



# ADVANCE — WITH — ANGUS

**National Angus Conference  
showcases opportunities for cattlemen  
to advance in the beef industry with Angus.**

**A**pproximately 350 cattlemen and guests joined the American Angus Association Sept. 14-17 in historic Roanoke, Va., for the 2004 National Angus Conference and Tour. For cattlemen wishing to learn about advancements in the beef industry and Association programs and services, the annual event featured a one-day conference at the Hotel Roanoke Conference Center and a two-day tour.

The conference included individual presentations and a panel discussion by a variety of leading industry speakers, followed by a tour co-hosted by the Virginia Angus Association that featured Virginia Tech facilities, historic sites and Angus operations nestled throughout the countryside.

Angus Productions Inc. (API) staff provided real-time coverage of the event through [www.nationalangusconference.com](http://www.nationalangusconference.com). Sponsored by AgriLabs and Titanium® vaccines, the site features synopses, PowerPoint® (where available) and audios of the presentations, as well as an overview of tour stops. Abbreviated versions of the synopses are provided here.

If you would like to listen to one of the presentations but do not have Internet access, the Web Marketing Department can mail you a customized CD with the information you request. Contact Annie Jensen at (816) 383-5239.

## **The future of the beef business**

Cattlemen must develop and understand two themes in order to move the industry forward, said Virginia Tech ag economist Wayne Purcell. First, producers must change the way they do business and the way they interact with others in the industry. Only then can they develop the second theme — becoming consumer-driven.

“In order to be consumer-driven and to continue to enhance demand, you have to be able to change the way you do business and how you affiliate yourselves with your allies and with your partners in the [beef] sector,” he said.

Purcell said an important part of understanding market trends is understanding what determines demand and how it is measured.

“Demand is not measured by per capita consumption. Per capita consumption measures supply available; it says nothing about the level of demand,” he said. Rather, demand is determined by quantity consumed and consumers’ willingness to pay.

To increase that, producers should know what drives a consumer to buy beef, and they must be able to change their product offering when consumers change what they want.

To pay record-high prices, consumers

have to like the product, Purcell said. “It’s got to perform, and we can’t have a product failure rate of 25% as we have had.”

The Angus advance has decreased the probability of product failure, he added.

Purcell said the industry’s 20-year market slump beginning in the late 1970s, which resulted in a cumulative price decline of approximately 49.8%, was due to the industry’s failure to realize consumer desires for a safe, tender, consistent and convenient product. Only when programs like Certified Angus Beef LLC (CAB) began to provide those qualities did demand finally begin to turn around in 1998.

“The future of the industry is tied to the extent to which we go to the consumer,” he said. “Consumers are not willing to pay unless they’re confident they’re going to get a dependable, consistent, high-quality eating experience.”

Now that the industry has begun to improve beef quality and offer more consistent, convenient products, Purcell said he foresees a positive outlook for beef in the next six years.

“We’ll see more sophisticated coordination, quality control and product innovation,” he said. Moving to a



► Ag economist Wayne Purcell said producers need to be consumer-driven and change the product offering when consumers change what they want and what they are willing to pay for.

contract/alliance system from the traditional price-driven system will allow that.

Purcell predicted that in the next few years cow-calf producers will have an opportunity to invest in better genetics, the beef industry will begin to take back lost market share, beef demand will continue to increase, and producers will have a good chance at profits.

He said, "We'll see record-high prices repeated, and that will happen because we're headed into a building phase in the cattle cycle."

To view Purcell's weekly market reports or to monitor beef demand, visit [www.ext.vt.edu/news/periodicals/purcell/](http://www.ext.vt.edu/news/periodicals/purcell/) or [www.aaec.vt.edu/rilp](http://www.aaec.vt.edu/rilp).

### National animal ID moving forward

The national plan for an individual animal identification (ID) and tracking system of livestock across the United States is moving forward, reported Neil Hammerschmidt, animal ID coordinator with the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS).

Hammerschmidt explained that the goal of the system remains a 48-hour traceback capability in order to support animal disease control, surveillance and eradication programs.

