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# LIVESTOCK NEWSLETTER

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July - August 2001

AS-1



2001

## Georgia National Fair

October 5-14, 2001

Perry, GA

*New*

Following are some of the changes for the 2001 Georgia National Fair Junior Shows.

### Steers

- , **Weigh-in** time has changed 10 am - 2 pm on Friday.
- , Class winners will no longer be *reweighed*.

### Heifers

- , **Check-in, Weigh-in** (Commercial Heifers) has changed to 10 am - 3 pm on Friday.
- , **Commercial Heifers** must be born August 1, 2000 and after. (Registered heifers must still be born September 1, 2000 and after.
- , A breed show has been added for **Red Angus**.

### Market Swine

- , Exhibitors must fully attend and complete the **Pork Quality Assurance Youth Curriculum** by entry deadline, September 1, and be certified by agents/teachers/parents as having done so.

### Breeding Gilts

- , Gilts may stay over until Saturday morning, Oct. 13, but must be out of barn by **noon** on Sat.
- , There will no longer be a breed show for **Chester Whites**.

### Breeding Ewe

- , **Showmanship** classes are now offered for 1st-4th grade, 5th-8th grade and 9th-12th grades.
- , A **Supreme Champion** will no longer be chosen.

### Commercial Dairy Heifer

- , Exhibitors must be at least **nine years of age** by entry deadline, September 1.

### Market Meat Goat

- , Market Meat Goats must now weigh **45-110 lbs**.

### Important Reminder

- , Exhibitors may spend the night inside the barns only to tend to **lactating** animals and must do so within their assigned stalling area or purchase additional stalling space, **if available**. No other camping is allowed in or around the barn areas.
- , In order to create a good public image and add to the attractiveness of the livestock area, all beds, cots, **bedding**, etc. should be stored out of sight by 8 am each morning.
- , No **cooking** is allowed inside or around the outside of the barns to comply with local fire codes.

## Control of Algal Scums in Aquaculture Ponds

Gary Burtle  
Animal & Dairy Science  
The University of Georgia

Summer months are the time when dense blooms of blue green algae begin to cover fish ponds, particularly those that are fed heavily for aquaculture. The primary algal species involved in these blooms are *Oscillatoria sp.*, *Microcystis aeruginosa*, *Anabaena sp.*, and *Aphanizomenon flos-aquae*. Blooms become so dense that they form scums that can be several inches thick on the surface of ponds. Often the scums are visible in the early morning as the algal cells float after accumulating carbon dioxide during the night. Later in the day, carbon dioxide is utilized during photosynthesis and the algae sink in the water column. Dense algal blooms are associated with off-flavors in fish, dissolved oxygen depletions, toxin production, and foul odors.

Herbicides that can be utilized for algae control in aquaculture ponds include copper sulfate, liquid copper formulations, and diuron. Copper is labeled for use on fish intended for human consumption. However, diuron is only labeled for emergency use to control off-flavor in catfish ponds. Whenever using herbicides, use according to the label for best effectiveness, since many formulations have different ingredients at different concentrations. Copper compounds are toxic to certain species of fish at concentrations near that recommended for algae control. The alkalinity of pond water must be measured before attempting to treat with copper. Since copper can cause catastrophic death in fish, you should not use it unless you know your alkalinity is higher than 50 ppm as calcium carbonate.

Recently, planktivorous fish have been stocked with catfish in order to control blue green algae. The fish eat some of the algae and also recycle some of the nitrogen and phosphorus that would otherwise be wasted from the catfish feeding process. Research at Tifton, Georgia shows that the threadfin shad is a good prospect for blue green algae. When the shad is stocked at the rate of 600 per acre and allowed to spawn, algal numbers are 60% lower than when shad are not in the ponds. Stocking fathead minnows, at the rate of 1,500 to 2,000 per acre, delays the onset of heavy blue green algae blooms by at least a month versus ponds without fathead minnows. In sportfish ponds, the bluegill sunfish eats algae and can contribute to blue green algae control.

