## Timing of BVD vaccination vs. response

A group of 1,004 male and female fall- or spring-born Angus calves born in three consecutive years were used in this study. Calves were vaccinated with a modified-live product containing antigens against infectious bovine rhinotracheitis (IBR), bovine respiratory syncytial virus (BRSV), parainfluenza-3 (PI<sub>3</sub>), and bovine viral diarrhea virus Types 1 and 2 (BVD I and BVD II). An initial vaccine was given, followed three weeks later by a booster vaccination. No calves testing positive for BVD persistent infection (BVD-PI) were in the study. At time of first vaccination, fallborn calves averaged 107 days of age and 271 lb.; spring-born calves averaged 149 days and 359 lb.

Half of the calves were weaned at initial vaccination and half were weaned at booster vaccination. To measure antibody levels, blood serum was collected three weeks before initial vaccination, at initial vaccination, at booster vaccination, and three weeks after booster vaccination. Antibody levels were higher as age of dam increased. The level of maternal antibodies present at the time of vaccination reduced initial, booster and overall antibody responses to vaccination. Calves weaned at initial vaccination had greater final antibody level, initial response and overall response to vaccination than animals weaned at booster vaccination.

- The authors concluded that:
- 1. Calves from younger cows need to be vaccinated at an earlier date.
- 2. Older calves need to be vaccinated at an earlier date than younger calves.
- 3. If weaning and vaccination are done at the same time, calves should receive the initial vaccination when they are weaned.

Source: Stephen Hammack September Beef Cattle Browsing newsletter J. Animal Sci. 91:4440

## Timing of prostaglandin administration in timed AI

A study was conducted using 2,465 British or British-Continental postpartum cows in 13 herds located in eight states. Within-herd averages ranged from 3.6 to 5.9 years of age, 4.5 to 5.9 BCS, and 53 to 88 days postpartum. All cows were subjected to the CO-Synch + CIDR<sup>®</sup> protocol with one of the following prostaglandin F2α (PGF) alternatives:

- 2 doses PGF (25 mg per dose) eight hours apart, first dose at CIDR removal (2P8);
- ► 2 doses PGF (25 mg per dose) in two injection sites at CIDR removal (2P); and
- ► 1 dose PGF (25 mg per dose) at CIDR removal (1P).

All cows were artificially inseminated (AIed) 72 hours after CIDR removal. In five herds, any cows returning to estrus were AIed again; in eight herds cleanup bulls were used. Fixed-time AI pregnancy rates were significantly higher for 2P8 (55%) than 1P (48%), with 2P (51%) not significantly different from 2P8 or 1P. Rates were significantly higher for cycling cows and for those 3 years old or older. Overall pregnancy rates did not significantly differ among the three groups, but was significantly higher in cows 3 years old or older.

Since the 2P procedure did not significantly increase fixed-time pregnancy over 1P and the 2P would have higher treatment cost, there would be no advantage for 2P. The 2P8 procedure could be advantageous over 1P if the higher fixed-time pregnancy rate was worth more than the extra treatment and labor cost of 2P8.

Source: Stephen Hammack September Beef Cattle Browsing newsletter J. Animal Sci. 90:4814

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## CAB internship, scholarship deadlines noted

College sophomores or juniors who understand the cattle business and have a passion for effective writing could be the next interns with the world's leading beef brand.

Certified Angus Beef LLC (CAB) offers paid positions for those who will be juniors or seniors during the internships from next summer into spring 2015. Students with a strong writing background majoring in ag journalism or animal science/communications may apply for the 10- to 12-week summer position or part-time school terms.

Specific dates will be determined to coincide with academic semesters and all internships are available for college credit. The fall position may be offered as renewable through spring but depending on applicants, a separate spring internship may be

offered. Interns can work from home or from the CAB Supply Development office at 1107 Hylton Heights in Manhattan, Kan.

## Summary of deadlines:

► Nov. 25, 2013 – CAB Industry Information writing internship

- Dec. 6, 2013 CAB Colvin undergraduate scholarship
- ▶ Jan. 10, 2014 CAB Colvin graduate scholarship

Applications are due by Nov. 25, 2013, for the summer 2014 and/or school-year 2014-2015 positions. Apply online at *http://corporate.certifiedangusbeef.com/recruiting* by submitting a brief cover letter, résumé and three writing samples. For more information contact Miranda Reiman, CAB assistant director of industry information, at 308-784-2294 or mreiman@certifiedangusbeef.com.

CAB's Colvin Scholarship Fund will award six or more scholarships in 2014 totaling at least \$20,000. The funds will be split among five undergraduate scholarships — in the amounts of \$5,000, \$4,000, \$3,000, \$2,000 and \$1,000 — and a \$5,000 graduate-level scholarship.

College juniors and seniors who have shown commitment to the beef industry, either through coursework or activities, are encouraged to apply by the Dec. 6, 2013, deadline. Applications are evaluated on involvement, scholastic achievement, communication skills and reference letters. The graduate-level scholarship will be awarded to a full-time master's or doctorate student conducting research related to high-quality beef production. Applications for that award are due Jan. 10, 2014.

For more details, interested students should go online or contact Trudi Hoyle, CAB, at 800-225-2333 or thoyle@certifiedangusbeef.com.

- by CAB Staff