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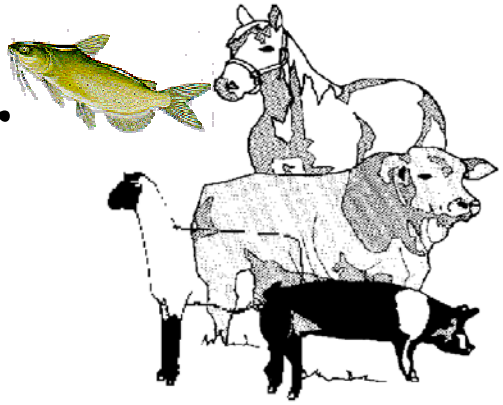
Animal and Dairy Science Department
Rhodes Center for Animal and Dairy Science

Livestock Newsletter



July/August 2003

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

July-August 2003 *AS-1*

Catfish Processing Plants are Optimistic about Catfish Market

Dr. Gary Burtle
Extension Aquaculture Specialist

Catfish sales continue to increase in volume during 2003. Processors report that sales are increasing because of the competitive price they are able to offer customers who might otherwise choose another fish or meat product. The trend set in 2002, when processors sold 7% more fish but at 1% less value, is continuing. Current prices for catfish sold to large processors remain 20% below the average price in 2000. Price pressure on catfish producers has resulted in reduced stocking densities or a decision not to restock at all. In some cases, farms have been put up for sale to cover debt issues.

Catfish pond inventories have been carried at high levels in order to maintain a continuous harvest system. This system encouraged stocking of 6,000 to 10,000 catfish per acre per year in order to achieve a 6,000 to 10,000 pound harvest per acre per year. The reality was that many of the catfish did not grow until the larger catfish were removed from the pond at harvest. If survival was good, 80% or higher, a pond could be carrying more than 15,000 catfish per acre at any time during the year. If three partial harvests were made each year of catfish weighing 2 pounds each, only about 25% of the fish would actually be harvested. The remainder of the fish would still be in the pond, unless a catastrophic disease or water quality event caused fish losses.

The big question for every catfish farmer is whether they have the surplus inventory or a “black hole” in their inventory. With surplus inventory, the producer should consider a pause in the restocking schedule until the inventory is reduced. At least, fall back to about 4,000 new catfish per acre per year. If the “black hole” of fish losses occurs, the producer will have difficulty finding enough fish to fill the 20,000 pound live haul truck at harvest. Poor feeding behavior will be the signal that pond inventories are not what they should be. When in doubt about catfish inventory, a sample should be collected by seining to determine the size and number of fish present in the pond.

Lower input for feed by switching from a satiation feeding schedule to a restricted feeding schedule. Feed conversion efficiency will improve by using a restricted feeding schedule. Instead of feeding as much as the fish will eat in 20 to 30 minutes, feed what they will eat in five minutes. An alternative method of restricted feeding is to lower the maximum feeding amount to less than 100 pounds per acre per day. A daily feeding rate of 80 pounds per acre per day will allow good growth for 4,000 pounds of catfish per acre. Reduced feeding generally improves pond water quality so that aeration time is reduced.

Sweetwater Catfish processing plant at Willacoochee continues construction. Equipment is on site and building modifications are underway. This medium sized processing plant should be operational soon.

Soybean Hulls For Beef Cattle

Dr. Johnny Rossi
Extension Animal Scientist

Soybean hulls can fit into any feeding program for any class of beef cattle. Soybean hulls are a by-product of crushing soybeans for oil. Soybeans are first cracked to facilitate the release of the hulls. Once the hulls are removed, they are toasted and ground and then either pelleted or sold as loose hulls. Pelleting increases the bulk density to decrease transportation costs and also reduces losses during handling. Soybean hulls typically contain 12% protein, 77% TDN, 70% NDF, 0.6% calcium and 0.25% phosphorus.

