The largest purse ever put up for a beef value contest — a total of \$244,500 was awarded to 26 Angus producers and feeders on Jan. 29 at the 2003 Cattle Industry Annual Convention and Trade Show in Nashville, Tenn.

The Best of *the* Breed (BoB) Angus challenge was announced at the 2001 Summer Conference in Denver, Colo., and began taking entries that September. Corporate sponsors are Agri Beef Co., Allflex USA, Certified Angus Beef LLC (CAB), Farmland National Beef (FNB), Merial SureHealth® and *Drovers*. Cattle were harvested at the FNB plant in Liberal, Kan., and contest winners were evaluated by the average beef value per hundredweight (cwt.) of carcass on a set contest grid. Amy Fahsholtz served as contest coordinator.

All of the grand-prize winners came from Kansas or Nebraska, and all were sorted at least once by ultrasound technology patented by the organization that placed first. Winning the \$100,000 top prize was the Kansas State University (K-State) Ag Research Center-Hays (ARCH), with an entry of 80 steers from registered Angus bulls. The steers were worth an average of \$132.05 per cwt. of carcass. They graded 100% Choice or better, with 91% qualifying for the *Certified Angus Beef*® (CAB®) brand, including 32% Prime. Another 6% qualified as Farmland Angus BeefTM. There were no discounts of any kind.

"Our herd is about 60% Angus, and we've worked with Dick Janssen at Green Garden Angus (Ellsworth, Kan.) on sire testing and ultrasound evaluations since 1989," says ARCH animal scientist John Brethour. Most of the steers were sired by Green Garden bulls, either from the ARCH herd or purchased from Roy Soukup of Ellsworth, Kan. Twenty were purchased from Martin Bland, Luray, Kan., sired by bulls from Gardiner Angus Ranch of Ashland, Kan. ARCH cows carried genetics from several Kansas Angus breeders.

Approximately 280 steers were evaluated by ultrasound in selecting contest entries, Brethour says. The steers were fed a ration based on grain sorghum with boosted protein levels from soybean meal. No growth implants were used.

Winning reserve champion and \$50,000 was Wickstrum Farms, Westmoreland, Kan., with an entry of twice as many steers (160) that came within 13¢ per cwt. of the top, at \$131.92 per cwt. All came from Wickstrum cows bred to registered bulls from Fink Beef Genetics, Manhattan, Kan., and were fed on the farm.

"We had no idea our cattle would do this well," says Larry Wickstrum, "but when the CONTINUED ON PAGE **176**



Ultrasound sorting enhances Angus genetics.

Story & photos by Steve Suther



▶ Pictured are (from left) Richard Jenkins, Merial, contest sponsor; Glenn Fischer, Allflex USA, contest sponsor; John Brethour, Kansas State University Ag Research Center-Hays, winner; Amy Fahsholtz, Best of *the* Breed coordinator; Kevin Hughes, Agri Beef Co., contest sponsor; John Stika, Certified Angus Beef LLC, contest sponsor; and Tracy Thomas, Farmland National Beef/U.S. Premium Beef, contest sponsor. *Drovers* magazine was also a sponsor.

► **Right:** Winning reserve champion and \$50,000 was Wickstrum Farms, Westmoreland, Kan., with an entry of 160 steers. Pictured are Lori Fink, seedstock supplier; Sharon and Larry Wickstrum, winners; and Amy Fahsholtz, BoB coordinator.





►Left: Placing third overall was Richard Bossen with a group of Angus-type steers of unknown origin sorted initially and into outcome groups by ultrasound. Bossen is pictured with Amy Fahsholtz.

Best of the Breed CONTINUED FROM PAGE 175

first sale group went 100% Choice with no [Yield Grade] 4s, we knew that didn't happen every day." BoB rules limited entries to two sale groups, so having to sell a large second group resulted in a few Yield Grade (YG) 4s overall. Still, only one steer did not grade at least Choice, and 90% made CAB, including 37% Prime.

"We could have entered a lot more,"

Wickstrum says. "When we were sorting by ultrasound, we weren't even halfway through what we planned to scan when we had the 160-head pen full." He never uses growth implants, and the cattle were fed a ration of mainly corn, wheat midds and sorghum silage for about 105 days. They were about 14 months old when harvested in May.

The next three positions for overall value

Insights from the winner

The recently completed Best of *the* Breed (BoB) Contest, or National Angus Carcass Challenge, is important as a documentation of how successful the Angus breed has been in meeting the need for improved carcass merit. It served as an audit of just what has been accomplished with the programs promoted during the last 15 years by John Crouch and the American Angus Association staff to identify those bloodlines and genetics with superior carcass traits and to disseminate those across the breed.

It is unfortunate that a similar contest was not held 10 or 15 years ago to serve as a benchmark for the amount of progress made in the past decade. The top six entries averaged 99% Choice and better; 15 years ago who would have thought that to be attainable? [Our championship entry was 100% Choice, 91% *Certified Angus Beef* [®] (CAB[®]) or better and 32% Prime with no Yield Grade (YG) 4 carcasses and 31% YG 2s.] I sincerely hope that a similar effort will take place in another decade or so, and I suspect that the results that we take pride in today will pale beside those future efforts.

