It must be spring – the snow has finally started to melt, there is a crocus diligently pushing thru the snow in my back yard and I caught a whiff of skunk smell last evening. And maybe most importantly for us sports enthusiasts, we are in the throes of March Madness with the NCAA Basketball tournament kicking off as I write this message. I hope signs of spring are surfacing in your world as well!

This past month, Dr. Kent Ames and I made our annual trip to northern Michigan to do something that we both truly enjoy. Now I know what you are all thinking – there goes Grooms and Ames off to do some ice fishing up on some frozen outpost or maybe skiing on the truly magnificent mountains in northern Michigan – typical academics! But nope, we spent a weekend with 150 4-H kids and their chaperones talking about veterinary medicine. This is something I have been doing since coming to Michigan State 15 years ago, and Kent even longer. It is a great opportunity to interact with enthusiastic youth, many of whom may be the future of our profession.

During the weekend, there was much discussion about Porcine Epidemic Diarrhea virus or PEDv – it showed up here in Michigan not too long ago, and now that it is here, everyone wants to know about it. If you haven’t had the chance to learn about PEDv, I would encourage you to get on the internet and find out what is going on. I know our swine veterinarian colleagues are working feverishly to help their clients deal with this devastating virus. AASV has a great website resource on PEDv – I encourage you to visit it.

One of the messages that Dr. Ames and I conveyed multiple times to the 4-H kids and their chaperones (mostly parents) is that there is no vaccine available yet, so the only tool available to prevent PEDv is biosecurity. Unfortunately, when you talk to kids, and their parents, most don’t really get biosecurity, probably because it doesn’t come in a bottle! But by the end of the weekend, we had these kids (and chaperones) understanding biosecurity and how it can reduce disease risk.

This is where challenges meet opportunity. PEDv is the challenge, talking about biosecurity is the opportunity. Many of us in the bovine world don’t think about biosecurity (or at least we don’t think about it seriously) as a way to prevent and control infections disease. In fact, when is the last time you talked with a client about ways to reduce biological risks? In today’s world of tight profit margins and increasing infectious disease risks because of the global world we live in, discussing biosecurity practices is something we should be doing regularly with clients. The goal? Prevent that devastating infectious disease outbreak. I bet the dairyman I worked with recently who lost 30% of his lactating herd due to BRSV pneumonia wishes he had thought about biosecurity (by the way, a great teaching case!)

It is not that we need to get to the level of biosecurity of the swine or poultry industry, but I think doing small things to reduce biological risks makes sense. And there is nobody better prepared to discuss these ideas with our clients than
veterinarians. Let me give you an example. Several years ago, I worked with an expanding dairy farm that went through some significant abortion losses due to BVDV. After screening the herd for PIUs and modifying their vaccine program, we talked about biosecurity going forward during the farm expansion. We discussed the risk areas for bringing the virus (and other pathogens) onto the farm and developed some biosecurity protocols to reduce risk. The primary one for BVDV was to isolate new purchases when possible until they could be tested for PI status. This strategy has served this client well in reducing BVDV risk (and I am sure others as well). I am not taking credit for this dairyman’s success, but I am taking credit for discussing biosecurity and its importance for disease control.

Bottom line, I think with the recent example of PEDv and the knowledge that something like this could very easily and will likely happen in the cattle industry, we should take the opportunity to discuss biosecurity with our clients. Stealing a line from our Veterinary Practice Sustainability Committee, is there a “value proposition” here? Absolutely! I really don’t think there is anyone else visiting cattle farms today who can help reduce biological risks more than veterinarians. Have you ever thought about offering a biological risk audit for your clients? I believe this is a great opportunity!

I should point out that there are some excellent biological risk management resources available that the AABP Biological Risk Management and Preparedness Committee has put together. They can be accessed at http://www.aabp.org/Members/committee.asp.

I hope the emerging spring brings you new opportunities and most importantly, success for your favorite basketball team.

Dan Grooms

* Photo by New Mexico Stock

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| **World Association for Biuiatrics** |
| **2014** | **2016** |
| Cairns, Australia | Dublin, Ireland |
| **July 27 – August 1** | **July 3 – 7** |

DISCLAIMER

The AABP does not take responsibility for information contained in or accuracy of the abstracts published in this newsletter.


2014 AABP Annual Conference Program Now Available

The program for the 47th Annual AABP Conference is now available online at www.aabp.org. This year’s conference returns to popular Albuquerque, New Mexico, September 18-20 (preconference seminars Sept.14-17). The 2014 conference theme is “Reconnect. Retool. Reclaim.” and is focused on adding to the practitioner’s skillset to enhance business opportunities.

The program committee has recruited an outstanding lineup of industry experts and successful practitioners, and features a keynote address by Dr. Lowell Catlett, entitled “Welcome to the Future of Agriculture, Healthcare and Food Safety”. This dynamic program offers 21 practice building preconference seminars and features a newly designed one-day seminar for veterinary technicians. The conference sessions for the beef (cow-calf and feedlot), dairy, and small ruminant practitioner are focused, practical and relevant to any veterinarian working with cattle today.

Ten limited-enrollment Clinical Forums will be offered with practitioner-focused topics such as practice expansion, business succession planning, feedlot consulting, residue avoidance and disease investigation to name a few. The balance of the
program includes Practice Tips, Research Summaries and student-focused sessions (Case Reports, Quiz Bowl, and Student Delegate Program).

The ever popular exhibit hall will offer opportunities to visit with familiar faces while learning about the latest in technologies and services. Finally, the 2nd Annual AABP Stampede 5k Run provides another opportunity to enjoy the beauty of a cool September Saturday morning in the high country.

Registration for the meeting will open May 1. You owe it to yourself to visit www.aabp.org, click on the “conference” drop down menu and see what practice tools await you in beautiful Albuquerque. Make plans to “Reconnect” with your fellow bovine practitioners this September.