Use of herbicides can cause sudden algal death that results in oxygen depletion or release of toxins. In order to protect from oxygen depletion, adequate emergency aeration should be available before herbicide application. Use oxygen meters to determine the effect of herbicide application on dissolved oxygen concentrations. If toxins are released, an oxidizer such as potassium permanganate may be able to detoxify the organic chemical toxins.

Beware of chemicals that are not approved for use in fish ponds. Severe penalties may be levied on those who use chemicals in ways that are not on their specific product labels. Consult your county extension agent for algae identification and herbicide recommendations.

# West Nile Encephalitis in Horses

Gary Heusner  
Extension Animal Scientist - Equine

Anxiety levels have definitely increased with the confirmation of birds testing positive for West Nile virus in several counties in Georgia. West Nile virus (WNV) grows in birds and is transmitted from bird to bird and from birds to humans and horses (see diagram) by mosquitoes. Infected birds serve as the reservoir host of the West Nile virus. These birds develop a high level viremia - a large number of virus particles in their circulatory system. Mosquitoes become infected after taking a blood meal from an infected bird. They in turn infect horses by biting them. The incubation period for the first signs of the disease is between 5 and 15 days. Horses are considered "dead-end" or "terminal carriers". "Terminal carriers" have so few virus particles in their bloodstream that a mosquito cannot accumulate enough of the virus while taking a blood meal to subsequently transmit the infection. No evidence suggests that horses can transmit West Nile virus to other horses, birds or humans.

The clinical signs of West Nile virus disease in the horse vary. The virus can affect the central nervous system and cause encephalitis. Some horses exposed to the virus may not show any clinical signs or perhaps may exhibit only vague signs of the disease. Clinical signs may include one or more of the following: loss of appetite and depression, fever, weakness of hind limbs, paralysis of hind limbs, impaired vision, ataxia, head pressing, head tilt, aimless wandering, convulsion, inability to swallow, circling, hyper excitability, coma or acute death. Other diseases such as rabies, botulism, equine protozoal myeloencephalitis (EPM), Eastern (EEE), Western (WEE) and Venezuelan (VEE) encephalitis, will exhibit clinical symptoms similar to West Nile encephalitis. The blood of the infected horse must be tested.

Currently there is no vaccine available for the prevention of West Nile encephalitis in horses. Horses vaccinated against Eastern, Western and/or Venezuelan encephalitis will not be protected against West Nile encephalitis.

## **Feeding Sprouted Wheat to Beef Cattle**

Johnny Rossi

## Extension Animal Scientist

Wet weather during June delayed the wheat harvest. The delayed harvest has resulted in wheat that has sprouted before harvesting. Sprouted wheat receives severe price discounts and is unacceptable for use in the milling, brewing, and food industries. An alternative use is feeding this grain to beef cattle. There is some energy loss during the sprouting process as carbon dioxide and water. However, the nutritive value is essentially equal to normal non-sprouted wheat.

Limited research has been conducted concerning the use of sprouted wheat grains in beef cattle diets. However, nutrient analysis of sprouted wheat indicates there is little to no reduction in feeding value. Due to loss of energy during the sprouting process, some nutrients are actually concentrated. For approximately 50% sprouted wheat, bushels weights are about 8% lower, crude protein 10% higher, and crude fiber 11% higher when compared with normal non-sprouted wheat.

Performance of cattle has not been affected when consuming diets containing primarily sprouted wheat. Sprouted wheat fed at 36% of the diet dry matter with 24% normal wheat and 40% hay did not decrease average daily gain or feed efficiency compared to feeding an all normal wheat plus hay diet. Feeding sprouted wheat is economical to feed and has the value of about 105% of the price of corn. The majority of wheat fed to beef cattle is used in feedlot diets. Wheat is rapidly digested in the rumen and results in a depression of fiber digestion more severely than with feeding corn or most by-product feeds. Therefore, wheat is not often used as a supplement to forage-based diets. However, feeding wheat at 0.75 to 1.0% body weight can support gains of up to two pounds per day in stocker calves grazing good quality forage. The negative effect on fiber digestion may be lessened by the lower starch content in sprouted wheat compared with normal wheat. An advantage for wheat compared with corn is that a wheat-based diet will require less supplemental protein, with crude protein averaging 13.5% for wheat versus 9% for corn.

