

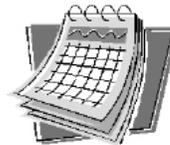


Animal Science Newsletter

October 2003

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Dates to Remember

October

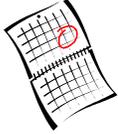
- 2** 4-H & FFA Cattle Feeding Workshop - Alachua County Extension, Gainesville, FL
- 2-4** Southern Region 4-H Volunteer Forum - Eatonton, GA
- 3** FCA Quality Replacement Heifer Sale - Ocala Livestock Market - Ocala, FL
- 3** The Farm / Brangus Bonanza Sale - Okeechobee, FL
- 6** Mo Brangus & Oak Knoll Ranch Brangus Bull Sale - Arcadia, FL
- 7** 3rd Annual Florida Cow/Calf Seminar - Gainesville, FL
- 10-11** Cow Creek Ranch Bull Sale - Aliceville, AL
- 18** Ankony at Pine Ridge Bull Sale - Ocala Livestock Market - Ocala, FL
- 18** 4-H Foundation Sport Clay Shoot Fundraiser - Orlando, FL
- 18** St. Johns County 45th Annual Cracker Day - St. Augustine, FL
- 21-23** 2nd Annual Artificial Insemination School - Wauchula, FL
- 24** Graham Angus Bull Sale - Okeechobee, FL
- 25** Debtor Hereford Bull Sale - Horton, AL
- 31** Ankony Angus Sale - Omega, FL
- 31** Lemmon Angus Sale - Okeechobee, FL

November

- 1** Osceola County Sporting Clay Shoot - TM Ranch, Orlando, FL
- 1** Hines Brothers/Express Ranches Bull Sale - High Springs, FL
- 1** Black & White Bull Sale - Ocala Livestock Market, Ocala, FL
- 1** Twin Valley Farms Bull Sale - Prattville, AL
- 7** Callaway Farms Black Angus Sale - Hardee Farms, Chiefland, FL
- 7** Hardee Farms Black Bull Sale - Chiefland, FL
- 7** Rogers Charolais - Okeechobee, FL
- 8** Walden Farms Charolais Annual Production Sale - Brantley, AL
- 14** Leachman Bull Sale - Okeechobee, FL
- 21** Hardee County Cattlemen's Association 4th Annual All Breed Bull Sale - Wauchula, FL

Prepared by Extension Specialists in Animal Sciences

- ❖ F.G. Hembry, Professor, Department Chairman
- ❖ E.L. Johnson, Associate Professor, Extension Equine Specialist
- ❖ T.T. Marshall, Professor, Beef Cattle Management
- ❖ R.O. Myer, Professor, Animal Nutritionist, Marianna
- ❖ R.S. Sand, Associate Professor, Extension Livestock Specialist 
- ❖ W. Taylor, Coordinator Youth Education/Training
- ❖ S.H. TenBroeck, Associate Professor, Extension Youth Specialist
- ❖ T.A. Thrift, Assistant Professor, Beef Cattle Nutrition



Beef Management Calendar

October

- ☑ Plant cool season legumes.
- ☑ Plant small grain pastures.
- ☑ Check mineral feeder.
- ☑ Check for external parasites, especially lice, and treat if needed.
- ☑ Check for spittlebugs and grassloopers and treat, if needed.
- ☑ Watch condition of cow herd; maintain adequate nutrition.
- ☑ Isolate any additions to the herd for 30 to 60 days and observe for signs of disease; retest for brucellosis and leptospirosis.
- ☑ Be sure you have adequate handling facilities, and they are in good working order.
- ☑ If you are raising bulls for the commercial market, October thru December is the main bull-buying season for cattlemen in south Florida and now is the time to have your promotion program fully activated.

November

- ☑ Have soils tested.
- ☑ Observe cows daily to detect calving difficulty.
- ☑ Use mineral with high level of magnesium if grass tetany has been a problem in the past.
- ☑ Check for external parasites and treat if needed.
- ☑ Maintain adequate nutrient level for cow herd.
- ☑ Calve in well-drained pastures.
- ☑ Survey pastures for poisonous plants.
- ☑ Start summarizing your annual records, both production and financial-then you will have time to make adjustments for tax purposes.
- ☑ Re-evaluate winter feeding program and feed supplies.
- ☑ Get breeding soundness exams on bull battery so you have time to find replacements if some fail.
- ☑ Implement bull conditioning program.
- ☑ Review plans and arrangements for the upcoming breeding season.
- ☑ Check progress of developing replacement heifers - are they going to meet your target weight by the start of the breeding season?

