



# Animal Science Newsletter

January 2003

## In This Issue...

Beef Management Calendar.....	2
2002 Bull Test Completed .....	2
Livestock Summary .....	3
UF Extension to Manage Agricultural Mediation .....	4
County-of-Origin Labeling Law Proceeding .....	4
New Website for US Government Science Information .....	5
Farm Bureau Says 'Yes' to Plan to Streamline Forest, Rangeland Management .....	5
Ardisia crenata .....	6
Tender Beef Gene Test a World-First.....	7



## Dates to Remember

### January

3	Hog & Ham Workshop - Palmetto, FL
10	Avenue of the Breeds Bull Sale -Montgomery, AL
11	Sunshine Farms Sale - Clanton, AL
11	Lake City Invitational Brangus Bull Sale -Lake City, FL
14	Ocala Bull Sale - Ocala, FL
14-16	ECS Led Training Course - Gainesville, FL
15-16	Florida Cattlemen's Institute and Allied Trade Show - Kissimmee, FL
20	Hog & Ham Workshop - Gainesville, FL
21	Reproduction in the Beef Herd Workshop - Lake City, FL
21-23	ECS Led Training Course - Palmetto, FL
22-24	AI Management School - Okeechobee, FL
25	FL Bull Test Sale - Marianna, FL
31-Feb 2	American Youth Horse Council Youth Horse Leadership Symposium - St. Louis, MO

## Prepared by Extension Specialists in Animal Sciences

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- ❖ T.A. Thrift, Assistant Professor, Beef Cattle Nutrition

### February

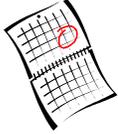
3	All Breed Bull Sale - Lakeland, FL
4-6	ECS Led Training Course - Kissimmee, FL
8	Florida State Fair Horse & Livestock Judging, Tampa both contests - FFA Preliminary, 4-H Practice
11	Florida Ag Hall of Fame Induction
15	Walden's Black & White Sale - Brantley, AL
21	SE Youth Fair / Neal McCoy Concert - Ocala, FL



*Happy  
New  
Year!*



2 January 2002



## Beef Management Calendar

### January

- Apply lime for summer crops.
- Check for lice and treat if necessary.
- Control weeds in cool season pastures.
- Begin grazing winter clover pastures when approximately 6 inches high. Rye should be 12-8 inches high.
- Check mineral feeders.
- Put bulls out for October calving season.
- Make up breeding herd lists if using single sire herds.
- Watch for calf scours.
- Give bulls extra feed and care so they will be in condition for breeding season.
- Make sure cow herd has access to adequate fresh water.
- Buy only performance tested bulls with superior records.
- Get taxes filed.
- Discuss herd health with your veterinarian and outline a program for the year. Review herd health program with your veterinarian regularly.
- Carry a pocket notebook to record heat, breeding abnormalities, discharges, abortions, retained placentas, difficult calvings and other data.
- Observe cow herd for calving difficulties.
- Watch for grass tetany on winter pastures.
- Increase magnesium levels in mineral mixes if grass tetany has been previous problem (if you are not already using a high magnesium mineral).
- Examine bulls for breeding soundness and semen quality prior to the breeding season.
- Vaccinate cows and heifers against vibriosis and leptospirosis prior to the breeding season.

### February

- Top dress winter forages, if needed.
- Check and fill mineral feeders.
- Put bulls out with breeding herd.
- Work calves (identify, implant with growth stimulant, vaccinate, etc.).
- Make sure lactating cows are receiving an adequate level of energy.
- Watch calves for signs of respiratory diseases.
- Cull cows that failed to calve while prices are seasonally up.
- Check for lice and treat if needed.

### March

- Prepare land for summer crops.
- Begin grazing warm season permanent pastures.

- Check and fill mineral feeder.
- Observe bulls for condition and success. Rotate and rest if needed.
- Deworm cows as needed.
- Make sure calves are healthy and making good weight gains.
- Hang forced-use dust bags by April 1st for external parasite control or use insecticide impregnated ear tags.
- Identify, vaccinate, implant, and work late calves.
- Put bulls out March 1st for calving season to start December 9.
- Remove bulls March 22nd to end calving season January 1.

