



UNIVERSITY OF  
FLORIDA

EXTENSION

Institute of Food and Agricultural Sciences



# Animal Science Newsletter

July 2002

## In This Issue...

Beef Management Calendar .....	2
Livestock Summary.....	2
2002 Pasture To Plate.....	3
Pasture To Plate Program For 2001-2002 Completed.....	4
UF Researchers Develop Biocontrol For Destructive Weed .....	5
New Brochure On Scrapie Eradication Program For Sheep/Goat Shows .....	6
Owners Urged To Vaccinate Horses For EEE, WNV .....	7
USDA Releases Over \$2.2 Million To Florida For Strengthening Agriculture Homeland Security Protections .....	7
FSIS Sets Biosecurity Guidelines For Meat Industry.....	8

Dear Readers,

For the past year, the *Animal Science Newsletter*, has been available on the web at <http://www.animal.ufl.edu/BeefCattle/Newsletter/index.htm>, in both html and pdf file format. Beginning with next month's issue, and all future issues, the *Animal Science Newsletter* will no longer be mailed in hard copy format, unless requested. We feel that retrieving the monthly newsletter from our website, is more cost effective and efficient for our readers. This format will also enable readers to view all of the photographs in color allowing more visual detail to the story that it accompanies. PDF files may be opened with a reader such as Adobe Acrobat Reader, which can be downloaded at <http://www.adobe.com/products/acrobat/readstep.html> or from the Animal Science Newsletter web page, by following the "Get Acrobat Reader" link at the bottom of the page. Many of you probably already have this program installed on your computer.

If you wish to continue receiving the newsletter in the mail or if you would like to receive an email each month, informing you when a new issue of the newsletter is available on our web site, please email Pam Gross at [gross@animal.ufl.edu](mailto:gross@animal.ufl.edu). Be sure to include your complete mailing address if you wish to continue receiving a printed version of the newsletter.

Please contact us if you have any problems, comments, or questions.

*Extension Specialists*  
(352) 392-1916



## Dates To Remember

### July 2002

4	Independence Day (Holiday)
11-13	State 4-H Horse Show - Tampa
16	Farming in the New Millennium - FL Farm Bureau, Gainesville
22-26	FL 4-H Congress - Gainesville
31-August 4	Southern Regional 4-H Horse Championships

### August 2002

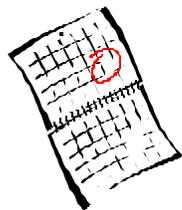
5-8	NW FL Beef Cattle Reproduction Management School - Chipley
16	FL Brangus Breeders Annual Meeting - Kissimmee
17	FL Brangus Breeders Accent on Quality Female Sale - Kissimmee
24	Florida Angus Female Futurity and Sale - Marianna
29	Beef Cattle & Forage Field Day - Marianna

## 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
- ❖ A.M. Stelzleni, Research Programs/Services Coordinator
- ❖ W. Taylor, Coordinator Youth Education/Training
- ❖ S.H. TenBroeck, Associate Professor, Extension Youth Specialist

Happy 4th of July





## Beef Management Calendar

### 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

- Treat for liver flukes as close to August 15<sup>th</sup> as possible, if they are in your area.
- 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.

### September

- Cut hay.
- Heavily graze pastures to be interplanted to cool season pastures.
- Check mineral feeder.
- Check for mole crickets, spittlebugs, and grassloopers, and treat if necessary.

- Check dust bags.
- Wean calves and cull cow herd if not already done. Remove open, unsound, or poor producing cows.
- Train cowboys to observe normal and abnormal behavior and signs of disease.
- Be sure any replacement purchases are healthy and have been calfhood vaccinated for brucellosis.
- September or October is a good time to deworm the cow herd if internal parasites are a problem.
- When replacement heifers are weaned, give them required vaccinations and teach them to eat – then put them on a good nutrition program.
- Determine bull replacement needs, develop selection criteria, and start checking availability of quality animals.
- Review winter feed supply and feeding plans so that needed adjustments can be made before supplies tighten and prices rise.



## Livestock Summary

The total meat production in 2002 is projected by the USDA to be about 84 billion pounds nationally, up one percent from a year ago. Beef production is expected to remain nearly unchanged from last year, but poultry and pork production are expected to be up slightly.

Drought conditions are forcing more cattle into feedlots. The weather is possibly delaying herd expansion for at least another year.