Dr. John M. Davidson, AABP Program Committee Chair and AABP President-Elect

Call For Volunteers – AABP Board of Directors Creates Two Task Forces

AABP Communications Task Force
Communication with membership in any organization is critical to maintain engagement and deliver services. As an organization representing a diverse membership (geographically and professionally), it is important to make sure that our means of communication are still effective and relevant. In light of this, the AABP Board of Directors has voted to form a Communications Task Force to review current AABP member communication tools.

There are several reasons for this 1) we recognize that the way membership communicates evolves over time, so reviewing and potentially evolving our communication tools is necessary as well, 2) communication takes AABP resources, so making sure that we are using our resources in a fiscally responsible yet effective way is important, 3) with the recent hiring of our director of communications (Geni Wren), the time is good to review where we are and where we would like to go with respect to member communications.

The charge for this task force will be to review all AABP communication formats (electronic and written) and make recommendations to the AABP Board of Directors on suggested improvements in current communication tools or more broadly in strategic directions that AABP should consider with respect to communications.

The Board is currently seeking volunteers who are willing to serve on this task force. If you are interested and willing to serve in this important task force, please contact Dr. Gatz Riddell at mgriddell@aabp.org.

AABP Membership Recruitment and Retention Task Force
As with any professional organization, recruiting and retaining members is vital to maintain an effective organization. As our profession undergoes changes, it is important that AABP continues to evolve in making sure that we are meeting the expectations of our current and future members. At the March AABP Board of Directors Meeting, the BOD voted to form a Membership Recruitment and Retention Task Force.

This task force will evaluate current AABP membership practices and provide recommendations to the AABP Board of Directors for opportunities to improve member recruitment and retention to ensure the long term mission of the AABP will be met. Specific goals of this task force will be to 1) review existing membership data to identify membership trends across demographics, 2) review existing membership recruitment and retention activities to assess adequacy, 3) develop initiatives to broaden the appeal of AABP to larger segment of veterinary practitioners, 4) develop initiatives to better communicate advantages of AABP Membership to non-members.

The Board is currently seeking volunteers who are willing to serve on this task force. If you are interested and willing to serve in this important task force, please contact Dr. Gatz Riddell mgriddell@aabp.org.

AABP Representation on the AVMA Animal Agriculture Liaison Committee
The AABP Board of Directors is seeking interested AABP members to represent the AABP and bovine practice on the AVMA Animal Agriculture Liaison Committee (AALC). Information regarding the duties, time commitment and area of impact for the committee can be found on the AVMA website at https://www.avma.org/Members/Volunteer/BecomeAVolunteer/Pages/aalc.aspx and associated pages or can be requested from the AABP office (aabphq@aabp.org or mgriddell@aabp.org). The AABP needs to fill both the positions of Primary and Alternate Representative on the AVMA AALC.

The AABP Board of Directors requests that interested members submit their name and a one to two page resume to the AABP office (aabphq@aabp.org; Fax (334) 821-9532; or AABP, P.O. Box 3610, Auburn, AL 36831) by May 15, 2014.
AABP Opens Online Vice President Voting

AABP has opened voting to members for the Office of Vice President. Dr. David Rethorst and Dr. Mark Thomas have been placed on the ballot for the office of AABP Vice President. There will also be the opportunity on the ballot for write-in candidates.

AABP members will be able to vote online or by using a hard-copy ballot. To vote online and/or view candidate bios, visit www.aabp.org/ballot/. If you would prefer a hard-copy ballot, please contact the AABP office at 1-800-COW-AABP, fax the AABP office at 334-821-9532, or email aabphq@aabp.org and you can receive a ballot by fax, email or mail.

Voting closes June 30, 2014. A description of the duties of AABP Vice President can be found in the AABP bylaws at http://aabp.org/members/documents/bylaws.pdf.

2014 Cattle Production Veterinarian Hall of Fame Voting Now Open

Voting is now open for the 2014 Cattle Production Veterinarian Hall of Fame. The Hall of Fame was established in 2011 to celebrate the rich traditions of production veterinary medicine by honoring the exceptional men and women who have made lasting contributions to the veterinary profession.

Candidates for the 2014 award are:

**Beef:**
- Dr. David Bechtol
- Dr. Dallas Horton
- Dr. Ed Johnson

**Dairy:**
- Dr. John Dahl
- Dr. Maarten Drost

AABP members can vote for one beef and one dairy nominee. Vote online at http://aabp.org/halloffame/ by August 4, 2014.

The award is sponsored by the American Association of Bovine Practitioners, the Academy of Veterinary Consultants, Merck Animal Health, Bovine Veterinarian and Osborn|Barr.

Dues Invoices and Membership Information Updates

The AABP 2014-2015 regular member dues invoices will be mailed to the membership in early May (email notification for online renewal will be provided during the month of April).

These invoices will have space available for updating your address, phone, fax and email information. It is very important for you to help the AABP office maintain a current membership database for future mailings and publication distribution.

To update your member profile online, go to www.aabp.org/members/search/myaccount.asp and log in to the members area of the AABP website. The online dues payment process can be accessed by going to http://www.aabp.org/dues/ and logging in. Your log in information (your member number and your password), if forgotten, can be accessed from the member login section of the AABP home page.

MSU Vet Students Contribute to Farm Bill

Two Michigan State University veterinary students contributed to the 2014 Farm Bill, and AABP had a part in supporting the process.

In 2011, AABP helped financially support MSU’s Food Systems Fellowship (FSF) position (now in its 9th year) with the US Senate Committee on Agriculture, Nutrition and Forestry (Senate Agriculture Committee), which resulted in then second-year veterinary student Chelsea Render from Manchester, Mich., spending time in Washington, D.C. as a veterinary fellow. The support of this program is one of many efforts that AABP has undertaken to support the development of the next generation of bovine veterinary leaders.