## 2002 Bull Test Completed

On December 11 & 12, 2002, the 71 bulls participating in the Florida Bull Test were weighed and measured to complete the test. The bulls averaged 1,233 lb, with the lightest at 960 and the heaviest at 1,585. For the test (112 days), the group averaged 3.77 lb per day, with the highest at 5.13 and the lowest at 2.58. Weight per day of age averaged 3.00 pounds with a high of 3.77 and the low at 2.33. The average frame score was 6.03, with the tallest being 8.2 and the shortest 4.07. The bulls are ranked by an index made up of average daily gain on test and weight per day of age. The high indexing bull was the #281 Angus from Oak Bowery Farm, Opelika, AL. They also had the second high indexing bull, #280. In third, was the #320 Charolais from Rogers Bar HR, Collins, MS.

Bulls which are indexed 90 or better are eligible for the sale held January 25, 2003, at the unit. In order to be in the sale they must also pass a breeding soundness exam and a structural soundness/disposition screening. Additional information that will be available includes pelvic area, scrotal circumference, and ultra sound evaluation of carcass merit. Current EPD's for all traits will be included in the sale catalog which should be available the first week in January. Call the NFREC-Marianna to request a copy at (850) 482-9904.

Complete information on the bulls including weights, gains, etc., as well as ranking, is available on the bull test web site : <http://fbulltest.ifas.ufl.edu/>.

**SOURCE:** Dr. Bob Sand  
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## Livestock Summary



The USDA is predicting beef production in the October-December 2002 quarter to be about one percent over a year earlier. Prices for fed cattle are projected to average in the upper \$60's per hundredweight as packers compete for declining numbers of cattle.

Fed cattle marketings have been brisk relative to inventory levels in recent months. The October 1, 2002, cattle-on-feed inventory in the seven dominate states was down five percent from the previous year. On November 1, it was 9 percent below the figure for each of the last two years.

Feeder cattle supplies outside feedlots on October 1, 2002, were unchanged from a year earlier. Placements are expected to remain below year-earlier levels as wheat grazing prospects in the High Plains winter wheat areas are the best in several years. Improved weather conditions will result in more light cattle moved to pasture.

The upturn in prices will likely continue next year as steer and heifer slaughter drops each quarter relative to a year earlier. The largest year-to-year declines in slaughter are predicted to occur during the second half of 2003.

Gains in average slaughter weights should slow from this year's record pace if winter feeding conditions are normal. Florida cattlemen in the western panhandle are an exception to this. Exceptionally heavy mid-November rains heavily damaged winter small grain grazing.

Overall, beef production forecast is down five percent in 2003. Normal forage availability and grazing conditions in the spring and summer would encourage producers to retain animals for breeding.

Total red meat and poultry exports are expected to decline three percent in 2002 from a year earlier. The largest contributor to the decline is broiler exports. Exporting problems to Russia and export bans related to localized disease outbreaks are expected to register an eight percent year-over-year export reduction.

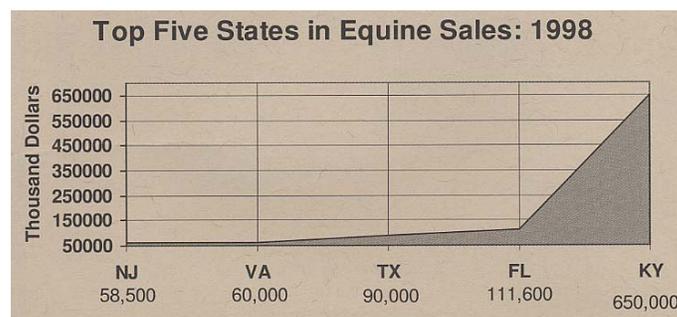
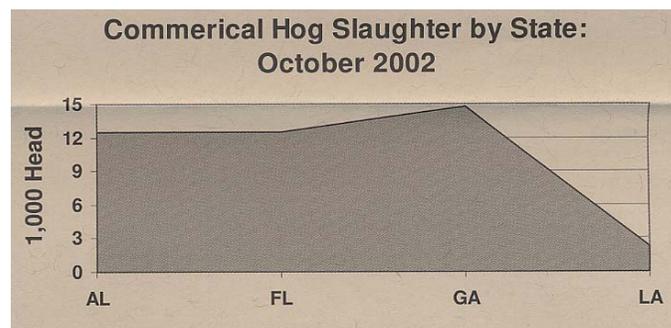
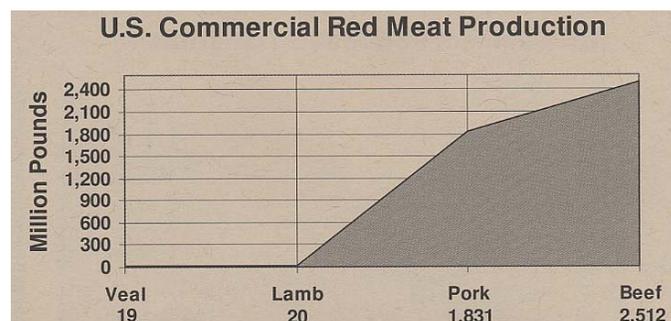
Red meat exports are projected to post a six percent gain in 2002 and a two percent gain in 2003. Likewise, broiler exports are anticipated to register a seven percent gain in 2003.