Conditions coming out of the winter, without improved soil moisture conditions or snow pack to fill reservoirs, have raised even greater concerns for spring and summer forage and grazing prospects.

Projected meat exports in 2002 are expected to fall about two percent from last year. All major meats are expected to register declines. A stronger U.S. Dollar is also contributing to the decline in export potential.

Greater meat production, however minor, and lower exports are pressuring domestic prices downward. Although fed steer prices are expected to register a year-over-year price gain, the projected increase is below earlier expectations as larger than expected placements boost beef production.

Beef cow slaughter, while below the large levels of a year earlier, are above 2000 slaughter levels. Dairy cow slaughter is historically low and consequently total cow slaughter continues to decline.

Beef production estimates have been increased for the year because of the larger numbers of cattle forced into feedlots and continued record slaughter weights.

Beef production in the second and third quarters is now expected to exceed year-earlier levels. Fourth-quarter production is expected to average below a year earlier. Continued poor grazing prospects and even larger feed lot placement could push production up.

Dressed weights remain sharply above the weather; reduced weights of the first half of 2001 are declining.

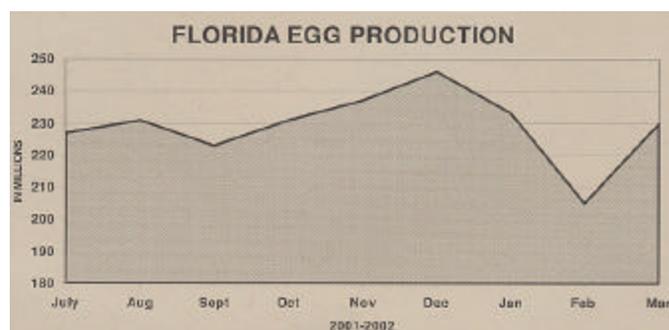
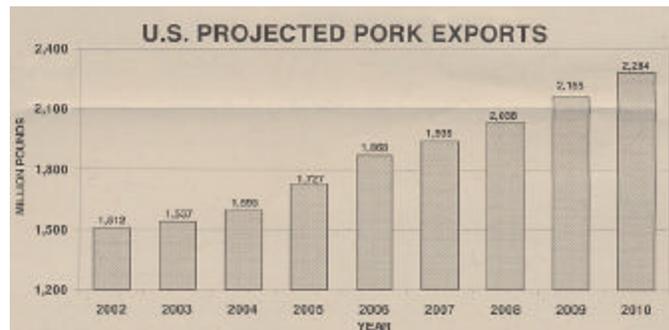
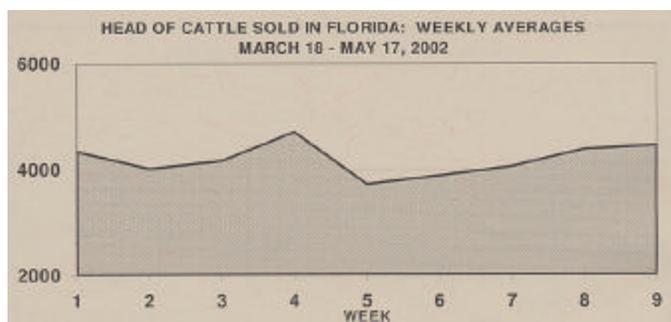
Fed cattle prices have remained relatively firm this year, however well below the weather induced levels of a year earlier. Increasing slaughter weights and numbers in later April and May have pressured prices downward.

Cattle prices in 2003 are currently projected to increase from the anticipated 2002 levels. Smaller inventories and stronger demand will drive prices. Cow-calf operators can expect to profit from the price run up.

The weather is already causing concerns about the summer of 2002. Pasture conditions in the panhandle have been adequate, but with the shortage of rain, higher than normal temperatures in May are raising doubts about the forthcoming summer.

The lack of rain is causing critical conditions for dryland forage.

## Livestock Trends



**SOURCE:** The Florida Agri-Journal  
 Researched by Les Harrison  
 Development Rep. I  
 Division of Marketing  
 Release – June 5, 2002



-RSS-

## 2002 Pasture To Plate

Florida's beef cattle industry, with 958,000 cows, ranks 12<sup>th</sup> in the U.S. and has the third largest cowherd east of the Mississippi. The inventory value of all cattle and calves in Florida on January 1, 2001, was \$1,134,000,000 and produced cash receipts of \$309,852,000 in 1999. The Florida beef industry must continue to be competitive and we must improve the quality of our calves to maintain our market share and value. Also knowing the performance of your cattle on the rail and in the feedyard is important when evaluating new marketing alternatives that are being offered.

