



UNIVERSITY OF
FLORIDA

EXTENSION

Institute of Food and Agricultural Sciences



Animal Science Newsletter

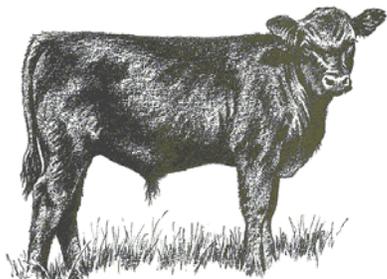
June 2002

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Dates To Remember

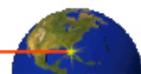
June 2002

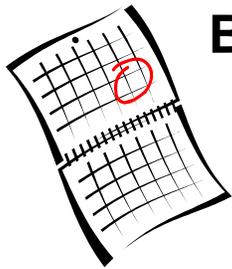
TBA	CVM MBNA Equine Conference
TBA	Timpoochee Horse Camp - Timpoochee
1	Florida Limousin Steer & Heifer Sale - Wauchula
6	2002 Corn Silage Field Day - Hague
8-9	CVM Annual Florida Goat Production Conference - Gainesville
9-15; 16-22; 23-29	Welaka Horse Camp - Welaka
19-21	2002 FCA Annual Convention and Trade Show - Marco Island
24-26	4-H Hog & Ham Program – Harvesting & Processing Week
27	State Horse Demonstrations and Public Speaking* Contests Horse Quiz Bowl, Horseman of the Year Interviews

July 2002

11-13	State 4-H Horse Show - Tampa
22-26	Florida 4-H Congress – Gainesville
31-August 4	Southern Regional 4-H Horse Championships

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Beef Management Calendar

June

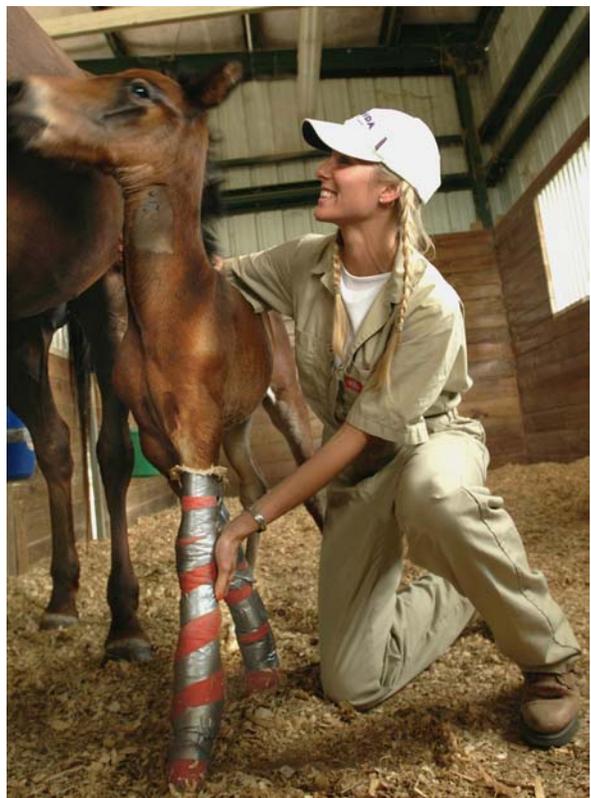
- Last date for planting sorghum.
- Check mineral feeder, use at least 8% phosphorus in mineral and not over 2 ½ to 1 calcium to phosphorus ratio.
- Check pastures and hay field for spittlebugs, mole crickets, and army worms. Treat if necessary; best month for mole cricket control.
- Check dust bags.
- 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.
- Cut corn silage.