Now planning to graduate from veterinary school this May, in 2011 Render was the first veterinary student to be accepted as a veterinary fellow for the Senate Agriculture Committee through the MSU Food Systems Fellowship program with support of groups such as AABP. She ended up working in this program, and then on policy staff for the committee, for 15 months. “I was immediately surprised at how involved I was in the policy-making process and took every opportunity to make a difference,” Render says. “I brought a veterinary, public health, or ‘on-the-farm’ perspective to a variety of issues. This perspective became valuable enough that I was actually offered a full-time policy position as the Farm Bill process started moving.” With support from MSU, Render temporarily suspended her veterinary studies to take advantage of that rare opportunity.
While there, Render’s job as a fellow was keeping up with current issues in agriculture where she researched, interpreted related legislation and provided briefs for Chairwoman Sen. Debbie Stabenow (D-Mich.) and ag staff. “For example, cases of foodborne illness outbreaks often led to the introduction of some food safety bills and increased pressure on government to regulate meat processing facilities,” she says. “So, I needed to be prepared for the practical implications and political challenges arising from such situations.” Render provided background and technical insight for policy decisions and to draft legislation, all which had the potential to be included in the Farm Bill.

The goal of the FSF program is to provide veterinary students interested in a career as a veterinarian in the food animal industry the opportunity to become exposed to the food industry through summer employment with agriculture industry partners. AABP President Dr. Dan Grooms has been directing the program since it started.

“Over the years, it has become incredibly evident to me how important it is for members of any profession to be involved in the public policy development arena,” Grooms says. “If you are not involved as a profession, your voice is not heard and decisions are made without your input or needs considered. Exposing and developing bovine veterinarians to work in this arena is incredibly important if we want our profession to remain strong and to have a voice in the decisions made that affect us and the industry we serve.”

Heather Arnold, Clarkston, Mich., will graduate from MSU’s veterinary school in 2016, and as a veterinary fellow for 12 weeks last summer, she arrived in D.C. just in time to see the Farm Bill approved by the committee and brought to the Senate floor for debate. “For each amendment introduced, the committee staff had to compile research to help senators on the committee decide how to vote,” Arnold explains. “As part of the process, we took meetings with many ag industry and producer groups to get their perspective, including Dr. Grooms who represented the AABP.”

Initially, Arnold was worried that after focusing on the sciences for most of her life her writing skills and policy knowledge would be subpar. “But as it turned out, my fellowship required many of the same skills as vet school. I would be assigned a topic and expected to thoroughly read up on it and summarize it in layman's terms. It was similar to cramming for a test and then having to explain the topic to a client.”

Having an ag background was extremely beneficial for Render as some of her most interesting and challenging work involved dairy policy. “Milk producers from across the country have demanded a modernized dairy policy, one that accounts for high feed costs and the uncertainty that comes with wide swings in milk prices,” she says. “My farm experience was the primary reason that I got involved in those negotiations, knowing that a one-size-fits-all law would not work for an industry as diverse as dairy farming.”

Render also worked on heated and contentious issues such as animal welfare, and she headed up a hearing on cage standards for laying hens. “Both the politics and emotions surrounding this issue made it difficult to work on and even more difficult to find solutions. However, I am pleased to have been able to work on a rare animal welfare hearing for the Senate Agriculture Committee.”

There was one significant highlight of Arnold’s experience with the fellowship. “After the Farm Bill was voted down in the House last summer, my hopes of being in D.C. when it passed were crushed. In my wildest dreams I could never have hoped for anything close to watching the President sign it into law in February at the Michigan State University College of Veterinary Medicine. It was a great experience and an amazing way to cap it off.”

Render encourages others to pursue activities like the FSF. “Our industry will increasingly feel the effects of legislative and regulatory changes in areas of animal welfare, environment, drug residue and oversight, food safety, traceability, and more. As veterinarians, we can be the experts. Perhaps if more of us understand the process, we can influence government-industry relations in a fair and positive way moving forward.”

Find out more about the Food Systems Fellowship program at http://cvm.msu.edu/fsf.

**Michigan State Launches Dairy Repro Website**

Michigan State University is launching a website, http://dairycattlereproduction.com/ containing specific topics about ovarian dynamics, fertility programs for dairy cows, and embryonic and fetal development. The goal for the site is to be a reference guide for veterinarians to enhance profit of their client’s herds.

This resource guide contains 3D animations of follicle development through the estrous cycle and during treatment with one of the fertility programs featured on the site, ultrasound videos of embryonic/fetal development from day 29 to 75 of gestation including color Doppler, ultrasound videos of ovarian development during treatment with a fertility program, and printable calendars of fertility programs for first and subsequent artificial insemination.

New information will be added on a regular basis as research projects are completed that can enhance reproductive management of dairy cows.

Submitted by the AABP Reproduction Committee
AABP offers the third webinar in a four-part series on practice management, called “Marketing Your Value Proposition.” Following the first two, “Constructing a Value Proposition” and “Partial Budgeting”, this webinar offers the viewer advice on how to market his/her services to clients.

The webinar covers the four P’s of marketing – product, price, place and promotion, looking at the cost of providing a service and how to price it accordingly. The webinar uses the example of offering embryo transfer services in a practice and details how to effectively market that service.

“This session provides the basics around the questions we often hear from our colleagues – how do I market my services and remain professional?” says Dick Lewis, a business consultant to AABP’s Veterinary Practice Sustainability committee that produced the webinars. “If you have spent the time and effort to build a good value proposition and made the investment to improve a specific aspect of it, the next step is to make sure that you’re marketing it effectively to clients and prospects. A significant improvement and investment in your practice that remains a secret isn’t helping you or your clients.”

