 **Weeds and More Weeds, Transgenic Varieties, and Corn without Atrazine** - Dr. Greg MacDonald

10:55 **Management of Silage in Hot and Humid Areas** - Drs. Limin Kung, Jr. and Gbola Adesogan

11:25 **My Experiences in Corn Production**: Panel Discussion

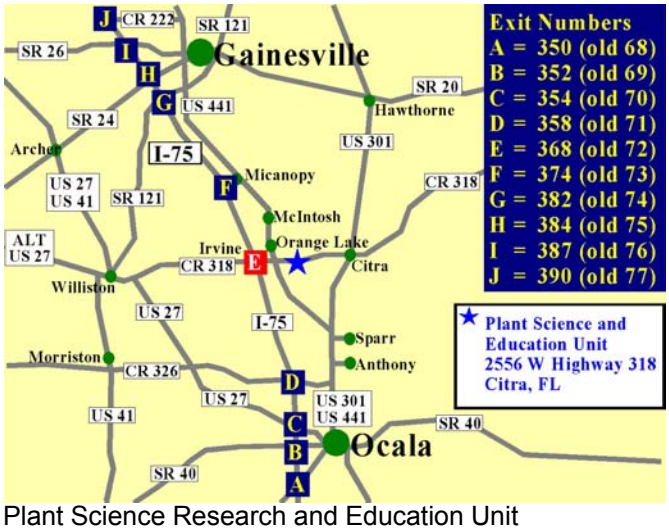
PM

12:00 **Lunch** - Provided by Diamond R. Fertilizer; Farm Credit of North Florida; Helena Chemical Co.; Southern States, Trenton; Magnum Plus Fertilizer; Marty Karle, Gromore UAP; and Ring Power Corporation

12:45 **Equipment Field Demonstrations**
- Chopping
- Bagging
- Tillage
- Planting – conventional, strip-till, no till
- Other
- Static Equipment Displays
- Feed Mixer Wagons
- Handling Equipment
- Irrigation Fertilizer Injection Pumps
- Irrigation Systems
- Moisture Testing Equipment
- Silage Bags

Refreshments - Provided by Lake Butler Farm CenterHandling Equipment

Directions



Plant Science Research and Education Unit
2256 West Highway 318
Citra, FL 32113
Phone: (352) 591-2678

From I-75 (Exit 368), turn east on CR 318, 3 miles to US 441 then continue on CR 318 for 2 miles. The unit is approximately 20 miles south of Gainesville and 20 miles north of Ocala.

To register, please visit the Corn Silage Field Day web site at http://www.animal.ufl.edu/dairy/corn%20silage%20field%20day/cornSilageFD.shtml.

For further information concerning the Corn Silage Field Day, please contact Jerry Wasdin at wasdin@animal.ufl.edu or (352) 392-1120.

SOURCE: Jerry Wasdin
Research Programs/Services Coord
UF/IFAS, Department of Animal Sciences, Gainesville, FL

-RSS-

USDA Provides New Tool for First Responders

To prepare for the intentional and unintentional introductions of animal diseases into the nation's food production pathway, Agriculture Secretary Ann M. Veneman has announced the release of an informational compact disc for federal and state agriculture first responders.

"This new tool provides federal, state and private veterinarians immediate access to resources and relevant information to help them more effectively identify, respond to, control and facilitate recovery from a foreign animal disease outbreak," Veneman said.

The compact disc, "Food Security: The Threat to American Livestock," was developed in conjunction with Auburn University. USDA's Animal and Plant Health Inspection Service, (APHIS) helps to ensure the safety of all animal and plant products from the farm to the food distribution centers located around the country. The agency has embarked on an extensive program to enhance its readiness to detect, deter and respond to terrorist events involving plant or animal pathogens. State and federal officials who have a role to fulfill in the event of an unintentional or intentional threat to U.S. livestock will also have access to this data bank.

Shortly after the events of Sept.11, Veneman formed a Homeland Security Council within the department to develop a plan and coordinate efforts among all USDA agencies and offices. The council focused on: food supply and agriculture production, USDA facilities and staff and emergency preparedness.