July

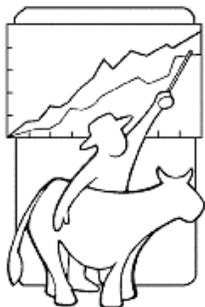
- Cut corn silage.
- Control weeds in summer pastures.
- Apply nitrogen to warm season pastures, if needed.
- Check mineral feeder.
- Check for army worms and mole crickets, and treat if necessary.
- Wean calves and cull cow herd.
- Watch for evidence of footrot and treat.
- Consider preconditioning calves before sale including vaccination for shipping fever and IBR at least 3 weeks before sale.
- Check dust bags.
- Update market information and plans.
- Revaccinate calves at weaning for blackleg.

August

- Cut hay.
- Apply lime for fall and winter crops.
- Harvest Bahiagrass seed.
- Check mineral feeder.
- Update market information and marketing plans.
- Check for army worms, spittlebugs, and mole crickets, and treat if necessary.
- Check dust bags.
- Wean calves and cull cow herd.
- Watch for evidence of abortions.
- Observe animals regularly for signs of disease.
- If cattle grubs were found on cattle last winter or heel flies were observed in the pasture, treat for cattle grubs this month.
- Pregnancy test and cull open heifers from replacement herd.



Jodi Crowley, graduate student of animal sciences at the University of Florida's Institute of Food and Agricultural Sciences, checks leg splints on Die Hard, a premature filly, at UF's Horse Teaching Unit in Gainesville, Friday APR-26, 2002. Die Hard was born six weeks early due to her mother having placentitis, an infection of the placenta. The splints on Die Hard's legs will keep them strong and help with muscle development since she had poor muscle mass at birth. "During the first week we were unsure of the foals' prognosis, but veterinarians are expecting a full recovery," Crowley said. (AP photo University of Florida/IFAS/Tara Piasio)



Livestock Summary

The USDA's Economic Research Service is reporting that boxed beef and fed cattle prices have strengthened during the first quarter, but remain well below the weather-induced tight supply situation that existed the prior year. Likewise, retail prices of choice beef are moving below the record setting pace of 2001.

On average, feeder cattle have lost money since last spring, but are positioned to show a profit during the second quarter of 2002. The tightened feeder cattle supply situation will result in feeder cattle prices rising.

Good news for Florida cow-calf operations. Prices will be above winter levels which were in the low \$80's, but expect to hear that feeding margins may be declining out west.

Commercial steer and heifer dressed slaughter weights continue to average sharply above this time last year, but are declining seasonally.

The relatively mild and dry 2001/02 winter contributed to good feedlot weight gains. The mild weather marginally depressed beef cow slaughter when compared to last year's weather induced levels, still slaughter remains above the 2000 level.

Concerns over poor winter grazing conditions and tight hay stocks resulted in relatively large beef cow slaughter through February. Continued mild weather in March and some improvement in moisture conditions contributed to reduced slaughter levels.

Beef cow slaughter will remain somewhat large until additional rains replenish subsoil moisture levels which will ensure a good spring grazing season.

Dairy cow slaughter remains relatively low, but with an increasing consequence. The Associated

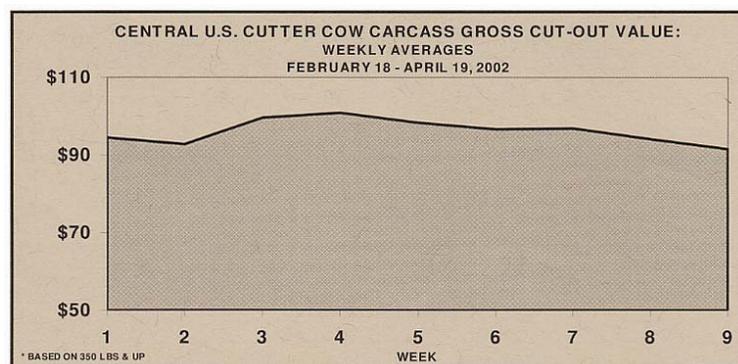
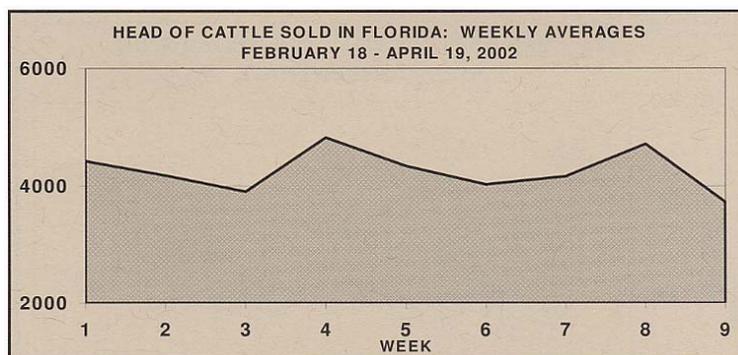
Press is reporting that McDonald's has joined Burger King, Wendy's, and other fast-food chains that are purchasing beef imported from Australia.