The first step in this process is to determine what you are presently producing and where improvement is needed. *Pasture to Plate* is a program designed to give cattle producer's valuable information about their cattle that will enable them to build on the strengths, as well as pinpointing their weaknesses, in breeding, health and/or management practices.

4 July 2002

**Pasture to Plate** is an educational program for cattle producers. The purpose is to give cattlemen the opportunity to: (1) evaluate the feedlot performance of their cattle, (2) obtain individual carcass quality and cutability information on their cattle, (3) become familiar with custom feeding practices and procedures, and retained ownership without the investment and risk involved in feeding an entire pen of cattle.

The Marketing committee of the Florida Cattlemen's Association in cooperation with the Florida Cooperative Extension Service sponsors this program.

For a brochure containing general information and a registration form that can be filled out online and printed for mailing, visit the Beef Cattle web site at: <http://www.animal.ufl.edu/BeefCattle/BeefCattlePrograms/index.htm>. The Adobe Acrobat Reader is needed for viewing the brochure and can be downloaded from a link at the bottom of the web page listed above. You may also request a brochure by contacting Dr. Bob Sand at (352) 392-7529 or by e-mail at [sand@animal.ufl.edu](mailto:sand@animal.ufl.edu).

For additional information, please contact:  
FCA Office (Jim Handley) – (407) 846-6221 or  
Dr. Bob Sand – (352) 392-7529

*Sponsored by:*



## Pasture To Plate Program For 2001-2002 Completed

It seems like it has taken a long time to get the Pasture to Plate cattle finished and harvested this year. The cattle were assembled in October and harvested in late May. Given the volatility and depression in the fed cattle market all spring, I kept hoping it would rebound by the time our cattle were ready. It didn't, but the good news is we marketed the cattle before the market bottomed, if it has. The cattle were marketed to Excel on a grid with a Choice, Yield Grade 3 base at \$110.00/cwt. of carcass. This equated to \$72.10/cwt. (based on their dressing % or yield) live when the cash market was \$67.00 or \$64.00 depending on which week you price them. When Excel got through with the discounts and premium adjustments we were paid \$107.17/cwt.

dressed or \$70.21/cwt. live. The cattle did well, better than any previous Pasture to Plate group, 69% Choice, 27% Select and 4% no roll or Standard quality grades and yield grades were 46% YG 2 and 46% YG3, 4% YG1 and 4% no grade. The overall performance of the group was depressed by one carcass that was no roll (Standard) and light weight (less than 550 lbs.).

The cattle's health in the feed yard was excellent since they did not treat a single animal, though the poor performance of the one animal suggests that at some point in its life it must have been sick and just didn't show it. They averaged a daily gain of 2.81 lbs which is below the industry minimum target of 3.0. One of the consequences of a slower rate of gain is generally poor feed conversion and in this case this is true. The cattle converted 8.4 lbs. of feed as fed to a pound of gain or on a dry matter basis 6.7 lbs. of feed per pound of gain. The industry target is to be below 6, preferably below 5.5. This impacts the cost of gain and in this case the cost of gain (total pounds gained/total feed yard charges) is \$0.54 according to my figures. The feedlot manager told me they closed out 7 lots at that time and 4 were less than 50 and 3 were over.

In summary, the cattle did very well in the packing house and only fair in the feed yard. Financially they lost \$30.27 per head when all costs are considered compared to their value at the start. While this is not good, we were successful in getting good individual animal data in the feed yard and in the packing plant, and they were not the 100 to 200 dollars per head losses we have been reading about. If you have any questions, don't hesitate to call. Information for the 2002-2003 Pasture to Plate program is available through the Florida Cattlemen's Association, your local Florida Cooperative Extension office, Dr. Bob Sand (352) 392-7529 or on the web at <http://www.animal.ufl.edu/beefcattle/beefcattleprograms/index.html>.