Project leader of AABP’s committee, Dr. David Welch, adds, “This webinar focuses on the real needs of the client and how we can address those needs. It explores the principles of marketing, how to develop an integrated marketing program, and how to utilize the technique of ‘consultative selling’. Consultative selling focuses on real needs of the client and can be equated to prescribing a solution to a client's needs, rather than pushing a service or product.”

AABP members can access this and other webinars for free by logging in at www.aabp.org, then click on Resources and Webinar Series. There is also an opportunity to join a discussion forum on the webinars on this same page. Non-AABP members wishing to view the webinar can find it online at the KSU Beef Cattle Institute website at www.animalcaretraining.org/vps. For non-members, the cost is $50 per webinar.

Donate Now to the Amstutz Auction!

The Amstutz Scholarship Committee is now accepting donations for the 2014 Live and Silent Auctions to be held at the 2014 AABP Annual Conference in Albuquerque. It’s easy to donate with our new online form. Go to http://www.aabp.org/auction/newitem.asp, or on the AABP homepage (www.aabp.org/), click on “Conference” then “Amstutz Auction”, then “Submit an Auction Item”.

The deadline for submissions is May 31, 2014, so items can be put in the auction catalog. Donations will not be accepted after that time. Please do not bring auction items to the conference unless requested by AABP. Donor will ship their item to the winning bidder of the item after the conference.

Student chapters and bovine clubs are also invited to donate to the Amstutz Silent Auction. Please work through your Junior Delegate or Faculty Representative as your point of contact. To make a donation, please use the Student Chapter auction donation form at http://www.aabp.org/auction/newstudentitem.asp -- do not use the regular auction form that is on the AABP auction page.

Note that student chapter donations are due online April 15, 2014 so items can be put in the auction catalog. Donations will not be accepted after that time. Please do not bring auction items to the conference unless requested by AABP. Donor will ship their item to the winning bidder of the item.

Your donation supports the future of bovine medicine. The 2013 Auction broke all records with a total proceeds of over $55,000 and we aim to top that amount in 2014. In addition to funding AABP’s premier student scholarship program, the auction is perfectly timed for early holiday shopping. We will again print and mail an auction catalog before the Annual Conference that lists the items you can consider buying as gifts to family, friends and clients.

AABP will decide which items will be in the silent and live auctions. Please contact Dr. Jim Floyd (James_Floyd@ncsu.edu) or Geni Wren (gwren@aabp.org) if you have questions.

AABP Education Grants

Formal advanced training in cattle production medicine can help expand the skills and knowledge base of the cattle production medicine practitioner. In the spirit of supporting the development of future bovine practitioners, the AABP Education Grants are available again this year.

The Education Grant program will provide grants of $750 that will be available for incoming senior students and new graduates (those who have graduated in the previous six months). These grants will be awarded to students attending an
accredited veterinary college advanced education program or another AABP-approved continuing education endeavor. Applicants must be a member or student member of the AABP.

Applications for funding are available on the website. For more information and access to the online application form, visit http://aabp.org/Students/EducationFundDesc.asp where you will find online access to submit your application, as well as a reference letter from a faculty member and a brief description of the course or continuing education opportunity. The deadline for applications for the 2014 AABP Education Grants is April 15, 2014.

CALL FOR ABSTRACTS
Research Summaries and Scientific Poster Sessions
47th Annual Conference of the AABP
September 18-20, 2014 in Albuquerque, New Mexico

The 47th Annual Conference of the American Association of Bovine Practitioners will once again feature scientific sessions focused on cutting edge research that is directly applicable to the health, welfare and productivity of cattle as well as food and environmental safety associated with cattle production. These sessions provide the opportunity for researchers from around the world to disseminate state of the art information to bovine practitioners who can then utilize it to improve the cattle industry.

Research projects having direct application to bovine practitioners are being solicited for presentation at the Oral and Scientific Poster Sessions for the 2014 Annual Conference of the AABP. Project summaries focused on all areas of bovine health, welfare and production are welcome including pharmacology, epidemiology, medicine, surgery, economic analysis, pathology, pre-harvest food and environmental safety, diagnostics, and health monitoring. Projects should have relevance to bovine practitioners and may be broadly applicable to the cattle industry or more specifically applicable to the beef or dairy industry.

Oral presentations made by graduate students in the AABP Research Summaries will be eligible to compete in the “AABP Graduate Student Research Summary Presentation” competition. The top three presenters from the graduate student competition will receive cash awards.

To be considered for the AABP Research Summary sessions (either the oral or poster sessions) and publication in the annual meeting proceedings, your abstract must be submitted to AABP by May 1, 2014. Abstracts must be submitted electronically. For more information and to submit an abstract, go to www.aabp.org and select the Conference link located on the top of the page and then click on the Abstract Submission link located in the Conference submenu.

If you have questions about the research summaries program, contact Drs. Jeff Ondrak (jondrak@gpvec.unl.edu) or Chris Chase (christopher.chase@sdstate.edu).

CALL FOR AASRP ABSTRACTS
Small Ruminant Research Summaries
AASRP Meeting at 47th Annual AABP Conference
September 19, 2014 in Albuquerque, New Mexico

For the first time, the 47th Annual AABP Conference will feature a scientific session focused on small ruminant research that is directly applicable to the health, welfare and productivity of goats, sheep, camelids or farmed deer. Faculty, graduate students, practitioners or veterinary students are urged to disseminate information to practitioners. Each presentation should be limited to 15 minutes.

Research projects having direct application to small ruminant practitioners are being solicited for the Oral Session on Friday, 4:15 to 6:15 p.m. Project summaries focused on all areas of small ruminant health, welfare and production are welcome including pharmacology, epidemiology, medicine, surgery, economic analysis, pathology, pre-harvest food and environmental safety, diagnostics, and health monitoring. Projects should have relevance to practitioners and may be broadly applicable or more specifically applicable.