December

- ☑ Begin grazing small grain pastures (if ready).
- ☑ Check mineral feeder.
- ☑ Check for external parasites and treat if needed.
- ☑ Deworm cows and heifers prior to winter feeding season.
- ☑ Observe regularly for calving difficulties.
- ☑ Rotate calving pastures to prevent diseases.
- ☑ Watch for scours in calves.
- ☑ Investigate health of bulls before you buy.
- ☑ Have dead animals posted by a veterinarian or diagnostic laboratory.
- ☑ Complete review of management plan and update for next year. Check replacement heifers to be sure they will be ready to breed 3 - 4 weeks prior to the main cow herd.

Livestock Summary



On August 8, the USDA announced conditions for resuming imports of certain ruminant-derived products from Canada. Under the terms, no Canadian cattle are allowed into the United States until a protocol is worked out for their movement. However, beef from these animals and any others may be imported provided that it is certified that the slaughtered animal is under 30 months of age and has been deboned under acceptable procedures.

On the home front, rapidly deteriorating grazing conditions have spread from the western States to most of the Great Plains. Currently 12.2 million head, or approximately 40 percent of the 30.6 million total domestic beef cows, are located within an area experiencing a drought.

Accumulating grass for fall and winter grazing and rebuilding hay stocks will be a major concern as the industry moves into the calf weaning and cow culling season. Total hay production is expected to rise sharply this year. Alfalfa production and other hay is forecast to rise 6 percent as yields are expected to reach record levels, although excessive moisture conditions in many areas could result in poor harvesting conditions and hay quality.

Beef and especially dairy cow slaughter has remained large this year, and beef cow slaughter has increased due to the worsening drought situation. Cattle inventories continue to decline in 2003 as drought and increased market uncertainties make producers reluctant to begin expansion.

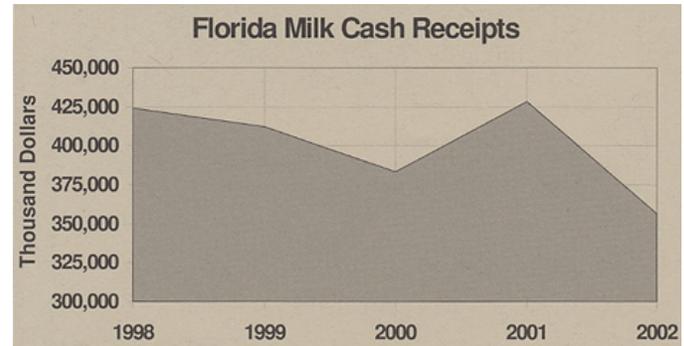
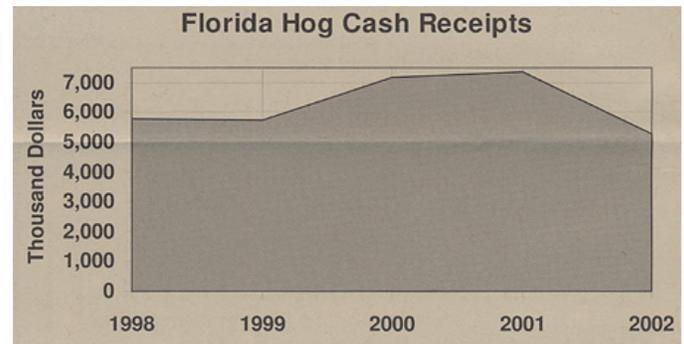
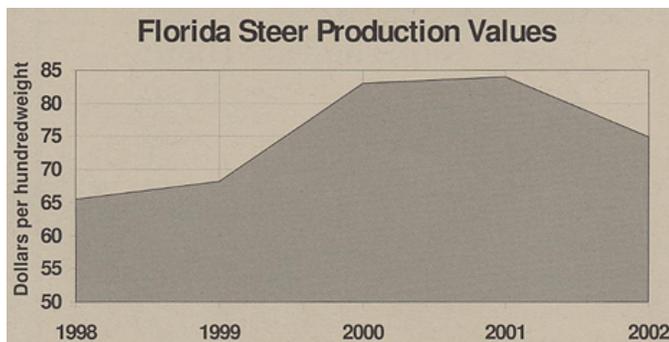
This year's calf crop is expected to be 38 million head, down less than 1 percent from last year, and the smallest calf crop since 1951. Continued large cow slaughter and low heifer retention will insure declining beginning cattle inventories in 2004 and 2005.