For best performance, wheat should be rolled or cracked, but not ground prior to feeding. Digestibility is improved compared to most other grains because it has a hard seed coat and is small in size. Wheat can be fed whole, but feed conversions may be 10 to 20% lower than processed wheat. However, effects of processing method on the feeding value of sprouted wheat has not been studied.

Storage of wet wheat can be a problem. Moisture can lead to molds and mycotoxins such as vomitoxin. Sprouted wheat may be more suitable to growing and finishing cattle because they can withstand up to 21 ppm of vomitoxin. However, breeding cattle are more sensitive and mycotoxins can cause abortions. High levels of ergot may also be a problem. Levels at only 0.1% of the diet has been shown to decrease animal performance.

## What is a CIDR?

**Timothy W. Wilson**

Extension Animal Scientist

Producers maximize profits each year by taking advantage of both new and old technologies. Many developments are confirmed throughout the world that could enhance overall animal agriculture production. Cow/calf producers are faced with the continuing challenge of producing high quality, uniform calves crops to maximize their marketing potential. Estrous synchronization protocols are used to help reach these goals. There are many protocols that have been used in the past, some with little and others great success.

One product that is currently being reviewed by the Food and Drug Administration (FDA) for approval in the United States is a controlled internal drug-releasing device or (CIDR). This product has been used in New Zealand and Australia with success for the past several years. A CIDR is a T-shaped insert coated with progesterone that is collapsed and inserted intravaginally. The absorption of increased progesterone into the bloodstream affects endocrine functions that lead to reduced concentrations of luteinizing hormone (LH). When LH is suppressed, estrus and ovulation is inhibited. To end the treatment, CIDR inserts can be removed easily by pulling on a plastic cord extending out of the vagina. As progesterone concentrations are reduced in the bloodstream, LH concentrations return to normal allowing for estrus and ovulation.

If approved by the United States FDA, producers could take advantage of this new technology by applying it to synchronize estrous cycles for artificial insemination, or planned natural breeding programs. Producers who utilized defined breeding seasons have approximately 82 days after a cow calves to have her rebred. Synthetic progesterone compounds, called progestins, as well as the naturally occurring progesterone have been reported to stimulate return to estrous cyclicity in anestrus (females that are not having normal estrous cycles) beef cows and heifers. Since CIDR is a progesterone-releasing device, it could be used to overcome anestrus. By utilizing this technology, producers could increase the number of cows that cycle during a defined breeding season.

Several synchronization protocols have been researched with varying success to determine the proper use of CIDR.

### Protocol 1:

- Day 0, insert CIDR
- Day 6, remove CIDR and inject prostaglandin
- Day 7, inject estradiol benzoate
- Day 8, heat check and breed

### Protocol 2:

- Day 0, insert CIDR
- Day 7, remove CIDR and inject prostaglandin
- Day 8, heat check and breed

As research continues with CIDR, customized estrous synchronization protocols could be developed. This technology, if approved for use in the United States should enhance estrous synchronization protocols that would be available for cattle producers. The information regarding CIDR inserts can be found on the Pharmacia Animal Health web site at: <http://www.cidranimalhealth.com/> If you have any questions regarding this product or its use, contact your county extension agent or call me at (912) 681-5639.

## Dates To Remember

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September 24-26	AI School Tom Christian	Oakhill Dairy, Leesville
October 5-14	Georgia National Fair	Perry
October 16-18	Sunbelt Expo	Perry

WEEK ENDING: The Cooperative Extension Service would like to thank Ernie Morgan for submitting this information.