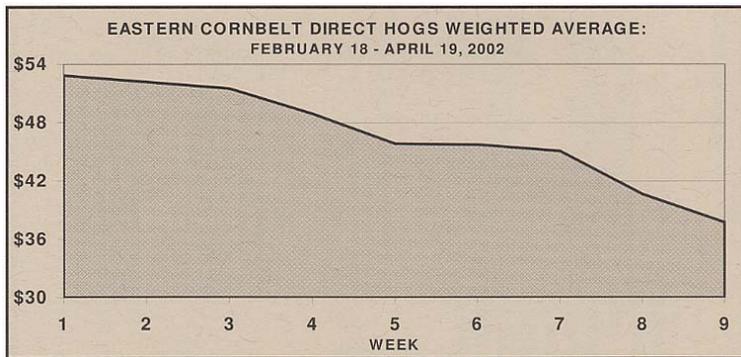
The reason cited by a McDonald's spokesman is a shortage of U.S. beef that is lean enough and is the right price range for their burgers. For now, McDonald's is test marketing the imported beef in about 400 of its 13,000 U.S. restaurants.

Australian beef is grass fed and five to 20 cents per pound cheaper than U.S. beef. McDonald's is the biggest single buyer of both U.S. and Australian beef, which the chain uses extensively outside the U.S.

Nationwide, beef imports were reported up four percent in 2001 to a record 3.16 billion pounds. Imports from Australia increased by over 12 percent, but were limited from further increases by the tariff rate quota. The quota imposes a much higher tariff on imports over the quota.

LIVESTOCK TRENDS





SOURCE: The Florida Agri-Journal
Release – May 3, 2002
Researched by Les Harrison
Development Rep. I
Division of Marketing

being emaciated cows, 5 being cows in moderate condition with the 12th and 13th ribs showing when cows move or have been shrunk, and 9 being very fat cows with no bone structure seen or felt and tail head berried in fat. This scoring system, with photos, is available from UF/IFAS publication SP 144, Effect of Body Condition on Productivity in Beef Cattle, authored by Bill Kunkle, Bob Sand, and Owen Rae. The publication is found on the Range Cattle REC or EDIS web site at:

http://edis.ifas.ufl.edu/scripts/htmlgen.exe?DOCUMENT_AN004.

The nice part about body condition scoring is that it gives a producer an immediate appraisal of a single animal or an entire herd. Cows can be scored in the cow pen or in the pasture from the pick-up truck.

The important relationship to body condition score is reproductive performance. Field studies in Florida and other states show a positive link between pregnancy rate and body condition scores taken at either pregnancy testing, calving, or during the breeding season. The publication reference above by Kunkle and others (SP 144) showed pregnancy percentages of 13, 46, 66, and 94 for brood cows with condition scores of 2, 3, 4, and 5, respectively (8 field trials).

The ideal body condition score is 5 or higher for brood cows at calving. A body condition score of 6 or higher would be a better target for first calf heifers.