Fed cattle continue to be marketed ahead of schedule and at lighter weights to fill the beef void due to the Canadian ban and because of the discounted futures market. Fed cattle marketings and slaughter rates are expected to remain strong through September, but the rate will slow as Canadian beef comes into the market again and U.S. cattle pick up more days on feed to compete in the higher quality domestic and export beef market.

Retail Choice beef prices have been on a record setting pace since February due to poor winter weather conditions and sharply lower slaughter weights. Retail prices hit record marks averaging \$3.65 a pound in July. Similarly fed cattle prices have been on a record setting pace for the past 2 months and are likely to approach the old August 1990 record of \$77.18 per cwt.

The last quarter of 2003 looks to be interesting for Florida's cow calf operators. U.S. slaughter weights are predicted to rise, but it will likely be winter before the industries come into balance and more normal feeding periods.

Livestock Trends



SOURCE: The Florida Agri-Journal
 Researched by Tony Young
 Marketing Specialist I
 Division of Marketing
 Release – September 5, 2003

-RSS-

New Cattle-Tracking System Garners Farm-to-Fork Support



A caucus of brand-name beef packers, producers and fast-feeders gathered in Washington, D.C., to endorse a new database designed to trace the source of a food borne illness anywhere in the food chain.

At a press conference at the Dirksen Senate office building, representatives from Swift & Co., Burger King and ConAgra Cattle Feeding Co. gave their backing to the new database, created by Wichita, Kansas-based VeriPrime Inc.

The system reportedly tracks cattle herds from birth to slaughter with coded tags. Although the beef industry is its first target market, the company said it plans to eventually cover hogs, poultry and seafood.

The company said the system allows anyone in the supply chain to track the source of tainted beef back to the original lot and herd in the event of a recall, or as a countermeasure against diseases, such as foot-and-mouth. Other purported benefits include verification of safeguards against cattle feed contamination and monitoring of animal welfare policies set by supermarkets and fast-food chains, such as Burger King.

Restaurants and supermarkets will be charged 5 cents for every pound of meat to cover the cost of tagging animals and plugging information about them into the database, said a VeriPrime spokesperson.

Although the Agriculture Department is not endorsing this system per se, it does support a unified industry tracking system. A voluntary plan for tagging animals is expected to be in place by July 2004.

Swift & Co. spokesman Jim Herlihy says he expects the new system to be widely adopted. "We envision that VeriPrime will be like a 'Good Housekeeping' seal to show that the process has been reviewed from start to finish," Herlihy said.

Swift itself has invested more than \$30 million in food safety interventions and testing following the August 2002 recall of 18.6 million pounds of E. coli-tainted ground beef from its Greeley, Colo., plant.



Early Weaning Had a Greater Effect on Carcass Quality Grade than Did Creep Feeding

Previous research has shown that either early weaning or a high-energy creep diet in conjunction with normal weaning can enhance carcass quality grade. In this University of Illinois study, Angus X Simmental steer calves (n=168) were assigned to four treatments: 1) Early Wean/High Concentrate (EW); 2) Normal Wean/Creep (C); 3) Normal Wean/Fiber Creep (FC); and 4) Normal Wean/No Creep (NC) to determine the effects of weaning age, creep feeding and type of creep on performance and carcass traits. Steers were weaned at 63 or 189 days of age. EW were fed to gain the same as the two creep-fed (CR-F) treatments during the growing period. Overall (including growing, adaptation, and finishing periods), NC steers had significantly lower ADG (2.82 lb/d) and were older at harvest (407 d) than other treatments (3.09 lb/d and 396 d). There were no differences in ADG or age at harvest between EW and CR-F steers or between C and FC steers. EW steers had a significantly higher marbling score (663), a higher percent that graded Mid-Choice or higher (72.5%), and a higher percent of Prime (12.5%) than CR-F steers (598, 38.8% and 2.5%, respectively). There was no difference in yield grade. The authors concluded that feeding early weaned steers a high concentrate diet improved quality grade compared to creep feeding normally weaned calves, and that type of creep did not affect carcass quality or overall performance (Shike et al., 2003. Midwestern Section ASAS, Abstract No. 80).