To be considered for the AABP Small Ruminant Research Summary session and publication in the annual meeting proceedings, the abstract must be submitted electronically to AABP by May 1, 2014.

For more information and to submit an abstract, go to www.aabp.org and select the Conference link located on the top of the page and then click on the Abstract Submission link located in the Conference submenu.

If you have questions about the AASRP research summaries program, contact Patty Scharko (pschark@clemson.edu or 803-422-6998).
Amstutz Scholarships

The Amstutz scholarships are funded jointly by the AABP Amstutz Scholarship Fund and the Eli Lilly & Co Foundation on behalf of Elanco Animal Health. In 2013, nine $7,500 scholarships were awarded.

Applicants must be student AABP members enrolled in colleges of veterinary medicine in Canada, the United States, Ross University and St. George’s University.

Applicants must be in their second year (will graduate in 2016) of the veterinary curriculum at the time of application. Completed electronic applications and two electronic letters of reference must be received on the AABP website by May 31, 2014.

For more information and to apply, visit http://www.aabp.org/Students/scholinfo.asp.

Cargill Animal Nutrition–AABP Foundation Scholarships

Cargill Animal Nutrition, in cooperation with the AABP Foundation, will award five $2,000 scholarships to veterinary students in the United States who are currently in their junior year (class of 2015). Applicants should have a strong background and interest in either dairy or beef.

To apply, go to the AABP Foundation webpage at http://foundation.aabp.org/Cargill/. Completed applications must be received by June 15, 2014. Successful applicants will be notified by August 1.

AABP Foundation–Zoetis Veterinary Student Scholarship

The AABP Foundation and Zoetis announce the continuation of the AABP Foundation–Zoetis Veterinary Student Scholarship Program. Offered to U.S. third-year veterinary students (class of 2015), the scholarship program provides cattle medicine-interested students with financial support to help offset the high cost of veterinary education and helps prepare them for a future in the beef and dairy industries.

This scholarship is a $5,000 award. As a part of the scholarship, recipients will be eligible to receive reimbursement for travel and housing expenses for the AABP Annual Conference in Albuquerque, N.M. in September, 2014.

Applicants must provide information regarding their cattle industry background and provide answers to several essay questions pertaining to the role of large animal veterinarians in today’s society.

Applicants must be students enrolled in a college of veterinary medicine in the United States or be U.S. citizens enrolled in schools outside of the United States. The scholarship application process will be open from April 15 to June 15, 2014, with the electronic application found online at http://foundation.aabp.org/zoetis/.

Apply for the Dr. Bruce Wren CE Award

If you are a dairy or beef cattle veterinarian who has been out of school less than 10 years and would like to further your education/training in the field/subject of your choice, apply for the Dr. Bruce Wren Continuing Education Award sponsored by AgriLabs and awarded at the 2014 American Association of Bovine Practitioners meeting in Albuquerque, NM, Sept. 18-20.

Two $5,000 individual awards (one for beef, one for dairy) will be given in honor of Bruce Wren, DVM, PhD. Candidates will design their own award through an application process and judging criteria based on a professional-development plan and letters of reference. Past recipients have used the award for things such as ultrasound training, reproduction courses, advanced degrees or specialized training and to attend conferences for CE (see website for details).

Candidates must be out of veterinary school for a minimum of one year and a maximum of 10 years to be eligible. Airfare and one-night hotel expenses for the AABP conference will also be provided by AgriLabs for recipients of this award.

A completed online application form (beef or dairy) and three letters of support must be submitted by July 15, 2014 to be considered. More information is available at http://www.agrilabs.com/t-Bruce_Wren_Award.aspx.
AETA Annual Convention Student Scholarship Award Announcement

The American Embryo Transfer Association is offering six Student Scholarship awards to help cover expenses at the 2014 AETA & CETA/ACTE Joint Annual Meeting in Madison, Wis, October 6-8, 2014.

The Scholarship includes student registration, pre-convention seminar(s), Friday and Saturday scientific sessions, banquet, breakfasts, lunches, breaks, maximum hotel accommodations for three nights, round trip airfare for one, and entrance to the pre-conference social.

Scholarship deadline is July 31, 2014. For more information please visit http://aeta.org/2014/.

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Evaluating Approaches to Measuring Ocular Pain in Bovine Calves with Corneal Scarification and Infectious Bovine Keratoconjunctivitis–associated Corneal Ulcerations


Infectious bovine keratoconjunctivitis (IBK) is a common ocular disease in cattle, associated with a 6.8 to 13.6 kg decrease in weaning weight. Antibiotic therapy is available but it is unclear if pain mitigation as an adjunct therapy would reduce the weight loss associated with IBK. Before assessing the impact of pain mitigation therapies, it is first necessary to validate approaches to qualifying ocular pain. The objective of this study was to evaluate approaches to qualifying ocular pain in bovine calves (Bos taurus) with IBK. Our a priori assumption was that scarification or corneal ulcerations consistent with IBK are painful compared to normal eyes. To quantify this difference in pain, we assessed 4 tools: pressure algometry–mechanical nociceptive threshold (PA-MNT), corneal touch thresholds (CTT) obtained with the use of a Cochet-Bonnet aesthesiometer, and assessment for the presence of blepharospasm and photophobia as metrics for pain. Using a 1-eye randomized controlled challenge trial, 31 calves with healthy eyes were randomly allocated to treatment groups, and then a left or right eye was randomly assigned for corneal scarification and inoculation with Moraxella bovoculi or Moraxella bovis. A repeated measures analysis of variance was used for PA-MNT, with significance set at \( P < 0.05 \). A log (base 10) transformation was used to stabilize the variance, and Tukey's t tests were used to test differences between assessment days for each landmark. Calves had statistically significantly lower PA-MNT scores (which indicates more pain) the day after scarification relative to baseline measurements (4 d before scarification). For example, at 1 landmark the median PA-MNT (kg/force) prescarification was 4.82 (95% confidence interval [CI]: 3.92–5.93) and 3.43 (95% CI: 2.79–4.22) postscarification. These data suggest PA-MNT may be a tool for quantifying ocular pain in calves. No differences (\( P < 0.1 \)) in PA-MNT scores between scarified and not-scarified eyes were detected for any landmark on any day. This result suggests that the pain response occurs over the entire face, not just the affected eye. Corneal ulcerations consistent with IBK were not associated with statistically significant differences in PA-MNT or CTT at eye or calf levels. Not surprisingly, scarified eyes were more likely to exhibit blepharospasm and photophobia compared to healthy eyes. Due to blepharospasm, the use of the Cochet-Bonnet to evaluate corneal sensitivity by CTT was of limited value.