GEORGIA CATTLE: RECEIPTS: 11,800 LAST WK 12,700 YEAR AGO 17,600

<u>FEEDERS</u>	<u>STEERS</u>	<u>MED &amp; LARGE 1</u>	<u>HEIFERS</u>
	109.00-121.00	300/350 LBS	100.00-108.00
	100.00-110.00	350/400	90.00-100.00
	94.00-104.00	400/450	85.00-95.00
	88.00-98.00	450/500	83.00-92.00
	85.00-95.00	500/550	81.00-91.00
	82.00-92.00	550/600	79.00-87.00
	80.00-90.00	600/650	75.00-85.00
	77.00-86.00	650/700	73.00-82.00

<u>SLAUGHTER COWS</u> % LEAN		
75-80% 850-1200 LBS		42.00-46.00
80-85% 850-1200 LBS		43.00-52.00
80-86% OVER 1200 LBS		45.00-52.00
85-90% 800-1200 LBS		40.00-48.00

5 Area Daily Wtd Average - Texas/Oklahoma; Kansas; Nebraska; Colorado; and Iowa/So Minnesota Feedlots:

Steers...Select/Choice 65-80%	Weighted Average Price Range	-
Heifers..Select/Choice 65-80%	Weighted Average Price Range	<u>71.00-73.50</u>

By-Product Drop Value (Steer)...Hide and Offal Value 8.15/cwt.

Box Beef Cut-Out Value Choice 1-3 550/750 LBS. 122.46  
 Select 1-3 550/700 LBS. 116.58

Georgia Hogs: GA-FL-AL Direct Area Receipts 4700 Trends STEADY

US 1-2 220/260 LBS. 48.00-49.85 Sows 300/500 LBS. \_\_\_\_\_ 500-UP

FEEDER PIGS	GEORGIA	TENNESSEE		GEORGIA	TENNESSEE
US 1-2 35/40 LBS.		70.00-84.00	55-60		75.00-78.00
40/45		70.00-80.00	60/65		75.00-78.00
45/50		70.00-80.00	65/70		57.00-69.50
50/55		70.00-76.00	70/80		57.00-69.50

IOWA-SOUTHERN MINNESOTA DIRECT HOGS: RECEIPTS \_\_\_\_\_ TRENDS

BARROWS & GILTS 49-51% LEAN 185 LB CARCASSES RANGE 63.40-70.27 WTD AVG. 67.42

LAMB MARKET: MID-WEST CHOICE & PRIME 90/125 LBS. 53.55  
 VIRGINIA \_\_\_\_\_

LAMB CARCASSES	FOB OMAHA	CAF EAST COAST
55 LBS & DOWN	171.00	177.50
55 - 65 LBS.	171.00	177.50

## **Junior Update**

Ronnie Silcox  
Extension Animal Scientist

### **News From Gwinnett County Fair**

#### **Meat Goat Show** - September 13, 2001

The Gwinnett County Fair is planning a new Meat Goat show for 7:00 p.m. Thursday, September 13, 2001 in Lawrenceville. For more information about the show and entry requirements contact Robert Brannen at the Gwinnett County Extension Service (678-377-4010).

#### **Southeast Empire Lamb Show** - September 15, 2001

The Southeast Empire Lamb Show will be held at the Gwinnett County Fair on Saturday, September 15, 2001. Check-in is Saturday morning with the show starting at 11:30 a.m. Any lamb entered in the Georgia State Lamb Show is eligible to enter. Contact Ronnie Silcox, Extension Animal Scientist (706-542-1852) for Entry Materials.

#### **Southeast Empire Breeding Sheep Show** - September 16, 2001

The Southeast Empire Breeding Sheep Show will be held at the Gwinnett County Fair on Sunday, September 16, 2001. Any Georgia 4-H or FFA exhibitor eligible to enter the State Breeding Sheep show is eligible, for entry materials contact Ronnie Silcox, Extension Animal Scientist, (706-542-1852).

## **2001-2002 State Livestock Shows**

Dates for the State Market Lamb Show in Perry are Friday, October 5 - Saturday, October 6, 2001.

Dates for the Junior National Livestock Show in Perry are February 20-24, 2002.

Deadlines for entries and an order form for entry materials are included in this newsletter.