APHIS' compact disc addresses emergency preparedness and brings homeland security issues to the forefront of private veterinary practitioners and other agricultural first responders, as they conduct their daily activities. It offers comprehensive information on infectious disease threats to livestock, animal disease awareness briefings, standard veterinary medical information for diagnosing such diseases and emergency information gathering and reporting mechanisms.

Additionally, this information resource outlines routine biosecurity measures for on-site farm visits, recommends emergency response plans and suggests disease monitoring methods. The Food Security CD supports the National Animal Health Emergency Management System's goals, which are:

- Preventing the introduction of foreign and emerging animal pathogens.
- Being prepared to detect and manage an outbreak of a foreign animal disease.
- Having an appropriate response system for control and eradication of the disease.
- Having a system for recovery from the animal health emergency event.

SOURCE: Ed Curlett, (301) 734-3256
Jerry Redding, (202) 720-6959
United States Department of Agriculture, Washington, D.C.
Release - March 26, 2004

-TTM-

Veneman Announces Expanded BSE Surveillance Program

Agriculture Secretary Ann M. Veneman has announced details for an expanded surveillance effort for Bovine Spongiform Encephalopathy (BSE) in the United States.

"We are committed to ensuring that a robust U.S. surveillance program continues in this country," said Veneman. "This one-time extensive surveillance plan reflects the recommendation of the international scientific review panel."

On December 30, 2003, Veneman announced that an international scientific review panel would review the U.S. Department of Agriculture's investigation into the BSE find in Washington State and provide recommendations for future actions. Last month, this panel, operating as a subcommittee of the Secretary's Advisory Committee on Foreign Animal and Poultry Diseases, recommended a one-year enhanced surveillance program targeting cattle from the populations considered at highest risk for the disease, as well as a random sampling of animals from the aged cattle population.

The panel also complimented USDA on its investigative efforts as well as commented that the removal of specified risk materials from the food supply was the single most important action USDA took to protect public health.

USDA's BSE surveillance program historically has been focused on the cattle populations where it is most likely to be found, including those condemned at slaughter because of signs of central nervous system disorders, non-ambulatory cattle and those that die on farms. In FY 2004, USDA sampled 20,543 animals—a sample size designed to detect the disease if it occurred in one animal per million adult cattle with a 95 percent confidence level, which is 47 times the international standard for low-risk countries.

Veneman said that $70 million will be transferred from the USDA Commodity Credit Corporation to fund the enhanced program with the goal to test as many cattle as possible in the high-risk population as well as to test a sampling of the normal, aged cattle population over a 12 to 18 month time frame.

The enhanced surveillance plan incorporates

recommendations from the international scientific review panel and the Harvard Center for Risk Analysis; both have reviewed and support the plan.

In addition, USDA is appreciative of the advice, assistance and analyses provided by the House and Senate Agriculture Committees, House and Senate Appropriations Committees and the House Government Reform Committees in developing this robust, aggressive surveillance plan.

The primary focus of USDA's enhanced surveillance effort will continue to be the highest risk populations for the disease, but USDA will greatly increase the number of target animals surveyed and will include a random sampling of apparently normal, aged animals. USDA will build on previous cooperative efforts with renderers and others to obtain samples from the targeted high-risk populations, which are banned from the human food supply.

Under the enhanced program, using statistically geographic modeling, sampling some 268,000 animals would allow for the detection of BSE at a rate of 1 positive in 10 million adult cattle with a 99 percent confidence level. In other words, the enhanced program could detect BSE even if there were only five positive animals in the entire country. Sampling some 201,000 animals would allow for the detection of BSE at the same rate at a 95 percent confidence level.

The sampling of apparently normal animals will come from the 40 U.S. slaughter plants that handle 86 percent of the aged cattle processed for human consumption each year in the United States. The carcasses from these animals will be held and not allowed to enter the human food chain until test results show the samples are negative for BSE.

USDA will begin immediately to prepare for the increased testing, with the anticipation that the program will be ready to be fully implemented June 1, 2004. In the meantime, BSE testing will continue at the current rate, which is based on a plan to test 40,000 animals in FY 2004. Testing will be conducted through USDA's National Veterinary Services Laboratory in Ames, Iowa, and a network of laboratories around the country.