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Lack of Evidence for the Presence of Emerging Hobi-like Viruses in North American Fetal Bovine Serum Lots

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The detection of an emerging pestivirus species, “HoBi-like virus,” in fetal bovine serum (FBS) labeled as U.S. origin, but packaged in Europe, raised concerns that HoBi-like virus may have entered the United States. In the current study, 90 lots of FBS originating in North America (NA) were screened for pestivirus antigen and antibodies. Lots in group 1 (G1, 72 samples) and group 2 (G2, 9 samples) originated in NA and were packaged in the United States. Group 3 (G3) was composed of 9 lots collected in NA and processed in Europe. Lots in G1 were claimed negative for Bovine viral diarrhea virus (BVDV), while lots in G2 and G3 were claimed positive by the commercial processor. All lots in G1 and G2 tested negative by reverse transcription polymerase chain reaction (RT-PCR) using HoBi-like–specific primers. Two G1 lots tested positive by BVDV RT-PCR. One of these was also positive by virus isolation. All G2 lots were positive by BVDV RT-PCR. In addition, four G2 lots were VI positive while 1 lot was antigen-capture enzyme-linked immunosorbent assay (ELISA) positive. Two G3 lots were positive by HoBi-like–specific RT-PCR tests. All lots were negative for HoBi_D32/00 neutralizing antibodies. Seven lots (4 G1; 1 G2; 2 G3) had antibodies against BVDV by virus neutralization and/or antigen-capture ELISA. While there is no evidence of HoBi-like viruses in NA based on tested samples, further studies are required to validate HoBi-like virus–free status and develop means to prevent the spread of HoBi-like virus into NA.

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Increased Mortality in Groups of Cattle Administered the β-Adrenergic Agonists Ractopamine Hydrochloride and Zilpaterol Hydrochloride

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The United States Food and Drug Administration (FDA) approved two β-adrenergic agonists (βAA) for in-feed administration to cattle fed in confinement for human consumption. Anecdotal reports have generated concern that administration of βAA might be associated with an increased incidence of cattle deaths. Our objectives, therefore, were to a) quantify the association between βAA administration and mortality in feedlot cattle, and b) explore those variables that may confound or modify this association. Three datasets were acquired for analysis: one included information from randomized and controlled clinical trials of the βAA ractopamine hydrochloride, while the other two were observational data on zilpaterol hydrochloride administration to large numbers of cattle housed, fed, and cared for using routine commercial production practices in the U.S. Various population and time at-risk models were developed to explore potential βAA relationships with mortality, as well as the extent of confounding and effect modification. Measures of effect were relatively consistent across datasets and models in that the cumulative risk and incidence rate of death was 75 to 90% greater in animals administered the βAA compared to contemporaneous controls. During the exposure period, 40 to 50% of deaths among groups administered the βAA were attributed to administration of the drug. None of the available covariates meaningfully confounded the relationship between βAA and increased mortality. Only month of slaughter, presumably a proxy for climate, consistently modified the effect in that the biological association was generally greatest during the warmer months of the year. While death is a rare event in feedlot cattle, the data reported herein provide compelling evidence that mortality is nevertheless increased in response to administration of FDA-approved βAA and represents a heretofore unquantified adverse drug event.

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Evaluation of Feeding Distiller’s Grains, Containing Virginiamycin, on Antimicrobial Susceptibilities in Fecal Isolates of Enterococcus and Escherichia coli and Prevalence of Resistance Genes in Cattle
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Dried distiller’s grains (DG) produced from ethanol fermentations dosed with 0 (control), 2, or 20 mg/kg virginiamycin-based product or spiked with virginiamycin (VM) postfermentation were fed to cattle and effects on antimicrobial susceptibility, and prevalence of antimicrobial resistance genes in commensal bacteria was examined. Biological activity assays of DG (from each fermentation) indicated a concentration of 0, 0.7, and 8.9 mg/kg VM, respectively. Twenty-four crossbred beef steers were fed 1 of 4 diets (containing 8% of each of the different batches of DG) and a fourth using 8% of the control DG (0 mg/kg VM) + 0.025 g/kg V-Max50 (positive control) for 7 wk. Fecal samples were collected weekly throughout the experimental period and cultured for Escherichia coli and Enterococcus, and isolates were examined for antimicrobial susceptibility, antimicrobial resistance genes (vatE, ermB, and msrC in Enterococcus), and integrons (E. coli). No treatment differences (P > 0.05) were observed in antimicrobial susceptibility of the E. coli isolates. Enterococcus isolates were resistant to more antimicrobials; however, this was influenced by the species of Enterococcus and not treatment (P > 0.10). The prevalence of ermB was greater (P < 0.05) in the control isolates after 4 and 6 wk while at wk 7, prevalence was greater (P < 0.01) in the 0.7 and 8.9 mg/kg VM treatments. Taken together, the minor treatment differences observed for the presence of ermB coupled with the lack of effect on antimicrobial susceptibility patterns suggest that feeding DG containing VM residues should have minimal if any impact on prevalence of antimicrobial resistance.