Brighter price prospects lay on the horizon for Florida's cow-calf producers, but with two big "ifs" – the weather and the economy. Another severe drought like 2002's will almost certainly depress demand for feeder animals, and the prices paid for them.

The strength of overall national and world economy will also play a role in demand and pricing. The prospects of war with Iraq and the current "soft spot" in the economy are dampening demand.

There is reason for optimism, but with caution.

## Livestock Trends



### SOURCE:

The Florida Agri-Journal  
 Researched by Les Harrison  
 Development Rep. I  
 Division of Marketing  
 Release – December 6, 2002

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## UF Extension to Manage Agricultural Mediation

Florida offers mediation to people or organizations that have received an adverse decision from a United States Department of Agriculture agency in relation to a disaster or loan-related program. This process is handled by the Florida Agriculture Mediation Service (FAMS).

FAMS, which is sanctioned and funded by USDA, will now be managed by the University of Florida's Cooperative Extension Service, which is a part of UF's Institute of Food and Agricultural Sciences.

Mediation is consensual and less formal than litigation or the national appeals process. Trained mediators help parties review issues and reach agreements without further appeals.

Mediators do not impose decisions, and individuals may participate without surrendering appeal rights. Possible results of mediation may include a more beneficial outcome or a more efficient appeal process.

County extension agents do not serve as mediators. FAMS, which was initiated by UF's Levin College of Law and has been certified to offer mediation services for USDA agencies since 1997, uses only mediators certified by the Florida Supreme Court. Mediators are independent contractors and are neutral in any cases that they mediate.

If you have received a written adverse decision from the Farm Service Agency, Rural Development Agency or Natural Resources and Conservation Service, the letter should explain your rights to challenge the decision, including instructions on the mediation option. If your letter does not include instructions on how to mediate the decision, and you would like to see if this option is available to you, please contact FAMS at Room 1038, P.O. Box 110210, Gainesville, Fla. 32611-0210 or call the toll-free number (888) 712-9421.

The Farm Service Agency, Rural Development Agency or Natural Resource and Conservation Service can also provide more information.

**SOURCE:** Florida Agricultural Mediation Service  
<http://grove.ufl.edu/~mediate/>  
(888) 712-9421  
Release – December 3, 2002

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## Country-of-Origin Labeling Law Proceeding

One of the many provisions in the Farm Security and Rural Investment Act of 2002 (aka farm bill) was a requirement for the U.S. Department of Agriculture (USDA) to issue voluntary country-of-origin labeling guidelines for use by retailers who wish to notify their customers of the country of origin of beef (including veal), lamb, pork, fish, perishable agricultural commodities, and peanuts.

The USDA just released the rules to enact the voluntary component of this new law and will be enforcing mandatory compliance of this law by September 30, 2004. The process to make mandatory rules will begin in April of 2003.

### Main Points

1. The guidelines are voluntary. However, if one chooses to use the USA label they must follow the guidelines.
2. Labeling becomes mandatory September 30, 2004.
3. Retailers are responsible for ensuring that guidelines are followed. Those who violate the guidelines can be fined up to \$10,000 per violation.
4. Food services (restaurants, cafeterias, lunchrooms, food stands, saloons, taverns, bars, lounges, etc.) are exempt from the labeling law.

