

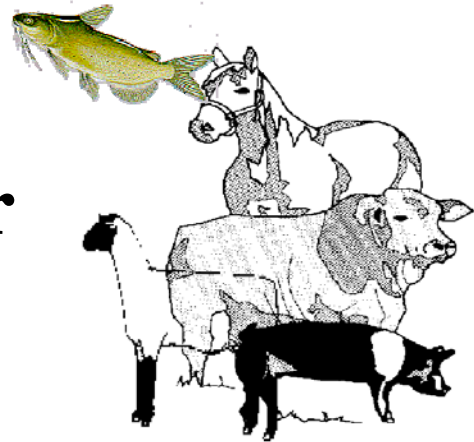
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Animal and Dairy Science Department
Rhodes Center for Animal and Dairy Science

Livestock Newsletter

March/April 2006

<http://www.ces.uga.edu/Agriculture/asdsvm/beef-home.html>



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Robert L. Stewart
Extension Coordinator
Animal and Dairy Science Department

LIVESTOCK NEWSLETTER

March/April

AS-1

48th Tifton Bull Performance and Sale Summary

Johnny Rossi
Extension Animal Scientist

The 48th Tifton Bull Sale was held at the Tifton Bull Evaluation Center in Irwinville on March 1, 2006. A total of 117 bulls sold for an average of \$2,400. There was a good crowd with a total of 68 buyers from Georgia, Alabama, Florida, North Carolina, and Tennessee. Sale results are shown in Table 1.

The test consists of a three week warm-up period and an official 112 day high concentrate feed test designed to measure performance. Bulls were born between December 1, 2004 and February 28, 2005. Bulls are eligible for the sale if they finish in the top two-thirds of their breed based upon an index, which is average daily gain on test plus weight per day of age. Bulls must also pass a breeding soundness exam, have a yearling scrotal circumference of 30 cm or greater and be free of any physical defects to be eligible for the sale. The test average daily gain was the second highest in history at 4.57 pounds per day. The top gaining bull was a Simmental/Angus bull that averaged 6.15 pounds per day and was consigned by James Fordham of Cochran, Georgia. Performance data is shown in Table 2.

Table. 2006 Tifton Bull Sale Summary.

Breed	No. Sold	Average
Angus	59	\$2,566
Brangus	6	\$2,500
Charolais	4	\$1,575
Gelbvieh	5	\$1,660
Gelbvieh %	1	\$1,200
Hereford	4	\$1,950
Red Angus	3	\$1,633
Shorthorn	1	\$1,200
Simbrah	1	\$1,800
Simmental	31	\$2,474
Sim-Angus	2	\$3,100
11 breeds	117	\$2,400

Table 2. 2005-06 Tifton Bull Test Performance Results.

Breed	No.	On test Wt.	Final Wt.	ADG	WDA
Angus	93	844	1380	4.79	3.54
Brangus	9	886	1322	3.88	3.22
Charolais	6	776	1236	4.10	3.34
Gelbvieh	7	739	1189	4.02	3.18
Gelbvieh %	2	852	1316	4.14	3.39
Hereford	7	843	1291	3.99	3.18
Red Angus	4	875	1340	4.15	3.53
Shorthorn	1	750	1221	4.21	2.97
Simbrah	1	953	1335	3.41	3.33
Simmental	47	848	1360	4.58	3.46
Simmental/Angus	3	907	1423	4.61	3.46
Averages	180	843	1354	4.57	3.46

Beef Management: Fly Control

Tim Wilson
Extension Animal Scientist – Beef Cattle

As the warmer months of the year arrive grass begins to green-up, the leaves begin to grow and the flowers bloom. Although the spring and summer months make many people happy, one thing that often becomes a problem for beef producers is horn flies.

Losses to the beef industry associated with horn flies have been estimated to be as high as \$700 million annually due to blood loss, irritation, annoyance and reduced weaning weights of calves nursing dams (Allison, NCSU 1996). Producers may use one or more of the many methods of application currently available to control horn flies such as sprays, dusts, ear tags, back-rubbers, boluses and in feed additives. Some even take advantage of de-wormers applied as an injectable or pour-on that are labeled to control horn flies in their management strategy.