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Cow Attributes, Herd Management, and Reproductive History Events Associated with Abortion in Cow-calf Herds from Western Canada
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The primary objective of this study was to identify herd management and cow characteristics that are associated with abortion in cow-calf herds in Western Canada. Reproductive events were closely monitored in 29,713 cows in 203 herds from the beginning of the breeding season in 2001 through the calving season in 2002. Herd management and cow-level risk factors such as age, body condition score, and previous reproductive history were measured through a series of herd visits by project personnel and detailed individual animal records maintained by the herd owner. Pregnancy status was assessed in fall of 2001 by the herd veterinarian. Cows most likely to abort were replacement heifers, cows that were more than 10 years of age, cows with a body condition score of less than or equal to or 5 of 9 at pregnancy testing, or with twin pregnancies. Cows vaccinated for bovine viral diarrhea virus and infectious bovine rhinotracheitis and bred on community pastures were less likely to abort than cows from community pastures that were not vaccinated. Cows bred on community pastures that were not vaccinated were also more likely to abort than cows that were not on community pastures regardless of vaccination status. Adverse calving-associated events such as severe dystocia, problems such as uterine prolapse or retained placentas, abortion or calf death within 1 hour of birth were also associated with an increased risk of abortion the subsequent calving season after accounting for all other factors.

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Scrotal circumference of Australian beef bulls
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Normal range for scrotal circumference in Australian beef bulls was established using more than 300,000 measurements of breed, management group, age, liveweight, and scrotal circumference. The data used were derived from Australian bull breeders and two large research projects in northern Australia. Most bulls were within 250 to 750 kg liveweight and 300 to 750
days of age. The differences between breeds and variances within breeds were higher when scrotal circumference was predicted from age rather than liveweight, because of variance in growth rates. The average standard deviation for predicted scrotal circumference from liveweight and age was 25 and 30 mm, respectively. Scrotal circumference by liveweight relationships have a similar pattern across all breeds, except in Waygu, with a 50 to 70 mm range in average scrotal circumference at liveweights between 250 and 750 kg. Temperate breed bulls tended to have higher scrotal circumference at the same liveweight than tropically adapted breeds. Five groupings of common beef breeds in Australian were identified, within which there were similar predictions of scrotal circumference from liveweight. It was concluded that liveweight and breed are required to identify whether scrotal circumference is within normal range for Australian beef bulls that experience a wide range of nutritional conditions.

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**Maternal Isolation Behavior of Holstein Dairy Cows Kept Indoors**

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The aim of this study was to determine if, and under what conditions, indoor-housed dairy cows would seek a shelter to calve. Seventy-two Holstein dairy cows were paired by expected calving date and moved into a maternity pen that contained an open area with no cover and a sheltered area that was covered on all sides except for the ceiling and an entrance where cows could freely enter or exit. Once the first cow of a pair calved (“pair-housed”), she was removed; the second cow remained in the pen until calving (“single-housed”). For both pair- and single-housed cows, location and time of calving was determined by video. For single-housed cows, use of each area in the 12 h before calving was measured, and for pair-housed cows, distance from partner during the 12 h before calving was measured. Single-housed cows were more likely to calve in the shelter but only when calving occurred during the day (P = 0.03). Pair-housed cows were more likely to calve in the open area, regardless of time of day (P = 0.02). Beginning about 8 h before calving, single-housed cows that calved in the shelter increased their use of the shelter, and pair-housed cows spent more time away from their partners (P < 0.001 and P = 0.01, respectively). These results suggest that indoor-housed dairy cows prefer a shelter during calving only when they were housed individually and when calving during the daytime.

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**Jejunal hematoma in cattle: a retrospective case analysis**


Sixteen years of adult cattle submissions to the California Animal Health and Food Safety Laboratory System were examined and data captured from cases with anaerobic cultures of intestinal content. Analysis was performed to determine if there were statistical differences between case submission types (nonbloody intestinal content [129 cases], bloody intestinal content [134 cases], and jejunal hematoma [JH; 51 cases]) for the presence of Clostridium perfringens (314 cases), C. perfringens toxinotypes (35 cases), and C. perfringens toxins (51 cases) in the content. Across submission types, significant differences were found in the isolation of C. perfringens between different specimen types (live cow, dead cow, or tissue from a field necropsy) with field samples being the most likely to have C. perfringens detected and live animals the least likely (P = 0.001). In cases of JH, detection of C. perfringens by enzyme-linked immunosorbent assay was more likely when a live or dead animal was submitted (P = 0.023) or when a live animal was submitted (P = 0.019) compared with submission of field necropsy tissues. These differences were not observed when cultures were performed to detect C. perfringens in cases of JH. There were no statistical differences between submission types with regard to any other variables evaluated. Detailed histologic examination of 21 cases of JH suggested disturbance of normal vascular or lymphatic function as the underlying problem in this entity.