USDA is also working to approve rapid tests for use in the testing program. USDA will help defray costs incurred by industries participating in the surveillance program for such items as transportation, disposal and storage, and carcasses being tested.

Detailed information on the surveillance plan can be found at http://www.aphis.usda.gov/lpa/issues/bse/bse.html.

SOURCE: Alisa Harrison, (202) 720-4623
Jim Rogers, (202) 690-4755
United States Department of Agriculture, Washington, D.C.
Release - March 15, 2004

-TTM-

Beef Industry Provides Restaurants with Menu Ideas to Build Beef Demand

As the challenges to be more creative and economical continue to grow in the food service industry, the Beef Checkoff Program has been out front with new and ground-breaking recipes to increase consumer demand for beef. The colorful new 28-page recipe collection entitled Innovation in Action offers a variety of recipes and menu concepts to tempt every palate.

This piece was funded by beef producers through their $1-per-head checkoff, and coordinated for the Cattlemen's Beef Promotion and Research Board and state beef councils by the National Cattlemen's Beef Association (NCBA).

"We are extremely pleased to offer "Innovation in Action" to restaurant and other food service operators," said Sid Sumner, Bartow, Fla., beef producer and chairman of the Joint Foodservice Committee. "Creativity is the ingredient that helps turn occasional customers into loyal ones, and we're happy to help with this to make sure beef is part of the picture."

Today's growing food industry is continually evolving and heavily influenced by many ethnic cultures. Innovation in Action embraces these influences by pairing beef with complementary ingredients to create dishes with Latin, Mediterranean and Asian flavor, among others.

In addition to innovative recipes and concepts such as steak moo shu, beef pretzels, Cheeseburger Fries and all-American sushi, readers will also find starters, cooking and preparation tips, and information featuring exciting new beef products recently developed for foodservice operations. The collection also highlights ideas from some of the hottest operations on how to transform good menu items into profitable hits.

"As a partner with restaurants in growing beef business, America's beef producers know the best thing we can do is develop new products and creative recipes that allow them to build relationships and loyalty with their customers," said Sumner. "We believe this booklet will be very helpful to restaurants and other food service establishments."

Innovation in Action also highlights the newest beef value cuts that are a result of a new cutting approach developed through beef checkoff-funded research: taking the best portion of what used to be sold as larger roasts and cutting them into higher-value steaks. These new cuts are low on plate waste and high on tenderness, flavor and quality. Distinctive recipes for all occasions -- including breakfast -- are included.

The booklet will be distributed to food service operators throughout the country. Additional copies of the brochure can be obtained by calling the NCBA Customer Service Department at 1-800-368-3138 or emailing a request to innovationinaction@beef.org and requesting item #24708.

SOURCE: Walt Barnhart
barnhart@beef.org
National Cattlemen's Beef Association
http://www.beef.org
Release - March 26, 2004

-TTM-

Effect of Scours on Calf Weaning Weight

Montana State University researchers evaluated health and performance records of 3637 calves from inbred and outbred populations over a 14-year period. The inbred cattle were linebred Herefords. The outbred cattle consisted of four genotypes: 1) Hereford; 2) Angus x Hereford; 3) Simmental x Hereford; and 4) Tarentaise x Hereford. Over the 14-year period, the average incidence of scours was 35%; the range was 13 to 64%. Incidence of scours was significantly higher for inbred than outbred calves (41 vs 28%). Incidence of scours was significantly higher in calves born to 2-yr-old dams and decreased with increasing age of dam. Scours significantly impacted calf weaning weight. Over all years, scouring calves weighed 458 lb at weaning while non-scouring calves weighed 478 lb. Also, outbred calves were significantly heavier than inbred calves (483 vs 452 lb. The authors concluded that the economic benefit of managing to reduce the incidence of scours should exceed the expense to reduce the economic loss that can occur when calves are afflicted with scours (Anderson et al. 2003. Prof. Anim. Sci. 19: 399).