Many beef producers will use ear tags that are impregnated with an insecticide to control horn flies. This method of control, although relatively simple, is often misused and can result in future problems. These ear tags contain an ingredient that over time is reduced in its effectiveness, so they should be removed once they are no longer effective. Typically insecticidal tags can last a couple of months, but should always be removed at the end of the season. If these tags are not removed they will

continue to release their ingredient at a lower, less effective dose and fly populations could develop resistance to that particular ingredient. It is recommended to read the label closely and remove these tags at the appropriate time to prevent resistance.

Development of new technology to control horn flies has been limited for the past 20 years. In the past there have only been two primary chemical classes of insecticides, pyrethroids and organophosphates, commonly used to control horn flies. Producers are encouraged to design their fly control strategies to change chemical classes every two years, to prevent flies developing resistance.

In May 2004, a product containing spinosad, from the chemical class spinosyn, was approved for use in beef cattle. Spinosyn compounds are in a chemical class separate from pyrethroids and organophosphates and have been used to control pests in cotton with success. Producers who wish to further diversify their horn fly control strategy could incorporate this new chemical class of insecticide into their management.

Removing fly tags at the appropriate time and alternating the chemical class of insecticides can help prevent horn fly resistance in beef cattle. When using insecticides, review the label and follow it closely. Failure to do so may not only be illegal, but may also result in future problems associated with resistance. If you have any questions related to horn fly control, please contact your county extension agent, veterinarian or me at 706/624-1403.

Georgia Beef Challenge – Report for 2004-05

Robert L. Stewart, Ronald E. Silcox, and Patsie T. Cannon
Animal and Dairy Science Department
The University of Georgia

The Georgia Beef Challenge was organized in 1991 to allow Georgia cattle producers to gain information on the health, performance, and carcass merit of their cattle. Over the years, thousands of calves from Georgia cattle operations have been evaluated. As a result, we have gained much information about the genetics of our cattle, both from an individual herd standpoint and how Georgia cattle compare to the rest of the beef industry. Our partners at Tri County Steer Carcass Futurity (TCSCF) in Southwest Iowa continue to do an outstanding job with our cattle.

In 2004-05, 929 calves were consigned to the program. Shipments started in May and ended in January. As usual, factors beyond our control influenced the outcome of the Beef Challenge. Weather was relatively good for feeding cattle in Iowa. There was a wide range of profitability this year (Table 1). One of the primary factors which affected profitability in the majority of the pens was the action taken by the Georgia Beef Challenge Risk Management Committee. The committee consisted of Turner Callaway, Jim Collins, Mac Hall, Curt Lacy, Bobby Lovett, John McKissick, Bobby Miller, Clay Sims, Frank Thomas, Robert Stewart, and Patsie Cannon. They set a pricing strategy to (1) protect the beginning value of the calves, and (2) to take a \$50 per head profit if and when available. Special thanks is due to Jim Collins, Curt Lacy, and John McKissick for their extraordinary work for our program. They organized the breakeven projections, watched the market, and ordered the contracts.

Table 1 summarizes the performance, carcass data and profitability for the 2004-05 Beef Challenge. On average this was a very good year for most phases of the program. A few of the categories were below our targets.