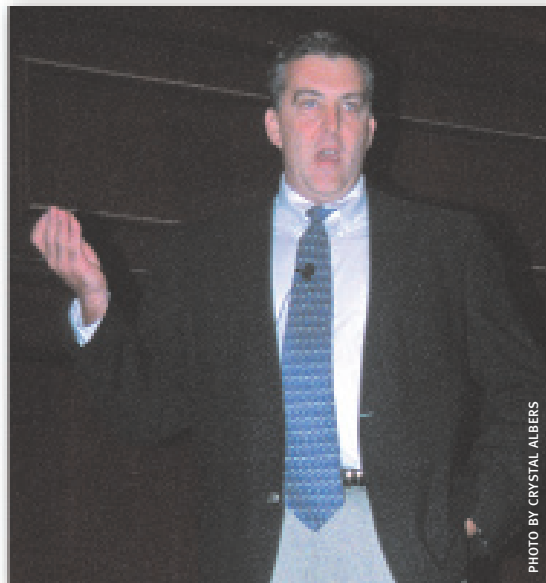
Hammerschmidt said the success of America's program will hinge on working together. "A national animal ID plan is an enormous undertaking that can only be successful with an industry and government partnership."

See the full article in this issue for more details.

### New tools for members, customers

American Angus Association Vice President of Information and Data Programs Bill Bowman and Genetic Research Director Sally Northcutt outlined tools and services available to commercial bull buyers, as well as to Association members.

The Angus Herd Improvement Records (AHIR) program amasses a cumulative database of more than 14 million pedigrees and 13 million performance measures to provide cattle producers with dependable predictive measures for use in their operations. Expected progeny differences (EPDs) are available on 17 traits, and now



► Bill Bowman of the American Angus Association shared with producers the newest genetic improvement tools available for Angus breeders and their customers.

the Association's bio-economic \$Values add a multi-trait selection index approach. The \$Values were developed to serve as selection tools for commercial bull buyers.

\$Values encompass revenue generated by outputs and costs or expenses associated with inputs. Available \$Values for feedlot performance merit and carcass value continue to grow in popularity. Feedlot Value (\$F) represents the dollar-per-head difference in future progeny performance in the feedlot. Grid Value (\$G) combines quality grade and yield grade attributes and associated adjustments for industry-relevant values and costs to arrive at the expected dollar-per-head difference in grid merit. The overall Beef Value (\$B), which combines the attributes of \$F and \$G, is an important tool used by commercial bull buyers as an indicator of terminal value, including postweaning performance and grid merit.

What's next in the suite of \$Values?

The newest index, to be released with the spring 2005 National Cattle Evaluation (NCE), is the Weaned Calf \$Value (\$W). This \$Value considers four primary economic impact areas: 1) birth weight (BW) and calf death loss adjustments to cow profitability, 2) weaning weight (WW) revenue and expenses, 3) maternal milk, and 4) mature cow size expense adjustments. \$W provides the expected dollar-per-head difference in future progeny performance preweaning in a multi-trait fashion, with the

cow herd as a priority. Interactive decision tools and educational modules to support \$W are slated to be released in mid-2005.

The new generation of \$Values for commercial bull buyers has generated additional research projects. A Cow Energy Value (\$EN) will be available with the spring 2005 EPD release to assess differences in cow energy requirement, expressed in dollars per cow per year, as an expected savings difference in future daughters of sires. Adjustments for computing the cow \$EN savings difference include maintenance requirements for lactation, not just mature size. \$EN is an additional tool for breeders wanting to fine-tune herd maintenance attributes in their breeding programs.

The mature size evaluation for mature weight EPD and mature height EPD have been enhanced to a multi-trait animal model for improved mature cow size EPDs for spring 2005. This technology will use repeated measures on cows from yearling age throughout their lifetimes. It is important that body condition scores (BCSs) be taken with the cow weights at or near calf-weaning date (+/- 45 days) in order for the weights to be used for EPDs.

Research for a heifer calving ease genetic evaluation is being completed this fall. Results would include a heifer calving ease direct and maternal EPD, expressed in percentage, where higher EPDs are more favorable as a tool to increase the chance of easier-calving qualities in heifers.

Two key programs demonstrate the continued pull-through effect of valued Angus genetics for commercial producers using registered Angus bulls. The first program for commercial cow-calf producers is the Association's Beef Record Service (BRS). The BRS program, established in 2000, puts production data into a usable form. It provides Standardized Performance Analysis (SPA)-certified production summaries tied to the American Angus Association database for preweaning and postweaning performance.