Above, we discussed specific body condition scores of cows in a herd and their subsequent pregnancy rate. The importance of body condition scoring is not only to predict what will happen, but to determine what actions need to be taken to have a better reproductive performance. If cows are thin at weaning or at calving a good supplementation program and better pasture would have a positive effect on their conception rate during the following breeding season. Cows could also be divided according to condition score with thin cows offered better pasture and/or more supplement.

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Body Condition Scoring the Cow Herd



The body condition of a cow or heifer is very important to their productivity. Body condition is simply a measure of a cow's degree of fatness which is very important for maintaining reproductive function and milk production for the calf. Cattlemen have long recognized the importance of body condition subjectively using terms like good, moderate, or poor condition to make management decisions such as forage and supplement needs, and to predict future performance.

To make body condition more objective, scientist began to develop scoring systems to place numeric values on the body condition of cows and heifers. One system used values of 1 to 5 with 1 being very thin, 3 being average, and 5 being very fat.

The scoring system most used by scientist and cattlemen today is one with scores of 1 to 9, with 1

Body condition scoring is one of the simplest but most useful management tools available to cattlemen. Make it work for you in an efficient cow/calf production program.

SOURCE: Findlay Pate
Range Cattle REC; Ona, Florida
Published in "The Peace River
Farmer and Rancher" –
May 2002

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New Product Helps Synchronize Cattle Breeding

A valuable tool has been added to the reproductive toolboxes of beef cattle and dairy producers based, in part, on testing done in the University of Illinois Department of Animal Sciences. The product, Controlled Internal Releasing Device, known as CIDR, helps advance the first pubertal estrus in beef heifers, advances the first postpartum estrus in suckled beef cows, and synchronizes estrus in replacement beef and dairy heifers and suckled cows.

"This is the first new procedure in cattle reproduction approved in 20 years," said Darrel J. Kesler, U of I professor of reproductive physiology who led pivotal studies on the product in 1997. "This procedure uses progesterone and progesterone-based procedures that have been demonstrated to be extremely valuable for the synchronization of estrus."

The CIDR is a "T" shaped device -- referred to as an insert by the Food and Drug Administration, which recently approved its use. The wings of the device collapse to form a rod that can be inserted into the animal's vagina with a releasing device. It is left in place for seven days. An injection of PGF 2a

is administered on day six and the insert is removed on day seven.

"In layman's terms, progesterone helps to regulate estrus, making cows ready for breeding at more predictable times," said Kesler.

Kesler said tests indicated that about 61 percent of the treated beef heifers conceived to artificial insemination within the first three days of the breeding season and results for beef cows and dairy heifers were similar. The progesterone in the device is a natural compound and is not absorbed by any animal tissue sold for human consumption, eliminating any residue concerns.

Originally developed in New Zealand, the product should go on the market within a month in the United States, marketed by Pharmacia Animal Health, likely through artificial insemination dealers.

SOURCE: FASS Track
University of Illinois via Ag
Online
Release – May 13, 2002

*Some of the Research to get FDA approval,
was done at the University of Florida, by Dr. Joel
Yelich and colleagues.*

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Public Citizen Blasts Irradiation Provision In Farm Bill; Expert Blasts Public Citizen

Just about every news release sent to the Meatingplace.com regarding the recently passed Farm Bill was positive except for one. This negative news release came from Public Citizen and targets the Farm Bill's irradiation provision.

A concerned reader thought it should be reported on to provide a counterpoint to PC's charges. So the Meatingplace.com contacted an expert source on irradiation technology, who wished to remain anonymous, on statements from PC's president, Joan Claybrook.

Here are her statements and the insider's responses to her charges.

Politics of irradiation?

"Any time a huge piece of legislation is being chewed over by Congress, there's a good chance that big business interests are hovering at the table like pigs at a trough," Claybrook said. "The Farm Bill that lawmakers approved [May 1] is just such a bill, and agribusiness lobbyists were at the trough."

She added that one disturbing provision, in particular, "bodes very badly for our food supply and for anyone who buys food at a supermarket. That provision guts current rules that prevent irradiated food from being labeled euphemistically as 'pasteurized.'"