The majority of the research into feeding soybean hulls has been as a supplement for forage based diets. Results of several trials have shown soybean hulls to be comparable to corn in energy content when fed as part of a high forage diet even though published energy values are lower than corn. The fiber content (NDF) of soybean hulls is highly digestible, which increases the energy value. Soybean hulls are low in starch and do not impair fiber digestion as much as corn does. In addition, soybean hulls do not depress forage intake to the extent that corn does when fed at comparable levels.

Soybean hulls are an excellent supplement for low quality perennial forages. Several trials have shown soybean hull conversion ratios of 5 to 6 pounds of feed to pound of gain when fed at rates up to 1.5% of body weight. Soybean hulls can also be used as a partial replacement for hay for wintering cows. Researchers were able to reduce hay intake by 5.3 lbs per day when cows were fed 4.0 lbs per day soybean hulls. Soybean hulls have 40 to 50% more energy than average quality hay, but are rarely 40 to 50% more expensive. In addition to improving energy status of the cow, feed costs can also be reduced when substituting soybean hulls for hay.

Soybean hulls can also be used as a supplement for cattle grazing high quality forages. Soybean hulls and corn were fed at 0.65% of body weight to steers grazing wheat pasture. Supplement conversion rates were 5.4 and 5.0 for corn and soybean hulls, respectively. Supplementation increased daily gains by 0.33 lbs per day. Soybean hulls have also compared favorably to corn when used as a creep feed.

Limit-fed diets containing primarily soybean hulls have also been evaluated for growing cattle. Because soybean hulls are high in fiber and have adequate protein for growing claves, researchers have used soybean hulls as the only ingredient in the diet. In this situation, the energy value is approximately 25% lower than corn, which is most likely due to lower digestibility of soybean hulls and increases in the incidence of bloat and acidosis. Bloat becomes a concern when soybean hulls comprise a major portion of the diet. Even though soybean hulls are high in fiber, their small particle size can lead to severe bloat problems. Feeding as little as 2 lbs of hay and 1 pound of soybean meal along with unlimited soybean hulls can reduce this problem. In addition, an ionophore will reduce the occurrence of bloat. It is not advisable to feed soybean hulls as the only ingredient in the diet. A combination of soybean hulls and corn should be fed when limit-feeding high grain diets to growing calves.

Soybean hulls are an excellent feed when used as a supplement for forage based diets. Soybean hulls are comparable to corn in energy value in a forage based diet. When feeding low forage high grain diets, the energy value of soybean hulls are approximately 25% less than corn. In addition, 1 to 2 pounds of hay and protein supplement can significantly reduce bloat and improve performance. Soybean hulls can also be used to partially hay in diets for wintering cow

Sire Selection Considerations

Timothy W. Wilson
Extension Animal Scientist

As the cooler months of fall draw near and the results of controlled breeding are realized, preparations should begin for the upcoming breeding season. Although most fall calving seasons do not begin until late September or early October, selecting a herd sire for the upcoming breeding season can begin at any time of the year. Selecting which sire will be used in a breeding program is an important decision that can have a long term impact on the overall production capabilities of a herd.

Herd sires considered for natural service breeding programs must be able to pass a breeding soundness exam. If a bull does not pass this exam he should either be re-tested at a later date, approximately 30 days prior to breeding, or another sire that passes this exam should be considered. Bulls that cannot properly pursue, mount and breed every female to which he is exposed may reduce or delay overall production.

Structural soundness and correctness are crucial in sire selection. Although breeding soundness exams require that bulls be structurally sound, structural correctness can vary from bull to bull. Physical traits such as body length and depth are typically considered in this process since they can be passed down from one generation to the next. Although few bulls can be considered perfectly correct, this selection process is useful when selecting for desirable characteristics.

Once bulls have passed the breeding soundness exam and have been evaluated for structural correctness, and evaluation of genetic potential can be considered. Expected progeny difference (EPD) is defined as the difference in performance expected from the offspring of one sire compared to the offspring of another sire in the same breed (Ensminger & Perry, Beef Cattle Science 7th Ed.). EPDs have been used extensively by breed associations to compare the abilities of one bull to another. Traits that are typically reported by breed associations can be found in Table 1.