Feedlot	No. Of Calves	Death Loss	Ave. Act. Carcass Price	Ave. Gross Income	Profit Or Loss	Cost Of Gain \$/cwt.	Overall ADG	Hot Carcass Wt.	Dress %	Fat Cover	Ribeye Area	Calc. Yield Grade	Quality Grade
Chambers May 04 S+H	61	0.000 %	\$ 133.42	\$ 905.76	\$ (16.97)	\$ 65.49	3.03	713	61.5 %	0.39	12.5	2.63	70%
Todd Bentley Aug 04 Heifers	65	3.077 %	\$ 143.46	\$ 905.15	\$ 92.65	\$ 51.67	2.97	652	61.6 %	0.49	12.0	2.91	73%
Chambers Sept 04 Steers	134	0.000 %	\$ 140.73	\$ 999.10	\$ 19.18	\$ 46.70	3.16	715	60.9 %	0.54	12.1	3.12	77%
Todd Bentley Aug 04 Steers	73	6.849 %	\$ 140.21	\$ 1,012.75	\$ (4.75)	\$ 50.48	3.11	772	61.5 %	0.46	12.6	2.98	94%
Bentley East Sept 04 Steers	83	0.000 %	\$ 145.47	\$ 1,104.78	\$ 211.62	\$ 44.30	3.27	760	61.5 %	0.51	12.6	3.05	84%
Rolling B Oct 04 Steers	74	0.000 %	\$ 147.70	\$ 1,135.26	\$ 205.86	\$ 40.55	3.51	769	61.5 %	0.45	12.8	3.03	88%
SMB Nov 04 Heavy Steers	106	0.943 %	\$ 145.58	\$ 1,145.89	\$ 150.20	\$ 46.11	3.70	796	61.4 %	0.41	12.8	3.02	75%
SMB Nov 04 Light Steers	106	0.000 %	\$ 150.03	\$ 1,088.45	\$ 234.59	\$ 41.55	3.49	726	61.2 %	0.40	12.5	2.82	96%
Bentley East Nov 04 S+H	81	0.000 %	\$ 146.04	\$ 1,059.66	\$ 206.17	\$ 41.79	3.52	726	61.5 %	0.41	12.5	2.79	85%
Lorimor Dec 04 Steers	64	0.000 %	\$ 138.51	\$ 1,095.03	\$ 140.93	\$ 36.42	4.43	791	61.0 %	0.36	13.4	2.61	55%
Tibken Jan 05 S+H	82	1.220 %	\$ 128.69	\$ 960.52	\$ 85.63	\$ 46.99	3.56	764	61.5 %	0.46	12.6	3.00	89%
AVES for 2004-05 Cattle	929	0.969 %	\$142.34	\$ 1,043.19	\$ 122.35	\$ 46.07	3.43	744	61.3 %	0.45	12.6	2.93	81%

Death loss at 0.969% is below industry averages and was under our desired maximum of 1%. Of the 11 pens on feed, two had death losses over 3% and seven had no loss. We need to continue to pay attention to detail when developing the health history of our calves. Proper vaccination and backgrounding are essential in order to minimize sickness and death. There were a number of reasons for death during the year. Of the nine health-related deaths, three were because of acute pneumonia, one – chronic pneumonia, one – chronic BRD, one – peritonitis, one – toxicity, and two were as a result of hypersensitivity to antibiotics.

Of the 929 calves that were shipped, 830 had no health treatments beyond the group health treatments; the charges for these treatments included the cost of vaccination, parasite control, and implants in which all animals in a group were treated. The other 99 calves had some type of individual health treatment where an animal is individually sorted off and treated; the charges for these treatments included both the chute charge and drug cost and may have included a trip charge if a veterinarian was called. The total charges for individual health treatments ranged from \$2 per calf up to \$185 per calf. Table 2 reveals a breakdown of the expense involved with individual health treatments.

Table 2 – Individual Health Treatments			
No. of Cattle	No. of Ind. Treatments	Percentage of Cattle Shipped	Ave. Cost Of Total Ind. Treatments
830	0	89.3%	\$ 0.00
63	1	6.8%	15.33
21	2	2.3%	36.48
10	3	1.1%	67.17
2	4	0.2%	66.22
2	5	0.2%	141.89
1	7	0.1%	71.37
		<i>Total Shipped: 929</i>	

The overall average daily gain at 3.43 pounds per day was impressive. One pen had an average of 4.43 with the lowest being 2.97. Other than death loss, performance is the single most important factor in determining profitability.

Carcass traits were also good news for this year's consignors. Average fat cover at 0.45 inches is within the target of 0.40 - 0.45 inches. The current industry average is 0.52 inches of fat cover. The average Calculated Yield Grade was 2.93, and the ribeye area average was 12.6. The pen average range was from a low of 12.0 square inches to a high of 13.4.

Eighty-one percent of the Georgia Beef Challenge carcasses had a Quality Grade of Low Choice or better. The industry goal is 70 percent Low Choice or better. In addition, Table 3 reveals how our cattle grade within the parameters of prime, choice, select, standard, and commercial.

Table 3 – Quality Grades for cattle harvested during 2004-05.		
Category	No.	Percentage of Cattle Harvested
Prime	15	1.6%
Choice	726	79.7%
Select	161	17.7%
Standard	8	0.9%
Commercial	1	0.1%
		<i>Total Harvested: 911</i>

Table 4 indicates the increasingly important premiums that are added to the base carcass price of our animals.