### What's covered?

The following items are covered by the law and must be labeled at the final retail point of sale as to country of origin:

- ◆ fresh or frozen muscle cuts of beef (including veal), lamb, and pork;
- ◆ ground beef, ground lamb, and ground pork;
- ◆ farm-raised fish and shellfish;
- ◆ perishable agricultural commodities (fresh and frozen fruits and vegetables);
- ◆ peanuts.

### What's next?

For the next 180 days, USDA will take submissions on the utility of the voluntary guidelines. Even though our goal of mandatory labeling is not a reality, the ball is

quickly moving in that direction. We must be diligent in following the USDA as it develops the rules.

The Florida Department of Agriculture and Consumer Services has been a great partner in our efforts to ensure that the national labeling program mirrors our state program. The Florida law has worked well for years and hasn't resulted in undue burdens on retailers.

**SOURCE:** Ray Hodge, FFBF  
National Affair Coordinator  
Reprinted in part with permission, from  
the Florida Agriculture  
Edward R. Albanesi, Editor  
Release – December 2002

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## **New Website for US Government Science Information**

The American public is now connected as never before to U.S. Government science and technology. Fourteen scientific and technical information organizations from 10 major science agencies have collaborated to create science.gov (www.science.gov), the "FirstGov for Science" web site. Science.gov is the gateway to reliable information about science and technology from across Federal government organizations.

From science.gov, users can find over one thousand government information resources about science. These resources include: technical reports, journal citations, databases, Federal web sites, and fact sheets. The information is all free, and no registration is required.

"Science.gov aims to bring the substantial resources of the federal science and technology enterprise together, in one place. Working together, federal agencies have assembled countless pages of government research, data, and reports. The site is a great example of e-government in action," said Dr. John H. Marburger, Director, Office of Science and Technology Policy, Executive Office of the President.

Science.gov is for the educational and library communities, as well as business people, entrepreneurs, agency scientists, and anyone with an interest in science. Support for building the science.gov gateway came from

"CENDI," an interagency committee of senior managers of Federal science and technology information programs.

"Science.gov provides the unique ability to search across the content within databases as well as across Web sites," said Eleanor Frierson, Deputy Director of the National Agricultural Library and co-chair of the science.gov Alliance, the interagency group that created science.gov. "It shows that Federal agencies can work together to pull off something none of them could do individually."

The agencies participating in science.gov are the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, and Interior; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation.

Additional information is available at [www.science.gov/communications](http://www.science.gov/communications) or by contacting Valerie Allen (phone (865) 576-3469; e-mail: [allenv@osti.gov](mailto:allenv@osti.gov)) or Sharon Jordan (phone (865) 576-1194; e-mail: [jordans@osti.gov](mailto:jordans@osti.gov)).

**SOURCE:** First Gov for Science  
<http://science.gov/>  
Release – December 5, 2002

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## **Farm Bureau Says 'Yes' to Plan to Streamline Forest, Rangeland Management**

Despite the outcry from environmentalists over a loosening of red tape on forest management plans, the head of the American Farm Bureau Federation came out in support of recent changes proposed by the U.S. Forest Service and the Interior Department, according to a news release.

"The administration's healthy forest initiative will lead to better forest management, fewer catastrophic wildfires and will benefit rural communities on the front lines whenever devastating wildfires break out," said Bob Stallman, AFBF president. "This plan represents a positive step toward better management of our nation's forest and rangelands."

Stallman said the forest initiative would "reduce the red tape" that has prevented needed fuel-reduction efforts, such as timber stand thinning and fuel wood removal projects. He said the plan should lead to better coordination between land management and wildlife management agencies when endangered species are involved.

"Farmers and ranchers across the country rely on well-managed federal forests and rangelands to enhance the viability of their own operations," he said. "In recent years, these lands have been ravaged by devastating wildfires and crippling pests. Unfortunately, some of the obstacles to better management have been the agencies' own internal procedures."

Stallman said the administration's plan dovetails with Farm Bureau's efforts to restore multiple-use and sensible management for public lands forests and rangelands.

"We appreciate the administration's efforts to improve resource management policy," he said.