**SOURCE:** Dr. Bob Sand  
Extension Livestock Specialist  
Department of Animal Sciences  
University of Florida  
Gainesville, FL  
[sand@animal.ufl.edu](mailto:sand@animal.ufl.edu)  
(352) 392-1916

**-RSS-**



## UF Researchers Develop Biocontrol For Destructive Weed

It sounds like the name of an exotic new drink, but tropical soda apple has been more aptly described as the "plant from hell," say University of Florida researchers who have developed a natural way to control the rapidly spreading weed.

"The highly invasive plant, which forms a dense and thorny thicket that is impenetrable to animals and people, has been classified by the federal government as one of the nation's most noxious weeds," said Raghavan Charudattan, professor of plant pathology with UF's Institute of Food and Agricultural Sciences. "In Florida and seven southeastern states, it's literally taking over, displacing native plant species in infested areas."

He said the weed, native to South America, is a serious environmental threat to natural areas, and it's become a major problem for the beef and dairy cattle industries.

Sharp thorns make the plant's foliage unpalatable, but livestock, wild animals and birds that eat the fruit help spread the seeds. Mature plants can produce 50,000 seeds that germinate under a wide range of conditions. Seeds also can be spread by compost, sod and moving water, Charudattan said.

Another concern, he said, is that cattle shipped out of Florida may harbor plant seeds in their digestive tracts and spread the weed to neighboring states. To stop the spread of seeds, Georgia, South Carolina and other southeastern states may require Florida cattle to be held on weed-free pastures for 10 days before being shipped to nearby states.

"Pastures infested with the weed have less area available for cattle grazing, which means the stocking rates - the number of animals per acre - must be reduced," Charudattan said.

Wade Grigsby, vice president of the cattle division for Alico Inc. in LaBelle, said the weed is an economic and environmental headache for the livestock industry.

"It may be impossible to eradicate tropical soda apple, but Charudattan's new biocontrol is the best option we have for bringing the weed under control," Grigsby said.

Until now, the only way to control the weed was with repeated mowing and chemical herbicides. But, Charudattan said, applying herbicides is a problem for the cattle industry because of possible chemical residues in milk and meat.

Charudattan's research has shown that a common plant virus can be used to kill tropical soda apple, and he is seeking commercial partners to produce and market the virus as a natural biocontrol or bioherbicide.

"During a routine examination of several plant pathogens for their ability to cause disease on tropical soda apple, we discovered that tobacco mild green mosaic virus (TMGMV) kills the weed," he said. "Tests in two pastures demonstrated the virus kills up to 97 percent of the weed."

To determine which plants may be vulnerable to the virus, Charudattan is testing the virus on some 200 different plant species, including other weeds and cultivated plants. The virus does not affect people or animals, he said.

"We know that some varieties of tobacco and peppers are susceptible, but the virus can be used safely in areas where tobacco and peppers are not grown," he said.

The virus, which can be applied easily and inexpensively with a portable back-pack sprayer, is effective against tropical soda apple under a wide range of temperatures and year-round growing conditions.

Charudattan said the bioherbicide would be easy to produce. "High concentrations of the inoculum can be produced inexpensively in tobacco plants and stockpiled for use. It remains effective for decades," he said.

Susceptible tobacco plants could be used to mass-produce a commercial bioherbicide. As they mature, infected leaves are harvested, freeze-dried and ground into a fine powder for storage at room temperature, he said.

"To demonstrate how easily the bioherbicide could be produced, we are establishing a pilot production facility at UF," Charudattan said. "The prototype production system could be established as a self-sustaining service from UF or licensed to a commercial company."

Other UF plant pathologists working with Charudattan on the tropical soda apple project include

professors Bill Zettler and Ernest Hiebert and graduate student Matt Petterson.



## New Brochure On Scrapie Eradication Program For Sheep/Goat Shows

Sheep and goat producers preparing to exhibit their animals this show season are urged to become familiar with new movement restrictions and identification requirements associated with a national program to eradicate scrapie.

“Requirements for Going to The Show”, a brief brochure on what exhibitors need to know as part of the new scrapie eradication program is now available from the National Scrapie Education Initiative conducted by the National Institute for Animal Agriculture (NIAA).

“Our aim with this brochure is to help exhibitors understand what is required in terms of individual animal identification and health certificates for showing their sheep and goats,” said Glenn N. Slack, NIAA’s President and CEO. The brochure will be distributed through NIAA’s Scrapie Information Network, comprised of state departments of agriculture, state farm bureaus, state and federal animal health officials, breed associations, state and national sheep and goat producer associations, and state extension specialists.