Table 4 - Premiums added to cattle harvested during 2004-05			
Premium	No.	Percentage of Cattle Harvested	Ave. Added Dollars Per Hundredwt.
Prime	15	1.6%	\$15.20
CAB	191	21.0%	\$4.40
Yield Grade	431	47.3%	\$3.08
		<i>Total Harvested: 911</i>	

For Dress Percentage, 97.1 percent of the Georgia animals harvested were in the window of 57.0 - 64.9 percent. Our overall pen average was 61.3 percent.

Table 5 itemizes the Adjusted Final Weights for the calves shipped during 2004-05. Note 30.4% of animals harvested had final weights ranging from 1,101 - 1,200 lbs., and 30.9% had final weights ranging from 1,201 – 1,300 lbs.

Table 5 - Adjusted Final Weight for cattle shipped during 2004-05.		
Category (lbs.)	No.	Percentage of Cattle with Final Wts.
542 – 600	4	0.4%
601 – 700	3	0.3%
701 – 800	1	0.1%
801 – 900	6	0.7%
901 – 1,000	25	2.7%
1,001 – 1,100	113	12.3%
1,101 – 1,200	280	30.4%
1,201 – 1,300	284	30.9%
1,301 – 1,400	155	16.8%
1,401 – 1,500	45	4.9%
1,501 – 1,588	4	0.4%
		<i>Total with Final Weights: 920</i>

Table 6 points out that less than one percent of our animals received discounts due to heavy or light hot carcass weights. Over 99 percent were within the 551 – 950 lb. range with neither light nor heavy carcass penalties.

Table 6 - Hot carcass weight discounts taken during 2004-05.		
Category	No.	Percentage of Cattle Harvested
Over 950 lbs.	1	0.1%
Under 550 lbs.	6	0.7%
		<i>Total Harvested: 911</i>

Defects were found in 9.1% of the animals shipped. Table 7 gives a summary of the problems. Defects included trim, disposition, horns, lungs, rat tails, one condemned, one pregnant, four feeders, and age being 30 months or older. All defects represent a deduction straight off the profit of those animals. Even though disposition does not show up as an identifiable carcass trait, it does affect performance and lowers quality grade. In order to address these problems, we must select for disposition in our cow herds; use polled bulls or proper de-horning technique; monitor respiratory problems (pneumonia in a calf can result in trim on a lung at harvest); and use proper castration technique.

Table 7 - Defects noted in 85 out of 929 head of cattle shipped during 2004-05.			
Defect*	No.	Percentage of Total Defects	Percentage of Total Shipped
Age (30 Months+)	2	2.3%	0.2%
Condemned	1	1.2%	0.1%
Disposition	36	42.3%	3.9%
Horns	10	11.8%	1.1%
Lungs	17	20.0%	1.8%
Pregnant	1	1.2%	0.1%
Rat Tail	9	10.6%	1.0%
Sold as Feeders	4	4.7%	0.4%

Total Trim	5	5.9%	0.5%
Totals	85	100.0%	9.1%
<i>*If an animal had more than one defect listed, then it was included in the category of the first defect listed for that animal. Eight animals had more than one defect listed.</i>			

Table 8 shows the breakdown of the average disposition scores. Note over 82 percent of animals had average disposition scores from 1.0 - 1.8. TCSCF research data shows a loss of \$62 per head for cattle with disposition scores of 3.0 or higher.

Category	No.	Percentage of Cattle Scored
1.0	318	34.3%
1.3	205	22.1%
1.5	78	8.4%
1.7	95	10.2%
1.8	68	7.3%
2.0	65	7.0%
2.3	33	3.5%
2.5	13	1.4%
2.7	9	1.0%
2.8	8	0.9%
3.0	10	1.1%
3.3	7	0.8%
3.5	6	0.6%
3.8	4	0.4%
4.0	8	0.9%
5.0	1	0.1%
<i>1 = best and 5 = worst</i>		<i>Total with Ave. Disposition Scores: 928</i>

The primary objective of the Georgia Beef Challenge has been to get back individual carcass data on the calves that are shipped. That objective continues to be achieved. In addition, the 2004-05 program resulted in 788 of the 929 calves shipped (84.8 percent) actually earning a profit over the value that was placed on each animal in Georgia by USDA Livestock Market Reporters. (Profits on a per head basis ranged from \$0.09 to \$502.37.)