**SOURCE:** Dan Murphy  
<http://www.meetingplace.com>  
Release – December 16, 2002

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## Ardisia crenata\*

**Common Name:** Coral ardisia, coral berry, spice berry

**Synonymy:** *Ardisia crenulata* Vent.

**Origin:** Japan to northern India

\* This plant has recently been implicated in some animal deaths. It has not been recognized as highly toxic, but can be.

**Botanical Description:** Evergreen subshrub to 1.8 m (6 ft) tall (more commonly 0.5-1 m in height), growing in multi-stemmed clumps. Leaves alternate, to 21 cm (8.3 in) long, dark green above, waxy, glabrous, with crenate (scalloped) margins and calluses in the

margin notches. Flowers white to pink in stalked axillary clusters, usually drooping below the foliage. Flowers small, bisexual, with petaloid parts pinkish white and anthers yellow. Fruit a bright red, globose, 1-seeded drupe, to 8 mm in diameter.

**Ecological Significance:** Introduced into Florida for ornament near the beginning of this century (Royal Palm Nurseries 1900). Noted as escaping into moist woods in 1982 (Wunderlin). Seen naturalized in hardwood hammocks across USDA Plant Hardiness Zone 9, including several areas in northern Florida (H. Dozier, University of Florida, personal observations). Recently reported as new to Texas flora, dominating understories in portions of two reserves (Singhurst *et al.* 1997). May reach densities of greater than 100 plants per m<sup>2</sup> (H. Dozier, University of Florida, unpublished data). Native plant species richness substantially lower in its presence, regardless of its density or the site history; also reduces the already dim light of forest understories by an additional 70%, potentially shading out native seedlings (H. Dozier, University of Florida, unpublished data). Mature naturalized plants usually surrounded by a carpet of seedlings, displacing small native ground cover such as violets, *Viola* spp., and wakerobins, *Trillium* spp., (M. Zeller and K. C. Burks, Florida Department of Environmental Protection, personal observations).

**Distribution:** Most widely distributed *Ardisia* worldwide (Watkins and Wolfe 1956, Watkins 1969). Naturalized on 2 islands in Hawaii (C. Smith, University of Hawaii, 1995 personal communication), and noted as an escapee in wet forest remnants in Mauritius over 60 years ago (Lorence and Sussman 1986; Vaughan and Wiehe 1937, 1941). Reported from Florida natural areas in Alachua, Flagler, Gadsden, Highlands, Hillsborough, Leon, Liberty, Marion, Martin, and Orange counties (EPPC 1996).

Recorded by herbarium specimens from Alachua, Citrus, Franklin, Gadsden, Hernando, Highlands, Leon, Marion, Orange, and Pasco counties (Wunderlin *et al.* 1996).

**Life History:** Prefers moist soil (Chabot 1952, Odenwald and Turner 1980), but may succumb to fungal rot in flooded soil (J. Tea, University of Florida, 1996 personal communication). Resprouts vigorously after cutting; propagated by cuttings for compact growth (Chabot 1952). Does not carry fire well through its thick foliage and resprouts following fire (F. E. Putz, University of Florida, 1996 personal communication). Produces fruit within 2 years from seed (Odenwald and Turner 1980). Fruit crop usually heavy, with viable seed retained year-round on plants (H. Dozier, University of

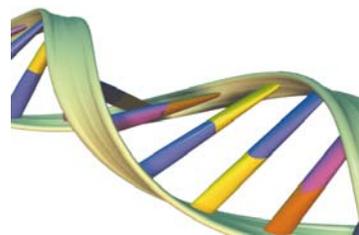
Florida, personal observations). Seeds dispersed by birds, including mockingbirds and cedar waxwings (K. Brady, Birdsong Nature Center, 1997 personal communication) and by raccoons (H. Dozier, University of Florida, personal observations). Seeds able to germinate in a range of soil pH, from pH 4 (acid) to pH 10 (alkaline), with germination rates of 84 to 98% within 40 days (M. Zeller, Florida Department of Environmental Protection, unpublished data).