Before issuing his response on this charge, the insider set the groundwork.

"The intention of the Farm Bill was to facilitate the use of food safety technologies that provide consumers with food safety and choices," he said. "The Farm Bill now formally recognizes that there are modern-day innovations -- several alternative safe treatments, processes and technologies -- that achieve the same standard of food safety as thermal pasteurization does for helping to eliminate the threat of harmful food-borne bacteria.

"Among those many innovations discovered over the last century are pressure treatments, pulse electric power, ozone, acid washes and irradiation," he added. "All of those, either working together or independently, provide significant protection against harmful food-borne bacteria."

The insider pointed out to the Meatingplace.com that these innovations all can fill a food-safety gap.

"For example, you can't eliminate E-coli in fresh ground beef except by irradiation or by cooking it," he said.

PC still blasting the term *pasteurization*

Claybrook said that the Farm Bill's irradiation language gives the industry several bites at the apple to label irradiated food as being pasteurized. One provision permits the industry to request permission from the Secretary of Health and Human Services to use the term "pasteurization" on the labels of irradiated foods.

"If the Secretary does not respond within 120 days, the irradiator can label the product as being pasteurized," she said. "There is no public notice requirement, nor is any consumer input requested or required before a decision on the industry request.

"A second provision directs the secretary of HHS to revisit the issue of food irradiation labeling through the standard regulatory process," she added. "However, during that process, any irradiation firm can petition the secretary to use alternative labeling terminology. The secretary has 180 days to respond. Again, there is no provision for a public notice requirement nor an opportunity for the public to comment.

"We believe the language was inserted largely at the behest of Sen. Tom Harkin (D-Iowa), who has accepted \$175,591 in agribusiness money in the past two election cycles, and of Rep. Billy Tauzin (R-La.), who has accepted \$86,225 in agribusiness money in the same period," she continued. "We are dismayed and disgusted that they chose to do so much for their contributors at the expense of consumers."

Other side of the story

Under the Farm Bill, some alternative processes may now be recognized as providing pasteurization, the insider countered.

"In other words, if a 5-log reduction in eggs is labeled as pasteurized using a thermal-heat process, then a 5 log reduction using irradiation or some other process is also pasteurization," the insider

said. "It's an equivalency. The intent of the law is to provide a common vocabulary, a common standard definition based on scientific equivalency. It stops this focus on the process and goes to the purpose."

The insider further pointed out that since 1997, the Congress has asked FDA to devise irradiation labeling that would not be perceived to be a warning or to give rise to inappropriate consumer anxiety.

"FDA has never done this," he added. "The [Farm Bill] law now requires the FDA to act in a timely manner.

"As I understand it, the law now forbids the secretary of USDA or FDA from prohibiting any technology that has been approved and proven to be safe," the insider said. "In other words, you can't say it's safe and approved and then turn around and prohibit its use."

Food producers who use irradiation want to label their products with the word "pasteurize" because it conjures up images of wholesome milk, Public Citizen's Claybrook charges.

"This is designed to confuse and mislead people; they don't want consumers to know the truth, which is that irradiated food may deplete nutrients and may create harmful chemicals," she added.

"That's not true," the insider countered. "The idea is to tell the consumer the *purpose*, that you have removed the pathogens, not to associate it with milk."

The insider added that Public Citizen's spin on the Farm Bill passage is purely "anti-consumer."

"The Farm Bill covers all technologies, not just irradiation," he said. "It improves the potential of food safety. It gives consumers a choice. Public Citizen's whole cause is designed to mislead and confuse people.

"Any time you apply energy to food, you have an impact on nutrients and the FDA and USDA have repeatedly said this impact does not affect

diet," he added. "You can use [Public Citizen's] argument against freezing, cooking, microwaving -- all of those technologies impact nutrients because you're applying energy to them.