Presently, there are 1,696 calves (1,381 steers and 315 heifers) participating in the 2005-2006 Georgia Beef Challenge. We repeatedly find that our genetics are as good as anywhere in the United States. We firmly believe that data and predictability will be important marketing factors in the years to come. Participants in the Georgia Beef Challenge will be in position to attract attention whatever might happen to the market.

If you have calves you wish to consign, contact your local county Extension Agent or Patsie Cannon at 229/386-3683 (ptcannon@uga.edu). They can furnish you with the entry information and preconditioning protocol to get your calves ready. In addition, feel free to access the website at www.tifton.uga.edu/pc-web to view Georgia Beef Challenge information and final reports from last year's pens. An additional website that may be of interest is www.tcscf.com which is maintained by the Tri-County Steer Carcass Futurity Cooperative and Iowa State University Extension.

Utilization of feed additives in natural beef programs

Johnny Rossi - Extension Animal Scientist

Natural beef programs are a growing trend in the beef cattle industry. Natural beef designation generally refers to no use of antibiotics, implants or ionophores. The exclusion of these products can reduce performance and lead to greater health problems. Several feed additives have been developed which meet the natural specifications and have been shown to improve animal performance and health. These natural feed additives, which can improve rumen fermentation and feed digestion are underutilized in natural beef feeding systems. Stocker cattle are an important part of the beef cattle enterprise in Georgia and throughout the southeast. Feed additives that can enhance performance of calves during the stocker phase need to be developed and implemented for the natural beef programs. A stocker feeding trial was conducted at the Mountain Research and Education Center to evaluate the use of additives for natural beef production. The objective of the trial were to 1) compare performance of growing calves fed either an ionophore or Yea-Sacc¹⁰²⁶® and Bio-Mos® in a corn silage based ration and 2) compare the use of feed additives versus no additives in corn silage based diets fed to stocker calves. Yea-Sacc¹⁰²⁶® is composed of yeast cells. It is designed to stabilize rumen pH levels, stimulate growth of fiber digesting, and maintain feed intake and growth rates. Bio-Mos® is a product derived from yeast designed to maintain gut health and integrity. Rumensin® is an ionophore designed to increase gain and improve feed efficiency in stocker calves.

Angus cross calves were divided by weight and sex. The diets were fed for 84 days. The corn silage was 25.1% dry matter and 7.7% crude protein and fed for free-choice consumption.

Treatments were as follows:

- 1) Fed corn silage, 0.75% body weight corn, and 1.5 lbs soybean meal
- 2) Fed corn silage, 0.75% body weight corn, and 1.5 lbs soybean meal with 250 mg Rumensin®
- 3) Fed corn silage, 0.75% body weight corn, and 1.5 lbs soybean meal with 8 g of Yea-Sacc¹⁰²⁶® and 8 g of Bio-Mos®.

All diets resulted in similar heifer performance (Table 1). Ionophores generally increase gains about 5% in calves consuming forage based diets. The Yea-Sacc¹⁰²⁶® and Bio-Mos® increases gains similar to ionophores. All treatments would result in more than adequate weight gains for developing heifers from weaning to breeding and for stocker calves. Total dry matter intake was lowest for calves fed Rumensin® (Table 2), intermediate for calves fed Yea-Sacc¹⁰²⁶® and Bio-Mos®, and highest for the Control calves. Feed efficiency was improved by 19% for the Rumensin® versus Control calves and was improved by 4% for the calves fed Yea-Sacc¹⁰²⁶® and Bio-Mos® versus the Control calves. In traditional production systems, the ionophore would be the most economical supplement to use when comparing gain and feed efficiency. However, in natural beef production systems, the use of Yea-Sacc¹⁰²⁶® and Bio-Mos® would be warranted.

Performance Results

Treatments			
	1	2	3
Item	Control	Rumensin®	Yea-Sacc ¹⁰²⁶ ® and Bio-Mos®
No. calves	10 steers 13 heifers	16 steers 13 heifers	16 steers 13 heifers
On-test wt, lbs	529	527	527
Off-test wt, lbs	716	717	720

Daily gain, lbs	2.22	2.27	2.30
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Feed intake results (dry matter basis)

Treatments			
	1	2	3
Item	Control	Rumensin®	Yea-Sacc ¹⁰²⁶ ® and Bio-Mos®
Silage, lbs/day	8.04	6.96	8.04
Corn, lbs/day	4.00	3.93	4.00
Supplement, lbs/day	1.35	1.35	1.35
Total, lbs/day	13.39	12.24	13.39
Feed efficiency, lb feed/lb gain	6.03	5.39	5.82

Beef Specialist Relocates to Calhoun

As of April 3, 2006, Tim Wilson, University of Georgia Extension Animal Scientist, has relocated to the Northwest Research and Education Center in Calhoun, Georgia.