EPDs are determined by an animal's individual performance records that include its ancestors, half and full siblings. As breed associations receive information on calves from a particular sire, the EPDs of that sire will change to more accurately reflect his ability as compared to the overall breed average. It is important to know the breed average of the selected breed. Keep in mind that if a birth weight EPD is +2.5, that does not necessarily mean birth weights will increase. If the breed average EPD for birth weight is +2.7, overall birth weights could be reduced by 0.2 lbs.

Accuracy scores accompany EPDs. A low accuracy score indicates that a sire may be young or that few calves have been reported to the breed association. As more data from calves are reported, this score will improve.

EPDs should not be used to predict actual performance. Each year breed averages change, so it will be important to obtain the most current EPDs available. Selection using EPDs should not be limited to a single trait. If single trait selection is used, that trait may improve while others are negatively altered. Although many of the traits reported by breed associations may be similar, caution should be taken when comparing from one breed to another.

Each year every cow and heifer impacts overall production by producing a calf. Bulls however, impact

every female they are exposed to. Careful selection should involve breeding soundness exams, structural correctness and EPDs. If you have any questions related to any of these selection criteria, feel free to contact your local County Extension Agent or contact me at **twwilson@uga.edu**.

Table 1. Genetic traits reported by breed associations using EPDs

A. Most Associations	B. Additional Traits
1. Birth weight	1. Total maternal
2. Weaning weight	2. Direct calving ease
3. Yearling weight	3. Scrotal circumference
4. Milk	4. Marbling
	5. Maternal calving ease
	6. Mature size
	7. Pelvic area

Dates to Remember

Gwinnett County Fair September 11-21, 2003
E-mail: **www.Gwinnettcountyfair.com**

Georgia National Fair October 3-12, 2003
e-mail: www.GNFA.com

Country of Origin Labeling

Dr. Charles A. McPeake
Extension Animal Scientist

Today, very rarely, can you read a livestock publication without viewing an article on Country of Origin Labeling (COOL). In 2002, Congress passed a new Farm Bill and COOL is part of the new market-driven legislation. Currently, Congress is studying its language and preparing to do battle.

COOL applies to the following commodities sold at the retail level: beef; pork; lamb-muscle cuts and ground; farm-raised fish and shellfish (fillets, steaks and nuggets); wild fish and shellfish; perishable commodities, including fresh and frozen fruits and vegetables; and peanuts. Excluded from COOL are covered commodities if they are an ingredient in a processed food item; a changed identity item and covered commodities that are materially changed. Food service establishments are also excluded from provisions of the law.

Presently, COOL will label a U.S. product only if born, raised and processed in the U.S. Additionally, it must have a verifiable audit trail to confirm each phase of production. See the attached chart for examples of information that could be gathered for verification. The chart can be found and other sources of information at the following website: (**http://www.ams.usda.gov/cool/coolbeef.pdf).**

Under the current law, it allows for voluntary labeling until September 30, 2004. Final regulations of the law are not required to be published until the day the mandatory portion of the bill goes into effect. This will be a major task.

No doubt the next congressional session will be important to our nation's cattlemen. It could mean drastic changes from the way business is currently conducted. Conversely, verification information supplied by cattlemen can be very important in terms of quality assessment and biosecurity measures.

It behooves all cattlemen to study the proposed law and be a voice as to what is best for beef and producers livelihoods.

Seafood Import Observations Show Trends

Dr. Gary Burtle
Extension Aquaculture Specialist

The catfish tariff has been imposed to curb dumping of low priced fish product in the U.S. market. A simplified definition of dumping says that if the product causes lower prices in the importing country to the extent that severe economic hardship occurs in that country, then dumping has occurred. The complicate process of proving dumping has occurred was successfully prosecuted for the catfish and crawfish industries. The shrimp industry is currently investigating their chances for an antidumping suit. Perhaps other industries might follow.