For more information, please visit:

- <http://aquat1.ifas.ufl.edu/>
- [http://www.floridata.com/ref/a/ardis\\_c.cfm](http://www.floridata.com/ref/a/ardis_c.cfm)

**SOURCE:** Center for Aquatic and Invasive Plants - University of Florida  
<http://aquat1.ifas.ufl.edu/>  
(352) 392-1799

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## Tender Beef Gene Test a World-First

The Australian-patented technology will allow beef producers to breed animals for their ability to more consistently deliver enhanced gastronomic experiences.

The test was developed by a consortium comprising; the Cattle and Beef Quality Cooperative Research Centre, CSIRO Livestock Industries and Meat and Livestock Australia.

Brisbane-based company, Genetic Solutions, has won the global race to bring the test to the market.

"There is keen interest in using this tool to selectively improve the quality of beef herds in Australia as well as in the Americas and South Africa," Genetic Solutions' Scientific Director, Dr. Jay Hetzel, said.

The new test, known as GeneSTAR Tenderness, will complement GeneSTAR Marbling - the world's first commercial DNA test for identifying animals with the desirable trait of fat distributed through the muscle.

Dr. Hetzel said beef consumers had clearly identified inconsistency in tenderness as a major deficiency. Research had shown that tenderness was more important than juiciness and flavor factors to their eating experience.

"A major scientific effort has now delivered beef producers a simple live animal test that will help them meet customer expectations."

Both GeneSTAR tests use laboratory analysis of an animal's DNA, which can be extracted from tail hair roots.

"The tenderness link to the naturally occurring enzyme, calpastatin, was identified in a major study led by Dr. Bill Barendse and a team from the Beef Quality CRC using more than 5,000 beef carcasses from seven breeds," said CSIRO Livestock Industries Chief, Mr. Shaun Coffey.

8 January 2002

Cattle and Beef Quality CRC Chief Executive Officer, Professor Bernie Bindon, said the GeneSTAR Tenderness test was made possible by the investment of more than \$32 million of Commonwealth CRC funds, producer levies and CSIRO project funding.

"Genetic improvement of tenderness has proved very difficult because the trait is hard to measure and is influenced by many pre and post-slaughter environmental factors. While the GeneSTAR test accounts for only a part of the variation in tenderness, the effects are permanent and cumulative."

He said the test is simple and can be performed at any stage on the live animal.

"GeneSTAR Tenderness should have long-term benefits for the beef quality of Australian herds," Professor Bindon said.

Researchers discovered two variants of the calpastatin gene - one associated with increased tenderness and another with increased toughness. Cattle are given a rating - 2-STAR, 1-STAR or 0-STAR - indicating how many copies they have of the tender form of the gene.

Dr. Hetzel said a bull and cow, both with 2-STAR ratings, would pass on the desirable traits to 100 per cent of their progeny.

"The 2-STAR animals are genetically programmed to be more tender. The improvement made possible by using this technology is predicted to more than halve the number of carcasses rated unacceptably tough by consumers."

Dr. Hetzel said selective breeding with 2-STAR bulls would eventually eliminate 0-STAR animals from a herd. Breeders unknowingly using 0-STAR or 1-STAR bulls could be putting future herd tenderness at risk.

The presence of the tender form of the gene varies across breeds with British-type breeds recording the highest frequency and the Brahman breed the lowest.

Meat and Livestock Australia Research Program Manager, Dr. Hutton Oddy, said the tenderness technology presented a great opportunity to do something for beef consumers.

"An enormous amount of work has been done on this project and it is good to see the results being commercialised in Australia," he said.

"In particular, this test presents a fantastic opportunity for the northern beef industry to genetically improve cattle for tenderness while retaining the desirable traits of tick resistance and heat tolerance," Dr Oddy said.

#### **More information:**

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Dr. Bill Barendse, CSIRO Livestock Industries, 07 3346 2440

Professor Bernard Bindon, Cattle and Beef Quality CRC, 02 6773 3513

#### **Media assistance:**

Ms. Catherine Young, CSIRO Livestock Industries, 07 3214 2927

Mr. Gordon Collie, Agri-Prose Ltd, mobile: 0409 473 343

#### **Related Link:**

<http://www.csiro.au>

**SOURCE:** FASS Track  
Federation of Animal Science Societies (FASS)  
<http://www.fass.org/>  
Phone: (217)356-3182  
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