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Reduced Stocking Density Mitigates the Negative Effects of Regrouping in Dairy Cattle
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In freestall systems, cows are frequently moved among pens and regrouped. This practice involves mixing unfamiliar cows, and can result in changes in stocking density after regrouping. Both regrouping and changes in stocking density can affect cow welfare, but no study to date has assessed the combined effects. The aim of this study was to test if reductions in stocking density can mitigate the responses to regrouping. By manipulating group size (6 vs. 12 cows) and pen size (12 vs. 24 stalls), 3 different stocking densities were created (25, 50, and 100%). Four groups of Holstein cows were regrouped weekly for 4 wk and the stocking density changed at regrouping. The change in density varied as follows: a decrease by a factor of 4 (100 to 25%), a decrease by a factor of 2 (100 to 50% or 50 to 25%), no change (50 to 50%), an increase by a factor of 2 (25 to 50% or 50 to 100%), and an increase by a factor of 4 (25 to 100%). Displacements at the feeding area, feeding time, and lying time were scored. The daily means for each group were used to calculate the differences in responses from 1 d before to 1 d after each regrouping. The number of displacements at the feed bunk decreased and lying time increased when stocking density decreased at regrouping. In conclusion, increases in competitive behavior and the associated decrease in lying times can be mitigated by reducing stocking density when regrouping dairy cows.

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Effect of Carryover and Presampling Procedures on the Results of Real-time PCR Used for Diagnosis of Bovine Intramammary Infections with Streptococcus Agalactiae at Routine Milk Recordings
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The use of PCR tests as diagnostics for intramammary infections (IMI) based on composite milk samples collected in a non-sterile manner at milk recordings is increasing. Carryover of sample material between cows and non-aseptic PCR sampling may be incriminated for misclassification of IMI with Streptococcus agalactiae (S. agalactiae) in dairy herds with conventional milking parlours. Misclassification may result in unnecessary costs for treatment and culling. The objectives of this study were to (1) determine the effect of carryover on PCR-positivity for S. agalactiae at different PCR cycle threshold (Ct) cut-offs by estimating the between-cow correlation while accounting for the milking order, and (2) evaluate the effect of aseptic presampling procedures (PSP) on PCR-positivity at the different Ct-value cut-offs. The study was conducted in 4 herds with conventional milking parlours at routine milk recordings. Following the farmers’ routine pre-milking preparation, 411 of 794 cows were randomly selected for the PSP treatment. These procedures included removing the first streams of milk and 70% alcohol teat disinfection. Composite milk samples were then collected from all cows and tested using PCR. Data on milking order were used to estimate the correlation between consecutively milked cows in each milking unit. Factors associated with the PCR-positivity for S. agalactiae were analyzed using generalized estimating equations assuming a binomially-distributed outcome with a logit link function. Presampling procedures were only significant using cut-off 37. A first-order autoregressive correlation structure provided the best correlation between consecutively milked cows in each milking unit. The correlation was 13%, 11%, 9% at cut-offs <40, 37, and 34, respectively. PSP did not reduce the odds of cows being PCR-positive for S. agalactiae. In conclusion, carryover and non-aseptic sampling affected the PCR results and should therefore be considered when samples from routine milk recordings are used. In relative terms, higher cut-offs resulted in higher between-cow correlation, but the absolute amount of carryover may not be affected although this was not tested.

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Evaluation of Selective Dry Cow Treatment Following On-farm Culture: Risk of Postcalving Intramammary Infection and Clinical Mastitis in the Subsequent Lactation

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The objective of the study was to evaluate the utility of a Petrifilm-based on-farm culture system when used to make selective antimicrobial treatment decisions on low somatic cell count cows (<200,000 cells/mL) at drying off. A total of 729 cows from 16 commercial dairy herds with a low bulk tank somatic cell count (<250,000 cells/mL) were randomly assigned to receive either blanket dry cow therapy (DCT) or Petrifilm-based selective DCT. Cows belonging to the blanket DCT group were infused with a commercial dry cow antimicrobial product and an internal teat sealant (ITS) at drying off. Using composite milk samples collected on the day before drying off, cows in the selective DCT group were treated at drying off based on the results obtained by the Petrifilm on-farm culture system with DCT + ITS (Petrifilm culture positive), or ITS alone (Petrifilm culture negative). Quarters of all cows were sampled for standard laboratory bacteriology on the day before drying off, at 3 to 4 d in milk (DIM), at 5 to 18 DIM, and from the first case of clinical mastitis occurring within 120 DIM. Multilevel logistic regression was used to assess the effect of study group (blanket or selective DCT) and resulting dry cow treatment (DCT + ITS, or ITS alone) on the risk of intramammary infection (IMI) at calving and the risk of a first case of clinical mastitis in the first 120 d of the subsequent lactation. The results of this study indicate that selective DCT based on results obtained by the Petrifilm on-farm culture system achieved the same level of success with respect to treatment and prevention of IMI over the dry period as blanket DCT and did not affect the risk of clinical mastitis in the first 120 d of the subsequent lactation.

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CONTINUING EDUCATION

4th International Beef Cattle Welfare Symposium

Registration is now open for the 4th International Beef Cattle Welfare Symposium that will be held in Ames, Iowa, July 16-18, 2014. Speakers from the U.S., Canada, Australia, Brazil and Ireland will address a wide variety of topics including discussions about beta-agonists, low stress cattle handling, the impact and mitigation of weaning and transportation stress and analgesic drug use. Greg Peterson from “The Peterson Brothers” will be the guest speaker at the evening reception.

Registration for the symposium is $225 (including the preconference program) or $200 for just the scientific program if registered by July 1, 2014.

The symposium has been approved for 14.5 CEU from the Iowa Veterinary Medical Board. For more information and to register, please visit www.cpm.iastate.edu/beefwelfare.

Academicians are invited to submit abstracts for the sessions on Friday and to encourage their graduate students submit abstracts for the poster and oral competitions.

Get Your Passports for the 2014 World Buiatrics Congress

The organizing committee of the 2014 World Buiatrics Congress, which will be held July 27-31, 2014, in Cairns, Australia, encourages those interested in attending the conference to make sure they have current passports. Pre-registration for the conference ends April 30.

For more information on the conference, scientific programs and activities, visit http://wbc2014.com/. You can also find the World Buiatrics Congress Cairns 2014 on Facebook.