Vietnam is a country that can be used as an example to show the effects of seafood imports into the U.S. In 2002 according to the National Marine Fisheries Service, about 2,500,000 pounds of catfish fillet per month were imported. The average value per pound of fillet was about $1.25. In 2003, through the month of May, imports of catfish fillet were down somewhat in the face of the successful antidumping suit to about 810,000 pounds per month. And, the price per pound of fillet was up to about $1.30 per pound. That price has to be compared to the domestic catfish fillet price of $2.85 per pound. The price difference can be attributed to a marketing success of the "farm-raised catfish" label used by the U.S. catfish industry. That label was also successful against competition from river and lake catfish and Brazilian catfish in the past.

The Vietnam example can be further examined in regard to their total seafood exports to the U.S. In May 2003, over $255,800,000 in seafood was exported to the U.S. The highest valued export was shrimp products at about $185,000,000. The list included catfish, tilapia, frog legs, unspecified freshwater fish fillets, clams, oysters, trout, as well others. It is apparent that the U.S. seafood consumers are a target of the Vietnamese seafood industry. The balance of trade with just this one country in seafood amounts to about $3 billion per year. Looking at U.S shrimp imports from all sources in 2002, the value exceeded $3.4 billion.

Between 2001 and 2003, most aquaculture product imports increased according to USDA. In terms of millions of pounds, imports increased in trout from 7.3 to 7.8, Atlantic salmon from 357.9 to 413.1, Pacific salmon from 27.9 to 41.5, shrimp from 882.6 to 946.4, and tilapia from 124.2 to 148.1. Only clam imports were reduce from 8.0 to 7.5 million pounds.

The increase in seafood imports affects commercial fishing, aquaculture and industries and services related to those livelihoods. Food safety issues should be considered with these import trends in mind. Biosecurity of our food source has become an important issue that should consider the import trends. Country of origin labeling has been proposed as one way to address some of these issues. There may be other methods that need consideration in order to adapt to or protect our industries form imports.

Web sites with background information include:
http://usda.mannlib.cornell.edu/usda/ and **http://www.st.nmfs.gov/st1/trade/index.html**

Georgia Beef Quality Assurance Certification Program

Dr. Ronnie Silcox
Extension Animal Science

To provide our consumers with wholesome, safe, consistently high-quality beef should be the goal of every beef producer. Across the nation Beef Quality Assurance programs have been developed to assist producers in developing management programs to meet this goal.

The Georgia Cattlemen's Association and the University of Georgia Cooperative Extension Service with support from the Georgia Beef Board have started a BQA certification program in Georgia. This program is totally voluntary and will probably be most valuable to those producers who are involved in group sales or in shipping loads of cattle to feed out programs in other states. Currently some feed out programs in other states require producers who participate to be BQA certified.

The Georgia BQA certification program uses a self-study computer course. Georgia has joined with Kentucky, Illinois, Indiana, Ohio and Michigan to support this Internet course.

To be Georgia BQA Certified, follow these steps:

1. Go to the Internet site http://www.ugabeef.org. Go to the Beef Quality Assurance Section for instructions.

2. The instructions will explain the process and direct you to http://www.iqbeef.org where you will go to the Georgia section.

3. The instructions will lead you to a page with a toll-free number. Call this number and pay a ten-dollar fee by credit card to Perdue University who maintains the site. They will e-mail you a user name and password.

4. Go through the six sections of the course and take a test on each section. You will need the user name and password to take the exam.

5. After you have passed all six exams, the Georgia Cattlemen's Association will be notified.

6. Return to the UGA Beef Team page at http://www.ugabeef.org for a copy of the Georgia Certification Application Form. Print it. Fill it out and sign it. Mail the form to the Georgia Cattlemen's Association. **A certification fee of $35 will be due prior to receiving a Georgia certification number (this fee is waived for current Georgia Cattlemen's Association members).**

Several county extension agents have gone through this program and it will take a total of about three to five hours depending on how fast you work. After you register, you have six months to complete the course. You do not have to finish it all at once.

The Internet site for iqbeef is an open site and you can look at all of the course work without registering. You must have a username and password to take the exam.