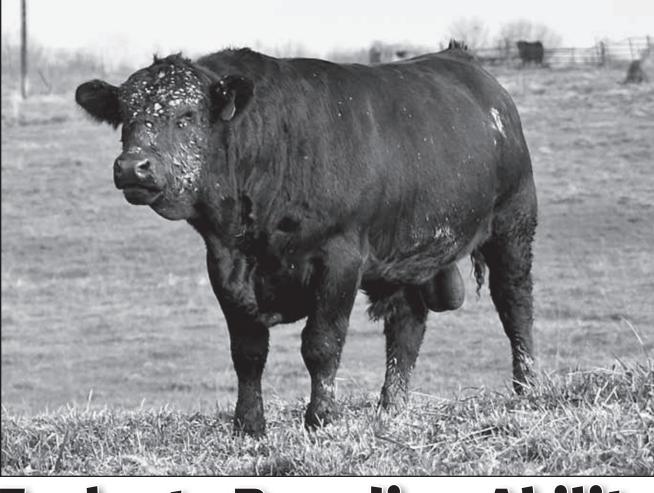


Volume 29, Number 3 • March 2012



Evaluate Breeding Ability

Bull breeding soundness exams can enhance profitability.

by **BARB BAYLOR ANDERSON**

If you're in the business of buying a bull, you should consider having a professional conduct a breeding soundness evaluation (sometimes referred to as a BSE) on the animal first. Carey Harbison, of Town & Country Veterinary Clinic in McLeansboro, Ill., says a BSE can show a \$17-per-cow return.

"A bull exposed to 24 to 30 cows will provide a \$408 return on a small investment," Harbison told participants at the Beef Sire Selection & Management Seminar recently in southern Illinois. "Bull fertility is much more important than the role of any individual cow. An infertile bull can devastate not just one breeding season, but several subsequent breeding seasons."

The elements of the exam

Fewer than one-third of bulls have a breeding soundness exam performed on them. Harbison recommends an exam be

performed under three different scenarios prepurchase; about 30-60 days prior to the start of the breeding season, or earlier for young sires; and postbreeding if fertility problems are suspected. In addition, Harbison advocates that the herd bull battery be evaluated annually, as

fertility can change from year to year.

A breeding soundness exam consists of seven key tests or evaluations: identification and history, structural soundness and

physical exam, rectal exam of internal genitalia, external exam of genitalia, scrotal circumference measurement, semen collection and evaluation, and

An infertile bull can

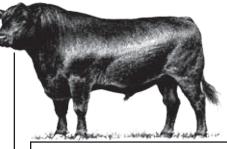
breeding season, but

several subsequent

breeding seasons."

libido and mating ability. The breeding soundness exam form from the Society devastate not just one for Theriogenology is generally used to gather the necessary information. A veterinarian can lead the process, with costs in the \$65-\$125 range - Carey Harbison per exam.

Identification and history should include present and past breeding history. Harbison says permanent



Features & News

Herd improvement starts with sire selection20
Use these adjustment factors to calculate across-breed EPDs
Genomic profile tool available for commerical cattle22
Association program has new name, same benefits24
Options for future solutions to feeding cattle32
Coverage from Cattle Industry Convention Cattlemen's College
Cattle can be trained to eat and control weeds52
Global food staple crop has multiple U.S. uses54
CAB premium details are often under-reported66
Two honored with CAB foodservice awards69
Good planning and groceries bring CAB premiums for Mike Duke70
Common folks produce uncommonly great beef74
AngusSource Carcass Challenge winds up four-year demo76
Cattle, grain and global market outlooks, plus weather predictions
Consumer issues discussed at Cattle Industry Convention
Six steps to help with farm transitions
Interactive web games give consumers a glimpse of agriculture90
USFRA starts conversations with consumers to build understanding92
Legislation is passed to end "man-made drought" in California94
Feeding strategy research may decrease <i>E. coli</i> prevalence 108
Column Links
Movin' Forward
Association Link10
The Source
Vet Link
Ridin' Herd
Beef Talk
Industry Link
Cow Camp Chatter
Certified Angus Beef LLC

Ridin' Herd
Beef Talk
Industry Link
Cow Camp Chatter
Certified Angus Beef LLC
Market Advisor
Angus Sales Link
New Products 110
Outside the Box 112

Staff

2
14
60
62

Services

Angus Journal subscription	. 35
NJAA membership	. 57
API Virtual Library	. 77
Angus Beef Bulletin EXTRA information1	113

Angus Beef Bulletin EXTRA

is emailed on or about the 20th of every month. Subscribe today at www.angusbeefbulletin.com

Evaluate Breeding Ability (from cover)

identification of the bull is essential for future reference. Past breeding history should include whether the bull was used in only one or multiple herds and whether the bull was a single sire or part of a multiple-sire breeding group. Such history can assist with disease prevention.

The structural soundness and physical exam should include both health and body condition. For example, eyes should be clear of any lesions, teeth should be in good condition for grazing and forage, and the overall health of the animal should be good.

An animal's body condition score (BCS) should be assessed. A bull should not be excessively fat, because it will affect sperm production, or excessively thin, because that can limit stamina. Bulls should be BCS 5+ to 6 at the start of the breeding season to allow for some weight loss. In addition, yearling bulls should be monitored for weight loss.

Harbison notes structural faults are heritable. The assessor should check rear leg conformation for load bearing during mounting and copulation, the possibility for joint swelling, and prospects for proper mobility in the pasture. Bull hooves should have no cracks, corns or be too long.