The fact that this contest was structured with 80-head entries made it much more meaningful than the typical carcass contest with only single-digit consignments. The fact that candidates had to be selected as they were placed on the finishing rations and at least 100 days before harvest made it especially challenging. I hope that everyone, regardless of outcome, found it to be a very valuable experience, and that the contest bears repeating.

Over the years we had relied on the expected progeny difference (EPD) data in sale books from Green Garden Angus, Ellsworth, Kan.; Harms Plainview Ranch, Lincolnville, Kan.; Bar S Ranch, Paradise, Kan.; and Bob and Kirk Dickinson, Gorham, Kan., to build carcass merit in our commercial cow herd. Most of the calves used in the contest had been sired by bulls from Green Garden Angus, and some were from a collaborator who obtained his bulls from Gardiner Angus Ranch, Ashland, Kan. We felt that we were making progress, but this contest provided an opportunity to objectively measure how far we had come and proves that relying heavily on EPDs for selection works.

There are a couple of items that need to be highlighted. One is that our results agree with Doyle Wilson's contention that there is little correlation between intramuscular fat (IMF) and subcutaneous fat. I suggest that there is an either/or phenomenon where the genes dictate whether extra energy is stored as IMF to improve beef quality or on the outside where it constitutes waste. In the top six entries there were only 6% YG 4 carcasses. Our entry had none; in fact, our proportion of YG 2 carcasses was higher among those grading Prime (40%) than the others were (26%). I felt that the contest scoring did not adequately encourage stopping at YG 2 and, for that matter, did not appropriately penalize YG 4 carcasses.

I suppose that Doyle Wilson and Gene Rouse of Iowa State University (ISU), John Crouch, and I have been the world's leading proponents of ultrasound technology for the beef cattle industry, and the outcome of this contest vindicates us. At least eight of the top finalists in the contest consisted of cattle selected with ultrasound technology before they were enrolled. All of our seedstock suppliers have used ultrasound for improving carcass genetics for years. In fact we went to Green Garden, Bar S and the Dickinsons with our system to begin identifying superior cattle in the 1980s, which would make those breeders among the first to exploit the technology. And over the years ultrasound has been an important tool for selecting replacement heifers in our commercial herd — possibly the very most beneficial application of the technology.

Finally, winning an event such as this represents a constellation of efforts. One needs to thank the crew who cared for the cattle; my colleagues Keith Harmoney and Sandy Johnson, who actually did the bull and replacement heifer selection for our cow herd; the Angus breeders whom I mentioned above for diligently putting together the genetics that enabled us to improve our herd; and those from the American Angus Association responsible for building a breed improvement program that made all this possible.

were claimed by Richard Bossen and family, Arcadia, Neb., on Angus-type steers of unknown genetic background from the Sandhills region, sorted initially and to outcome group by ultrasound. All of the Bossen cattle were Merial SureHealth®certified, as about one-third of all BoB cattle were.

The third-place overall pen of 80 achieved an average value of \$131.17 per cwt., with a contest high 37.69% Prime within their 84% CAB acceptance overall. Had they managed an extra 89¢ per cwt. in average value, this set would have won a \$100,000 Merial bonus, which went unclaimed because the K-State cattle did not qualify.

Bossen operates a 6,000-head feedlot and buys 12,000 Angus-type cattle each year from within 100 miles of the central Nebraska yard. Ultrasound sorting is a matter of routine for the business, so it was no problem to sort out the BoB entry pens, Bossen says. All of the steers were implanted with growth promotants on arrival, but they were not reimplanted.

Brethour was a developer of the ultrasound technology patented by K-State and licensed to Cattle Performance Enhancement Co. (CPEC), Oakley, Kan.

"The Kansas Beef Council supported the research that made this possible," Brethour says. "They upgraded our equipment three years ago and asked us to develop technology to go upstream and sort sixweight cattle to outcome groups. This proves that we are able to do that. But I really have to credit the American Angus Association for a program that has been immensely effective in improving carcass quality in their breed.

"My colleagues often say you can go premium Choice and Prime, but you're going to have overfat cattle," Brethour notes. "This shows that's not true; you can have quality without the external fat. My proportion of Yield Grade 2s to 3s was the same on Primes as on our CAB cattle." In fact, these were the only BoB cattle to avoid YG 4 and 5.

Bossen's second-high pen of 80 (\$130.87) was Region VII Champion, and his son-inlaw Bill Garrelt's 80 steers (\$130.58) were the regional reserve winner.

See Table 1 for complete listing of BoB regional winners, including the top 10 fed in CAB-licensed feedlots. For more details on BoB, or to enter the 2003 National Angus Carcass Challenge, check out Beef Quality Connection on the Web at *www.beefquality.biz* or view CAB at *www.cabfeedlots.com*.