“The brochure as well as other information about the scrapie eradication program is also available on the Internet at [www.animalagriculture.org/scrapie](http://www.animalagriculture.org/scrapie),” according to Slack.

In general, any breeding animal going to any show with entries from more than one state will require official USDA identification and must be accompanied by a health certificate.

“However there are exceptions,” said Slack, so he has several recommendations for exhibitors:

1. Read a copy of Requirements for Going to “The Show”;
2. Check with your local veterinarian or your State Veterinarian’s Office to see if your state has any further rules and regulations;
3. Check with the show/exhibition organizers to see if there are any special rules pertaining to that particular event.



Raghavan Charudattan, left, professor with the University of Florida’s Institute of Food and Agricultural Sciences, and Wade Grigsby, vice president of the cattle division of Alico, Inc. in LaBelle, examine tropical soda apple invasive weeds in a South Florida pasture, Tuesday--June 4, 2002. Charudattan, a plant pathologist, has developed a natural way to control the rapidly spreading weed without pesticides or mowing. He said a common plant virus, which is not harmful to people or animals, killed the weed in the container. Tropical soda apple forms a dense and thorny thicket that is impenetrable to animals and people, and it has been classified by the federal government as one of the nation’s most noxious weeds. (AP photo: University of Florida/IFAS/Thomas Wright)

**SOURCE:** Chuck Woods  
ICS, University of Florida, Gainesville, FL  
(352) 392-1773, ext. 281  
Release – June 6, 2002

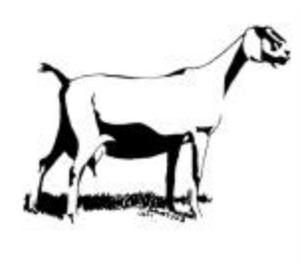
Sources: Dr. Raghavan Charudattan  
Plant Pathology  
University of Florida, Gainesville, FL  
[rc@mail.ifas.ufl.edu](mailto:rc@mail.ifas.ufl.edu)  
(352) 392-3631, ext. 354

Wade Grigsby  
Vice President of the Cattle Division  
Alico, Inc., LaBelle, FL  
[dpurvis723@aol.com](mailto:dpurvis723@aol.com)  
(863) 675-2966

-RSS-

For an individual copy of the brochure, write to Scrapie Eradication, National Institute for Animal Agriculture, 1910 Lyda Ave., Bowling Green, KY 42104-5809 or call 270-782-9798.

**SOURCE:** Gale Johnson  
National Institute for Animal Agriculture  
gjohnson@animalagriculture.org  
(270) 782-9798, ext. 112  
Release – May 24, 2002



-RSS-

## Owners Urged To Vaccinate Horses For EEE, WNV

Several cases of Eastern Equine Encephalitis (EEE) and West Nile Virus (WNV) have occurred around the state this season, and Florida horse owners are being encouraged to check with their veterinarians to make sure that their animals have been vaccinated against the diseases and that the vaccinations are up to date.

Six Florida horses this season have contracted EEE. Seven horses in the state have been afflicted with WNV.

Both EEE and WNV are mosquito-borne illnesses, said Florida Agriculture Commissioner Charles H. Bronson, who explained that the cases being detected now are happening before the onset of Florida's traditionally rainy season when mosquito populations increase, and that could suggest that the state is in for a tough year in terms of mosquito-borne illnesses.

Visitors to Florida, as well as residents, are encouraged to take precautions against mosquitoes, Bronson said, including avoiding outdoor activities after dark, wearing long sleeves and long pants when it is necessary to be outside during non-daylight hours, and wearing insect repellent while outside. Certain types of mosquitoes are active biters during the day, so precautions against mosquitoes should be taken at all times. Bronson also suggested removing standing water

from yards and properties, as stagnant water is an excellent breeding ground for mosquitoes.

Authorities also are asking members of the public to report dead birds through the Florida Fish and Wildlife Commission's website at [wld.fwc.state.fl.us/bird](http://wld.fwc.state.fl.us/bird) or by calling their local county Health Department Office.

**SOURCE:** Florida Market Bulletin  
<http://www.florida-agriculture.com>  
Florida Department of Agriculture and Consumer Services  
Release – June 2002

-ELJ-



## USDA Releases Over \$2.2 Million To Florida For Strengthening Agriculture Homeland Security Protections

Agriculture Under Secretary for Marketing and Regulatory Programs Bill Hawks today announced that the U.S. Department of Agriculture is releasing \$2,231,451 to the state of Florida to bolster food and agricultural homeland security protections, out of a total of more than \$43 million being provided to states. The resources are part of \$328 million approved by President Bush and the Congress earlier this year to strengthen USDA's homeland security preparedness.