SOURCE: Bill McDowell
<http://www.meatingplace.com>
Release – September 18, 2003

-RSS-

SOURCE: Beef Cattle Research Update
Harlan Ritchie, Steven Rust, and
Daniel Buskirk
Beef Cattle Specialists
Michigan State University
Release – Summer 2003

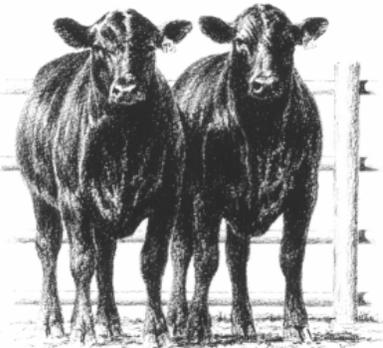
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Wintering Beef Cows on Limit-Fed High Energy Diets

University of Illinois animal scientist Dan Faulkner presented a compelling case for wintering beef cows in northern environments on alternative feeding strategies such as program feeding (feeding a limited amount of a high energy feed to achieve a described level of performance). Because grain and coproduct feedstuffs are often a cheaper source of energy than hay, there are opportunities to winter cows more economically with savings of over \$1/cow/day compared to traditional hay diets. In Illinois studies, cattle have consistently performed better than NRC predictions, which may be due to several factors. They have observed increased digestibility with program-fed diets. Visceral organ weight is also reduced with program feeding, which could reduce maintenance requirements because these organs are so highly metabolically active. Program feeding can also reduce manure production by over 75% compared to hay diets. One problem Illinois workers have observed with limit feeding occurs when diets are very low in roughage. On such diets, the cows will chew fences. They found that feeding 10-15% roughage in the diet alleviated such behavior (Faulkner, 2003. Midwestern Section ASAS, Abstract No. 39).

SOURCE: Beef Cattle Research Update
Harlan Ritchie, Steven Rust, and
Daniel Buskirk
Beef Cattle Specialists
Michigan State University
Release – Summer 2003

-RSS-



Measuring Dust on Feedlots

If you need to borrow a kitchen blender, make sure you don't use the one belonging to Agricultural Research Service's Daniel N. Miller. That's because he uses his slightly modified blender to pulverize soil from cattle feedlots so he can measure the dust produced.

Miller is a microbiologist at ARS' Roman L. Hruska U.S. Meat Animal Research Center in Clay Center, Neb. He and ARS agricultural engineer Bryan L. Woodbury are trying to determine the amount of dust produced in various sections of feedlots and why significant differences exist.

Dust can be inhaled into the lungs of both humans and animals and thus cause respiratory problems. Dust is also a carrier for odors, as well as ammonia and microorganisms.

The soil is first dried to remove excess moisture and then screened through a sieve. After the scientists put the soil sample into the blender, they turn it on for a series of blends totaling one minute. They collect the dust on a round filter that looks similar to fiberglass insulation.

They've verified that areas with a lot of moisture—which usually comes from rain, urine or water a farmer adds—have less dust. They've also gained new insights into the role of organic matter in dust production. Areas with greater amounts of dried manure actually needed more moisture to control dust than low-manure areas. Furthermore, they found that even small increases in moisture transformed dust-producing soil into soil that didn't produce dust.

In the future, the researchers want to look at other characteristics of dust, such as odor compounds bound to dust particles. They also want to look at other types of dust control besides adding sprinklers to the feedlot.

This research is reported in the September/October issue of the Journal of Environmental Quality.

6 October 2003

ARS is the U.S. Department of Agriculture's chief scientific research agency.

SOURCE: David Elstein
USDA/ARS
Release – September 15, 2003

-RSS-



Sunbelt Agricultural Exposition

Moultrie, Georgia

As agriculture enters a new era-technologically and economically-farmers are finding the Sunbelt Agricultural Exposition a vital part of their planning team.

"We are proud to showcase one of the largest venues of agriculture technology in the world," Chip Blalock, Sunbelt Expo Executive Director. "Every year, farmers are able to take information and new technology garnered from the show and directly apply it to their operation."