- John Brethour

Table 1:	: Regiona	l and overa	ıll winı	ners of t	he Best of	f the	Breed	l competition

Hot Price,			No.	Prize,	% Choice	% CAB		%		lot Car.,
\$/cwt.	Winner, City, State	Feedlot	Enrolled	\$	& above	Prime	FAB ^e	YG 1-2	YG 3	Wt., lb.
Grand cham 132.05	K-State Ag Research Center, Hays, Kan.	ARCH	80	100,000	100.00	91.48	6.13	30.85	69.15	799
Reserve champion										
131.92	Wickstrum Farms Inc., Westmoreland, Kan.	Wickstrum Farms Inc.	160	50,000	99.40	90.14	3.08	8.57	84.46	749
Third-place 131.17	overall Richard Bossen, Arcadia, Neb.	Bossen Livestock Co.	80	25,000	97.31	84.24	2.58	14.17	79.15	890
Region I ^f 124.24	Triple T Angus, Lewisburg, W.Va.	Gregory Feedlots Inc.	80	5,000	75.71	36.01	18.33	24.36	70.41	784
121.30	Dan Foglesong/KC Feeders, Gallipolis Ferry, W.Va.	KC Feeders	82	2,500	65.82	21.83	10.72	19.48	68.06	850
118.34	David Fitzpatrick, Winchester, Ky.	Hays Feeders LLC	82	1,000	44.60	12.57	2.40	44.39	53.44	823
Region II										
123.32	Midwest Feeders Inc., Ingalls, Kan. ^a	Midwest Feeders Inc.	118	5,000	86.90	44.68	5.08	12.43	78.87	881
120.47	Hill Creek Beef Co. LLC, Aliceville, Ala.	Supreme Cattle Feeders	90	2,500	51.87		10.34	38.23	56.92	812
119.26	Yon Family Farms, Ridge Spring, S.C.	Triangle H Grain & Cattle Co.	90	1,000	62.34	20.23	4.50	15.52	63.64	855
Region III 128.17	Mike Kasten Beef Alliance, ^{c, d} Millersville, Mo.	Irsik & Doll Feedyard	83	5,000	89.17	61.48	9.59	28.99	64.90	766
127.65	Generic Genetics, ^d Ida Grove, Iowa	Supreme Cattle Feeders	86	2,500	93.07	62.94	9.66	14.16	76.49	824
127.50	Circle A Ranch, ^d Iberia, Mo.	Irsik & Doll Feedyard	100	1,000	91.54	69.77	2.20	20.80	68.66	776
Region IV										
125.22	A.C. Freeman Angus, Holdenville, Okla.	Pfenninger Cattle Co.	85	5,000	79.39	48.28	8.61	39.76	59.03	777
124.72	U Lazy 2 Cattle Co., Quanah, Texas	Irsik & Doll Feedyard	103	2,500	79.92	34.93	17.80	36.51	62.43	749
124.35	Means Ranch Co. Ltd., Van Horn, Texas	Triangle H Grain & Cattle Co.	90	1,000	83.05	29.92	27.16	6.71	80.51	849
Region V 130.42	Siewert Ranch, Huntley, Mont.	Rice Bros. Feedyard LLC	80	5,000	98.73	83.16	6.52	27.79	66.98	786
128.66	Greeley Creek Ranch, ^d Livingston, Mont.	Hergert Land and Cattle Co.	82	2,500	100.00	75.02	6.25	3.81	77.20	844
127.78	Vermilion Ranch, ^d Billings, Mont.	Panhandle Feeders Inc.	90	1,000	100.00	72.88	3.41	6.33	67.97	876
Region VI										
125.49	Schmitz Feedlot LLC, Clayton, N.M.	Schmitz Feedlot LLC	84	5,000	84.48	39.72	19.55	21.12	71.43	808
120.49	John Josserand, Hereford, Texas ^b	Garden City Feed Yard LLC	80	2,500	66.12	20.45	15.00	11.94	70.47	852
119.67	Schmitz Feedlot LLC, Clayton, N.M.	Schmitz Feedlot LLC	84	1,000	63.59	18.56	7.08	16.87	70.56	889
Region VII										
130.87	Richard Bossen, Arcadia, Neb.	Bossen Livestock Co.	80	5,000	100.00	85.35	4.07	29.55	59.90	815
130.58	Bill Garrelts, Arcadia, Neb.	Bossen Livestock Co.	80	2,500	97.34	79.97	1.26	19.24	73.01	796
128.94	Blair Bros., Sturgis, S.D.	Poky Feeders Inc.	80	1,000	98.79	79.80	3.72	6.54	83.59	808

^aMississippi origin. ^bNew Mexico origin.

^cRecipient of \$2,500 as top value BoB pen from Irsik & Doll.

^AComplete of \$2,500 as top value both peri from this is a both. ^AComplete of \$2,500 as top value both peri from the period of the period o

⁶Farmland Angus Beef. ⁶For a map of which states are included in the seven regions see "A Q&A on the 'Best of *the* Breed' contest" on page 148 of the October 2001 *Angus Journal*.