Delaying the Initial Implant Improved Quality Grade in Steer Calves

The objective of this University of Nebraska study was to determine if delaying the initial feedlot implant would influence performance and carcass traits in steer calves implanted twice during the finishing period. One hundred crossbred steer calves (476 lb) were used in the study. One-half were implanted with Synovex S® after a 14-day acclimation period. The remainder were implanted with Synovex S® 30 days after the 14-day acclimation period. All calves were re-implanted 112 days later with Synovex Choice® and harvested after another 100 days.

Average daily gain (3.74 lb/d), final weight (1,269 lb), hot carcass weight (799 lb), fat thickness (.48 in), ribeye area (12.79 sq in), and yield gain (3.2)

were not affected by implant regimen. However, the delayed implant steers had significantly higher marbling scores (570 vs 527) and a higher percentage grading Choice (92 vs 68%). The authors concluded that delaying the administration of Synovex S® until 30 days on feed can improve marbling score and quality grade without compromising feedlot performance (Funston et al. 2004. University of Nebraska Beef Cattle Report. MP80A).

Characterizing Beef Cow Enterprises in Eight Northern Great Plains States

South Dakota State University researchers summarized data collected from 185 cooperating cow herds during the years 1991-1999 in eight Northern Plains states (ND, SD, MT, WY, MN, IA, NE, and KS). Data were collected and analyzed by Standardized Performance Analysis (SPA) guidelines. Compared to industry averages, these operations were large, averaging 508 breeding females. In addition to production data, 148 of the cooperators provided financial information. Although the results reported here are not necessarily applicable to other regions, they nevertheless provide benchmark data regarding practices, production levels and financial performance of enterprises in a major cow-calf producing area of the U.S. Following is an abbreviated summary of results (Dunn et al. 2003. South Dakota Beef Report).

- Acres/exposed female - 21.3 A
- Pregnancy percentage - 93.0%
- Calving percentage - 91.4%
- Weaning percentage - 86.7%
- Female replacement rate - 19.7%
- Average age at weaning - 199.0 days
- Average weaning weight per calf - 519.0 pounds
- Pounds calf weaned per female exposed - 451.0
- Total expenses per beginning year female - $397
- Total revenue per beginning year female - $430
- Net income - $33
- Return on assets - 3.1% pounds
- Total assets per beginning year female - $2,087

Calf-Fed Steers Graded Higher and Were More Acceptable in Palatability Attributes than Yearling Steers

Research has shown variable results when calf-feds and yearlings are compared for quality grade and measures of meat palatability. However, very few studies have made this comparison using contemporaries from the same herd. University of Nebraska scientists used ¾ British x ¼ Continental steers to make this comparison in a two-year study where herdmates were assigned at weaning time to be finished as either calves or yearlings. Calf-feds were placed directly in a finishing yard for 6 to 7 months and were 13 to 14 months old when harvested. Yearlings were backgrounded on various growing systems (drylot, corn stalks, and pasture) and then finished for 3 months. They were 19 to 20 months old when harvested. Both groups were fed to be harvested at a constant fat thickness endpoint of 0.5 in. Yearlings had significantly heavier carcasses (828 vs 696 lb) and greater ribeye areas (12.6 vs 11.3 sq in). There were no significant differences in fat thickness or yield grade. Calf-feds had significantly more marbling and a higher percentage of Choice carcasses than yearlings. Steaks from calves were significantly more tender as measured by shear force after 7, 14, and 21 days of aging. They were also scored higher by a sensory panel for tenderness, juiciness, flavor, and overall acceptability after 7 and 14 days of aging. Based on the shear force data, the probability of a tough steak from calf-feds was only 1.9, 0.7, and 0.02% after 7, 14, and 21 days of age, respectively. Yearlings showed a much higher probability of being tough: 29.2, 11.9, and 4.0% after 7, 14, and 21 days of age, respectively (Brewer et al. 2004. University of Nebraska Beef Cattle Report MP 80-A).

SOURCE: Harlan Ritchie, Steven Rust, and Daniel Buskirk
Beef Cattle Specialists
Michigan State University
East Lansing, MI 48824
Release - Winter 2004

-TAT-