Over 1,100 exhibitors and thousands of visitors are again expected to attend the Expo. This year's show will be held October 14-16 in Moultrie, GA. Established in 1978; the Sunbelt Expo has expanded to become the largest farm show in the world with on-site field crops and demonstrations.

New to the Sunbelt Expo for 2003 is the eBay/Farmers Hot Line education booth located in Building 4. Each day of the Expo visitors interested in learning how they can use the Internet to actually buy and sell agricultural products and services can experience the process "hands on". Team members from the eBay Business and Industry Division and www.AgDealMall.com will be available to walk visitors through the process. Says Blalock, "The Sunbelt Expo is the first agricultural event attended by eBay and AgDealMall as they announce their intent to offer farmers and ranchers an online superstore dedicated to agriculture. We think this shows how important our commitment is to offering

new and exciting technology to our visiting farmers."

In the fields this year, the three-day event will showcase "Precision Ag Technology" in addition to the traditional demonstrations in cotton, peanuts, hay, corn and soybeans. Trimble Navigation's AgGPS Autopilot guidance system, which actually steers the tractor, has been utilized from the planting to harvesting process at Sunbelt this year. The planting technique was shown at Field Day in July and the harvesting technique will be the focus in October. According to Darrell Williams, Expo Farm Manager, "this system takes the guesswork out of field layout, planting, cultivation, and chemical application." Also showing precision Ag technology will be BeeLine, AutoFarm, John Deere & AGCO's Challenger Division.

"Our 600-acre working farm really makes us unique," Blalock said, "Visitors see the latest harvesting and tillage techniques in a true farm setting."

Animal care is another strong component of the Sunbelt Expo, and the show's diversity in this area grows each year. Cattlemen attain valuable management knowledge at the Beef Cattle Management Seminars. The Southern DairyBusiness Center sponsored by DairyBusiness Communications will again offer a variety of educational seminars on the dairy industry. Goat and alpaca demonstrations are also offered as well as the entertaining American Grand Finals Stock Dog Trials. The horse demonstrations sponsored by Southern States will include rein cow demos and barrel racing. Visitors will also see demonstrations from Tennessee Walking Horses and Andalusian horses.

Tractor and other farm implements remain the focus of the Expo's equipment area. Visitors have the opportunity to actually "try out" different models at the tractor and truck driving ranges in the fields. GMC will again sponsor a professional test-driving track so visitors can give the newest models a spin. Also, do not miss the display of All Terrain Vehicles (ATVs)--which has exploded in growth in the past few years.

Other sections at the show include a Small Farm Center, Forestry, the Progressive Farmer Automotive area, Lawn and Gardening, Hunting and Fishing, and Family Living. Everyone will also enjoy the daily parade of Antique Tractors.

The great state of Mississippi will be recognized as the Spotlight State for 2003 and will offer visitors a wide variety of educational as well as entertaining exhibits showcasing Mississippi's agricultural industry.

Contact:

Gina McDonald
Marketing Director
290-G Harper Blvd.,
Moultrie, GA 31788
(229) 985-1968
info@sunbeltexpo.com

Additional Information:

Show Dates: October 14-16, 2003
Show Hours: 8:30am - 5:00pm - Tuesday and
Wednesday
8:30am - 4:00pm on Thursday
Admission: \$5 per person per day; children
under 6 free with parent

SOURCE: <http://www.sunbeltexpo.com>
Release – September 15, 2003

-TTM-

Feedlots Targeted as Next Step in E. coli Intervention

The next front the beef industry must tackle in combating E. coli O157:H7 is the pre-harvest period -- especially on feedlots -- researchers, feedlot operators and representatives from the National Cattlemen's Beef Association told a group of reporters during an NCBA-sponsored visit to the Imperial Beef feedlot in Imperial, NE. Research into feed additives and vaccines are showing significant results in reducing E. coli pathogens on the hide and in the intestines of cattle while management processes have no apparent correlation

to pathogen reduction, Keith Belk, associate professor of meat science at Colorado State University, told the group.

"The best evidence suggests that if we want to continue to reduce the risk to consumers, we have to include the pre-harvest sector," Belk said.