"As far as creating harmful chemicals, Public Citizen is the *only* organization that believes that," the insider said. "The FDA, USDA and other reputable science and medical organizations around the world don't believe that. And there is no scientific basis for even saying what Public Citizen said."

The insider feels that Congress finally has decided that enough was enough with propaganda from activists and special interest groups.

"They have taken away from Public Citizen the ability to mislead consumers using the power of fear," he said. "It stops this business of Public Citizen trying to frighten consumers away with vocabulary that misleads the consumers. And that's the whole reason Public Citizen is whining. They will no longer be able to frighten consumers away from irradiated product."

The insider had one parting shot at Public Citizen.

"And don't forget they opposed Elsa Murano from becoming the Agriculture Under Secretary for Food Safety. Everybody else thought she was great because she was a person of science, because she studied irradiation," he said. "The last thing Public Citizen wanted was somebody in office who understands food irradiation."

Although this battle is won, the war between Public Citizen and food irradiation is likely to continue. But this time around, irradiation proponents are pleased because finally the law is catching up to the science.

SOURCE: Bryan Salvage
<http://www.meetingplace.com>
Release – May 8, 2002

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CSPI: Mycoprotein In Poultry, Meat Analogs Is Causing People To Get Sick

Most readers of the Meatingplace.com agree that new products are the life's blood of the food industry. But many parties -- ranging from the government to activist groups -- are scrutinizing new products entering the marketplace today more than ever before.

Most recently, the Center for Science in the Public Interest has informed the Food and Drug Administration that a small percentage of consumers may get sick and vomit after eating new chicken and meat analogs they say are made from a fungus. Last January, the FDA allowed the manufacturer to sell the ingredient called mycoprotein as a Generally Recognized As Safe (GRAS) substance, and the agency is on the brink of formally approving it as a food additive, states a CSPI news release.

FDA failed to take into account one of the only scientific studies of the organism that makes up the "mycoprotein" ingredient in Quorn-brand foods, CSPI charged. That study linked the consumption of Quorn foods to vomiting and diarrhea, they added.

CSPI said it provided the FDA with new reports from several consumers who got sick after eating Quorn products. CSPI received those reports via its Website, <http://QuornComplaints.com>.

But an FDA spokesman told the Meatingplace.com: "We reviewed information submitted [on mycoprotein] in great detail, and we did not see any safety concerns."

More on the complaints

Here's more details on the reported illnesses, according to CSPI. One 22-year-old Massachusetts man reportedly told CSPI he vomited several hours after eating Quorn Tenders, and eight days later after eating Quorn Nuggets. Another 35-year-old Maryland woman reported severe vomiting and

diarrhea several hours after eating Quorn Chicken-style Tenders. Others reported similar symptoms, CSPI claimed.

Quorn is produced by Marlow Foods, a division of pharmaceutical company AstraZeneca. Quorn has been commercially available in Britain and in other European countries since 1994.

Quorn's labels identify mycoprotein as "mushroom in origin" and as an "unassuming member of the mushroom family; however CSPI said that these claims are highly deceptive and that should not be permitted.

CSPI added that three mycologists (fungus experts) at Pennsylvania State University and the State University of New York at Cortland told the FDA earlier this year that while the Quorn fungus and common mushrooms are both fungi, calling the Quorn fungus a mushroom is like "calling a rat a chicken because both are animals." Those scientists also wrote that *F. Venenatum* is a fungus more accurately described as a mold. Another mycologist from Cornell University said that mushrooms are as distantly related to Quorn's fungus as humans are to jellyfish.

To add more fuel to the fire, CSPI has called on the managers of more than 400 grocery stores that sell Quorn products, asking them to remove the products from the shelves pending further testing and changes in the labeling.

The FDA spokesman said that the agency had received CSPI's most recent letter stating its complaints and added: "We will review it and give it careful consideration."

SOURCE: Bryan Salvage
<http://meatingplace.com>
Release – May 7, 2002

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