Scrotal examination

A rectal exam of internal genitalia is important, Harbison explains, because glands provide the nutrients and environments for sperm as they move into the female reproductive tract. An external genitalia exam should include the prepuce, penis and scrotum. Any inflammation, abscesses or adhesions can cause breeding problems. He adds that testicles should be firm and the bull should be checked for scrotal conformation to avoid other sources of breeding problems.

"Scrotal circumference measurements are done for sperm cell output, using a scrotal tape," he says. "Results are highly repeatable. We want circumference at a minimum to be 32 centimeters (cm) for bulls at 12 months, up to 36 cm for 2-year-old bulls. Larger circumferences are preferable because they affect sperm production and age at puberty in offspring females."

Semen collection for the breeding soundness exam should include an evaluation of volume, although Harbison says semen volume will vary by age, size and breed of bull. The semen color should be milky in appearance and free of blood, urine, dirt and pus.

Motility and morphology are more important indicators of semen quality. Motility is the vigor and number of cells

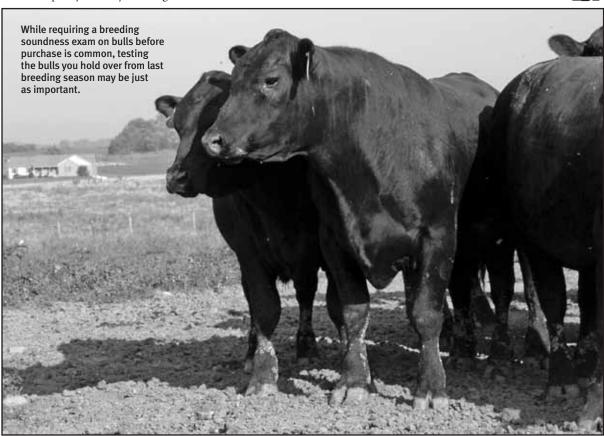


"For bulls to be classified as satisfactory potential breeders, they must pass the exam, and meet or exceed the scrotal circumference, sperm cell and motility minimums," says Carey Harbison, of Town & Country Veterinary Clinic in McLeansboro, Ill.

moving in a particular manner. Harbison says the minimum recommendation is 30%, but ideally it should be much higher. Morphology is a measure of normal and abnormal sperm present, and is a better predictor of fertility than motility. Morphology reflects the condition of the testes and excurrent duct system. The minimum percent to pass a breeding soundness exam is 70%. Sperm count is estimated by scrotal circumference, making accurate measurement crucial. Sperm concentration when freezing semen is another important consideration.

'For bulls to be classified as satisfactory potential breeders, they must pass the exam, and meet or exceed the scrotal circumference, sperm cell and motility minimums. Bulls who do not achieve these levels are classified as unsatisfactory potential breeders or have their classification deferred until they are retested at a later time," says Harbison.

The last evaluation, to determine libido and mating ability, is tougher to measure. Producers may have to make assessments during breeding, since both are key to reproductive performance.





Produced and published five times per year by Angus Productions Inc. in cooperation with the American Angus Association and Certified Angus Beef LLC.

3201 Frederick Ave. • Saint Joseph, MO 64506-2997 phone: 816-383-5200 • fax: 816-233-6575 office hours: (M-F) 8 a.m.-4:30 p.m. (Central time) web site: www.angusbeefbulletin.com

Staff are listed by name, phone extension and e-mail prefix. All direct phone numbers are "816-383-5..."; all e-mail addresses are "...@angusjournal.com"

General manager - Terry Cotton, 214, tcotton

Editorial Department

Editor – Shauna Rose Hermel, 270, shermel; Associate editor – Kasey Miller, 277, kaseymiller; Assistant editor – Linda Robbins, 245, lrobbins; Artists - Craig Simmons & Mary Black

Field editors

Barb Baylor Anderson, 305 Valley View Dr., Edwardsville, IL 62025, 618-656-0870, anderagcom@sbcglobal.net; Kindra Gordon, 11734 Weisman Rd., Whitewood, SD 57793, 605-722-7699, kindras@gordonresources.com; Becky Mills, Rt.1, Box 414, Cuthbert, GA 39840, 229-732-6748, beckymills81@yahoo.com; & Troy Smith, 44431 Sargent River Rd., Sargent, NE 68874, 308-527-3483; wordsmith@nctc.net

Publications and Production Department

Manager - LaVera Spire, 220, lspire

Advertising Department

- Advertising coordinators Doneta Brown, 232, dbrown; Karri Mildenberger, 289, kmildenberger; &
- Sara Reardon, 212, sreardon; Production coordinator
- Carol Beckett, 203, 226, cbeckett; Advertising artists
- Mike Bush & Monica Ford; Advertising Proofreader coordinator – Jacque McGinness



Circulation & billing manager – LaVera Spire, 220, lspire

Special Services Department

Coordinator – Sharon Mayes, 221, smayes; Assistants – Vickie Whitsell & Julie Tyliski; Artist – Susan Bomar; Proofreader – Melinda Cordell

Web Services Department

Coordinators – Doneta Brown, 232, dbrown; Sara Reardon, 212, sreardon; & Karri Mildenberger, 289, kmildenberger; Web developers - Tim Blumer, 227, & Thuy Copeland, 228

Photo Department

Coordinator - Kathrin Breytenbach; Assistant - Colette Weipert

Network systems coordinator - Bruce Buntin



Angus Productions Inc. Board of Directors

Chairman - Phil Trowbridge .ivestock ublications Vice chairman – Bryce Schumann President - Terry Cotton Secretary/Treasurer – Richard Wilson Directors - Charlie Boyd II, Vaughn Meyer, Jim Rentz, Chris Sankey, Darrell Silveira; and Gordon Stucky