The AngusSource program is an exciting and innovative tagging and marketing program for commercial cattle, providing dynamic opportunities for source-verified feeder calves and replacement females sired

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by registered Angus bulls. AngusSource provides key source, genetic and processing information on enrolled calves.

The dynamic nature of the program, with flexible tagging options [visual or radio frequency ID (RFID)], along with marketing profiles, including EPD and \$Values, describe the genetics and process information of feeder calves and Angus replacement females. AngusSource provides future buyers with full-service profiles on these Angus-influenced cattle.

### What's new in genetic technology?

Quantitative animal breeding and genetic research have been conducted on cattle for more than 75 years. In 1986 genomics was the term coined for the new scientific discipline of mapping, sequencing and analyzing genomes.

"The current tools (EPDs, performance records, etc.) you have available as breeders to make genetic improvement are always going to be the center of what you do," said Ronnie Green, national program leader for USDA Agricultural Research Service (ARS). "DNA and other technology is just going to add to those tools, not replace them."

The mammalian genome is made up of more than 3 billion pieces of information, Green said.

The first step of genomic research is to develop road maps of each chromosome — genetic linkage maps. In 1994 the first cattle linkage map was published both in Australia and the United States. Green said at that time there were less than 500 markers; today, there are more than 9,000.

After the development of a linkage map, chromosomal regions that are important to economically relevant traits (ERTs) can then be identified through a process known as "fine mapping." These regions are known as quantitative trait loci (QTL).

What has this mapping brought us? Some of the current tests available in the industry are:

- ▶ Thyroglobulin — marbling (GeneStar Marbling)
- ▶ Calpastatin — tenderness (GeneStar Tenderness)
- ▶ Calpain — tenderness
- ▶ Leptin — fat deposition
- ▶ Diacylglycerol acetyltransferase (DGAT) — fat deposition in milk

- ▶ Somatostatin — marbling
- ▶ ROCR (Marbling) — Australia CSIRO

So far, development of gene marker tests has focused on identifying the presence of genes that influence production traits and, particularly, carcass characteristics. However, Green predicted a shift in focus to create tests for genes affecting input traits, such as reproductive rate and disease resistance. Also in the future, the technology will likely be adapted to individual animal ID systems.

Green advised breeders to be practical. While many gene marker tests may become available, breeders will have to decide which tests offer the most benefit and are sustainable in terms of cost.

### Representing cattlemen's interests

It's important for cattlemen's interests to be heard in a nation where policy makers and government officials may not understand the beef industry, Jan Lyons, National Cattlemen's Beef Association (NCBA) president and Angus breeder, told producers at the conference.

"Reason must dictate our actions, and fact and science must guide our decisions," she said. "You and I know how to take care of our cattle. ... We can't allow outside interests to dictate what we do as producers."

Representation through organizations like NCBA is important in an industry where most producers dream of handing their operations down to the next generation, Lyons added, encouraging participants to join and actively participate in groups committed to lobbying for the interests of beef producers.

"If it affects you back home, you have to have someone you can go to," she said. "Someone has to monitor and defend your interests, and [we cattlemen] don't always have the opportunity to lobby for our own interests."

Lyons said beef organizations will also be important in determining the status of future export markets. She said opening export markets will be only half the battle — building U.S. beef demand will be key.

"Demand has been a critical factor in the success of our bottom line," she said.



▶ NCBA President Jan Lyons shared with conference attendees current NCBA initiatives and how the organization works to serve its members.

"By working with different groups and targeting demand, we've been able to improve the demand for beef ... and when we get the markets open, we'll be in a good position."

### Tips for marketing success

Developing industry relationships and focusing on customer service are important components for achieving success in the seedstock business. That was the consensus of four Angus industry leaders participating in a marketing panel discussion. Scott Greiner, Virginia Tech Extension beef specialist, moderated the panel, which included Angus producers Joe Hampton, Mount Ulla, N.C.; Harvey Lemmon, Woodbury, Ga.; and Lydia Yon, Ridge Spring, S.C.

See the full article in this issue for more details.



**Editor's Note:** The previous coverage of the National Angus Conference contains the writing of several Angus staff. Credit goes to Crystal Albers, Angus Journal assistant editor; Kindra Gordon, field editor; Troy Smith, field editor; Angie Stump Denton, Angus Productions Inc. Web marketing director; Bill Bowman and Sally Northcutt.