"These grants are an important component of the Administration's continued efforts to strengthen homeland security protections for America's food and agriculture," said Hawks. "States, local communities, academia and the private sector are all critical partners in making sure we are prepared in the event of an emergency."

The \$43 million will provide funding to support critical efforts to strengthen the food supply infrastructure. Of that, \$20.6 million will be provided to our state and university cooperators to be used to establish a network of diagnostic laboratories disbursed strategically throughout the nation to permit rapid and accurate diagnosis of animal disease threats; \$14 million will be used to strengthen state capabilities to respond to animal disease emergencies, primarily by helping every

8 July 2002

state to meet the national standards of emergency preparedness established by the National Animal Health Emergency Management System; \$4.5 million will be used to strengthen state-level surveillance for animal disease; and \$4.3 million will be used to assist states to improve their capability to detect plant pests and diseases.

Under Secretary Hawks was joined by Florida Agriculture Commissioner Charles Bronson in announcing the state's homeland security funding. This week, Agriculture Secretary Ann M. Veneman and Under Secretary Hawks, along with several USDA subcabinet members, are traveling to nearly a dozen states to discuss the importance of homeland security with Congressional, State and local officials and actions that federal, state, private sector and academia are taking to improve agriculture protection systems.

The state of Florida will receive \$2,231,451 in funding. Of that, \$1,650,000 will be used for rapid detection and diagnostics network, \$350,000 will be for plant pest and disease detection, \$162,045 will be for animal disease response, and \$69,407 will be for animal disease surveillance.

Earlier this year, USDA also announced additional homeland security allocations which include:

- \$177 million to make physical and operational security improvements at key USDA locations. This provides \$64 million at the animal disease center in Ames, Iowa to relocate labs from leased space into the main Ames campus and includes funds for a new facility for sensitive diagnostic work, which will be completed in 18 months.

- \$23 million for USDA's Plum Island laboratory, pending an independent review of the critical needs and options for the facility.

- \$35 million to strengthen the Agricultural Quarantine Inspection program to exclude agricultural pests and diseases at the borders. These funds are being used to expedite development of an automated system of inspections in coordination with the U.S. Customs Service. In addition, USDA is purchasing 100 rapid pathogen identification devices and hiring additional inspection personnel.

- \$16.5 million for the Food Safety and Inspection Service to increase monitoring, provide training to inspectors and expand technical capabilities. \$1.5 million of these funds are being used to hire additional inspectors for imported meat and poultry.

- \$15.3 million for the Agricultural Research Service to improve rapid detection technologies for foot and mouth diseases as well as other animal diseases.

Additional information on homeland security is available from <http://www.usda.gov/homelandsecurity>.

In USDA's FY 2003 budget request, more than \$150 million is being requested for additional homeland security protections. As well, if the budget is approved by Congress, it would bring food safety and pest and disease protection spending to the highest levels ever at USDA.

**SOURCE:** Alisa Harrison (202) 720-4623  
Johna Pierce (202) 720-4623  
USDA  
Release – May 30, 2002

**-RSS-**

## **FSIS Sets Biosecurity Guidelines For Meat Industry**

The Food Safety and Inspection Agency released a notice last week announcing new food-security guidelines to assist federal- and state-inspected meat, poultry and egg establishments in identifying ways to strengthen biosecurity, according to a news release.

FSIS will send the food-security guidelines in pamphlet form to all federal and state inspected facilities and to the Inspector-in-Charge at these facilities. The voluntary guidelines will be distributed through the HACCP network and through industry groups and extension services.

To access the FSIS notice, logon to please visit [www.fsis.usda.gov/OPPDE/rdad/FSISNotices/14-02.htm](http://www.fsis.usda.gov/OPPDE/rdad/FSISNotices/14-02.htm) or contact the USDA Technical Service Center at (800) 233-3935. To access the guidelines, visit <http://www.fsis.usda.gov/oa/topics/securityguide.htm>.

**SOURCE:** Dan Murphy  
<http://www.meatingplace.com>  
Release – May 28, 2002

**-RSS-**