Belk's 2003 study showed reductions in the amount of E. coli on the hide and in fecal matter of cows fed Bovamine, with treated cows showing a difference of 24.9 percent from the control group.

Alan Janzen, a partner at Imperial Beef, said anecdotal testing at Imperial suggested a 40-50 percent reduction in E. coli in feces.

The cost of using Bovamine in feed was 1.5 cents per head per day, Janzen said, but added that the product also increased daily gain and feed conversion in cattle.

"I feel very strongly that this is a cost-neutral product," he said.

Belk's research also tested two other intervention methods -- Neomycin and an E. coli vaccine -- as well as a combination of treatments. Neomycin performed the best in the study, showing a difference of 48.4 percent from the control group - almost twice that of Bovamine. Neomycin is currently used as a treatment for bacterial enteritis, but is not labeled for use as a pre-emptive treatment for E. coli in feed cattle, which could be a barrier to adoption.

"We didn't see it as a long term solution," Belk said. "We wanted to find something we could use during the hot season."

Belk said he expects E. coli vaccines to appear on the market in about a year.

While studies have shown management practices like raking pens or cleaning water troughs do not have a direct correlation to E. coli reductions, Jack Lawless, general manager at Imperial Beef, said proper pen maintenance and cleaning techniques combined with E. coli intervention in the feed help contribute to

controlling pathogens. Imperial designed their pens on a 2.5 to 4 percent slope to ensure proper drainage. "We want pens as clean and dry as possible to help keep the hides clean," Lawless said.

For the past 10 years the industry has devoted its E. coli prevention focus to post-harvest kill and processing operations, "because the squeeze point was packers," said Bo Reagan, vice president of research and knowledge management at NCBA. He said that the top four or five packers harvest 90 percent of feed cattle, making it the most cost-effective target for E. coli intervention techniques. But in light of recent recalls for E. coli contamination, such as Swift's July 2002 recall of 18.6 million pounds of meat, the beef industry must continue to look to other areas to reduce the risk of contamination, Reagan said.

"The existing post-harvest processes, we know they work," said Reagan. "We need to change the focus from post-harvest to pre-harvest."

Feedlots are seen as the next target of pathogen intervention because they are the second most consolidated point next to packers, with about 1,800 feedlots handling 85 percent of beef produced, Reagan said. Belk emphasized that pre-harvest intervention was just another tool available to help combat E. coli contamination.

"There can't be a silver bullet because risk can never be zero," Belk said. "This is not something anyone can do overnight."

SOURCE: Eric Hanson
<http://www.meatingplace.com>
Release – September 26, 2003

-RSS-

Cargill Analyst Expects Beef's Bull Run to Continue

The recent premium in live cattle and beef prices is likely to continue for some time, a senior Cargill Foods commodity analyst said Friday,

although near-term cattle and beef prices could dip as much as 3% before the market settles into a trading plateau. Ken Bull, Cargill's risk management chief who oversees all of the Minneapolis-based company's cattle procurement, said it will be months before the gradual easing of the U.S. ban on live cattle and some beef products from Canada will bring pricing pressure back to the market. Speaking at a proprietary food safety seminar for Cargill customers, Bull characterized the May 20 discovery of a single case of mad cow disease in Alberta as part of a "perfect storm" that has driven both cattle and beef prices to recent record highs. Cargill's estimated weekly kills for the summer months was 720,000 head. Currently, the company is averaging a weekly slaughter of 750,000 head—a trend echoed by other major processors, which has resulted in younger cattle being brought to market and, consequently, yielding beef of increasingly falling grades, Bull said.

"I think, though, that we will move into a time of some lower markets, but we don't expect a major dip," Bull said. "We are looking for the market to move backwards, maybe 2-to-3 percent, and then trade sideways for a while."

Bull expects continued lower beef supply next year, perhaps by as much as 3 percent, and expects pork supplies to tighten by about the same margin. Bull said he expects the chicken market to remain flat.

"As for beef, prices will remain well supported going through next year," Bull said.

While higher prices sometimes cause decreased commodity demand, consumers have not backed away from beef. Bull attributed consumers continued appetite for beef partly on the impact of the Atkins Diet, which some economists believe has pumped as much as an additional \$1 billion into the industry last year.

SOURCE: Daniel Yovich
<http://www.meatingplace.com>
Release – September 29, 2003

-RSS-