Prior to this transfer, Tim was located at the Southeast District Extension Office in Statesboro for the past five and one-half years. Tim has a Bachelor in Animal Science and a Master of Science in Reproductive Physiology, both from Texas A&M University. He is a member of the American Society of Animal Science and the American Registry of Professional Animal Scientist.

Along with his existing responsibilities as a beef specialist and Georgia Master Cattlemen's coordinator, his new duties will include supervising the Calhoun Performance Bull Test and the Calhoun Heifer Evaluation and Reproductive Development (HERD) Program. He supports all areas of beef cattle production with an emphasis on reproduction, estrous synchronization, heifer development, herd management and record-keeping.

Feel free to contact Tim at any time if you would like to visit about any of our programs or if you have any questions related to beef cattle.

Tim Wilson
 Extension Animal Scientist – Beef
 NW GA Research and Education Center
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Market News Branch
P O Box 86
Thomasville, GA 31799
Tel 912-226-1641



Agricultural Building
Atlanta, Georgia 30334

WEEK ENDING: 3-03-06 The Cooperative Extension Service would like to thank Terry Harris for submitting this information.

GEORGIA CATTLE: RECEIPTS: 10000 LAST WK 10800 YEAR AGO 9000

<u>FEEDERS</u>	<u>STEERS</u>	<u>MED & LARGE 1</u>	<u>HEIFERS</u>
	<u>143.00-179.00</u>	<u>300/350 LBS</u>	<u>128.00-155.00</u>
	<u>135.00-168.00</u>	<u>350/400</u>	<u>121.00-146.00</u>
	<u>125.00-155.00</u>	<u>400/450</u>	<u>117.00-142.00</u>
	<u>120.00-140.00</u>	<u>450/500</u>	<u>112.00-135.00</u>
	<u>110.00-132.00</u>	<u>500/550</u>	<u>100.00-129.00</u>
	<u>108.00-128.00</u>	<u>550/600</u>	<u>98.00-117.50</u>
	<u>103.00-118.00</u>	<u>600/650</u>	<u>90.00-104.00</u>
	<u>95.00-114.00</u>	<u>650/700</u>	<u>94.00-96.00</u>

<u>SLAUGHTER COWS % LEAN</u>	<u>75-80% 850-1200 LBS</u>	<u>50.00-59.00</u>
	<u>80-85% 850-1200 LBS</u>	<u>53.00-63.00</u>
	<u>80-86% OVER 1200 LBS</u>	<u>45.00-64.00</u>
	<u>85-90% 800-1200 LBS</u>	<u>50.00-59.00</u>

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

Steers...Select/Choice 65-80% Weighted Average Price Range 87

Heifers..Select/Choice 65-80% Weighted Average Price Range 87.50-88.00

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

Box Beef Cut-Out ValueChoice 1-3 550/750 LBS. 151.48

Select 1-3 550/700 LBS. 140.70

Georgia Hogs: GA-FL-AL Direct Area Receipts 3700 Trends 3.00 Lower

US 1-2 220/260 LBS. 36.00-38.00 Sows 300/500 LBS. 500-UP

<u>FEEDER PIGS</u>	<u>GEORGIA</u>	<u>TENNESSEE</u>	<u>GEORGIA</u>	<u>TENNESSEE</u>
<u>US 1-2 35/40 LBS.</u>				<u>55-60</u>
<u>40/45</u>				<u>60/65</u>
<u>45/50</u>				<u>65/70</u>
<u>50/55</u>				<u>70/80</u>

IOWA-SOUTHERN MINNESOTA DIRECT HOGS: RECEIPTS TRENDS 1.50 higher

BARROWS & GILTS 49-51% LEAN 185 LB CARCASSES RANGE 52.00-62.50 WTD AVG. 60.13