Ear tags and entry cards should be ordered by county extension agents or agriculture education teachers at least two weeks before the entry deadline for a show.

**ORDER FORM FOR EAR TAGS AND ENTRY CARDS**  
*(To be ordered by County Agents or Agriculture Education Teachers)*

Please send the order below to:

NAME \_\_\_\_\_ PHONE \_\_\_\_\_

COUNTY/CHAPTER \_\_\_\_\_ Circle one: 4-H or FFA

ADDRESS \_\_\_\_\_

UPS ADDRESS (if different) \_\_\_\_\_

CITY \_\_\_\_\_ ZIP \_\_\_\_\_

SHOW NAME	NO. TAGS REQUESTED (\$1.25 each)	NO. ENTRY CARDS REQUESTED* (only 1 per exhibitor) (no charge)	AMOUNT DUE
2001 STATE LAMB EAR TAGS @\$1.25 each AND ENTRY CARDS (available now)			
2002 STATE STEER SHOW EAR TAGS @\$1.25 each AND ENTRY CARDS (available now)			
2002 STATE MARKET HOG SHOW EAR TAGS @\$1.25 each AND ENTRY CARDS (available now)			
2002 STATE HEIFER SHOW ENTRY CARDS (available now)			-0-
2002 COMMERCIAL BEEF HEIFER SHOW EAR TAGS @\$1.25 each AND ENTRY CARDS (available now)			
2002 COMMERCIAL DAIRY HEIFER SHOW EAR TAGS @\$1.25 each AND ENTRY CARDS (available now)			
2002 COMMERCIAL BREEDING EWE SHOW EAR TAGS @ \$1.25 each AND ENTRY CARDS (available now)	N/A		-0-
2002 STATE BREEDING SHEEP SHOW ENTRY CARDS (available now)			
2002 BEEF QUIZ BOWL ENTRY FORMS AND INFORMATION (available 12/1/01)	N/A		-0-
2002 SWINE QUIZ BOWL ENTRY FORMS AND INFORMATION (available 12/1/01)	N/A		-0-
2001-2002 RULES AND REGULATIONS FOR ALL STATE SHOWS	N/A		-0-
TOTAL AMOUNT DUE			

**NOTE:** You will only need to order one (1) entry card per exhibitor, per show. Please keep this in mind when ordering.

Order all of the above entry cards, tags and rulebooks from:

**Ronnie Silcox**  
**Animal & Dairy Science Complex**  
**University of Georgia**  
**Athens, GA 30602-2771**  
**Phone: (706) 542-1852**

Make checks or money orders to Georgia 4-H Foundation (DO NOT SEND CASH). ABSOLUTELY NO PHONE/FAX ORDERS WILL BE TAKEN. Make additional copies as needed of this order form.

**GEORGIA JUNIOR STATE LIVESTOCK SHOWS**

## ENTRY DEADLINES

<b>2002 State Steer Show - Perry, GA .....</b>	<b>November 1, 2001</b>
<b>2002 State Heifer Show - Perry, GA .....</b>	<b>November 1, 2001</b>
<b>2002 State Junior Commercial Dairy Heifer Show - Perry, GA.....</b>	<b>November 15, 2001</b>
<b>2001 Market Lamb Record Books.....</b>	<b>December 1, 2001</b>
<b>2002 State Market Hog Show - Perry, GA .....</b>	<b>December 1, 2001</b>
<b>2002 State Breeding Sheep Show - Perry, GA .....</b>	<b>December 1, 2001</b>
<b>2002 Beef and Swine Quiz Bowls .....</b>	<b>February 1, 2002</b>
<b>2002 Junior National Banquet Adult Ticket Reservation .....</b> <b>(Order Form will be sent in January, 2002)</b>	<b>February 6, 2002</b>
<b>2001-2002 Market Hog Record Books .....</b>	<b>April 1, 2002</b>
<b>2001-2002 Steer/Beef Heifer, and Dairy Heifer Record Books .....</b>	<b>April 1, 2002</b>