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Fall 2008



page 9



page 11



page 16



page 17

Special Interest Articles:

Awards & Recognitions	2,4
Remembering Chick Wisman	5
Celebration of the 150th Anniversary of Darwin's <u>Origin</u>	7
Conferences & Meetings	8
Governor's School.....	11
Reproduction Course.....	11
Hokie Harvest Sale	12
Academic Quadrathlon	13
APSC Mock Interview Program.....	14
Alternative Spring Break.....	15
Swine Production.....	16
Dressage at Devon	17
Success at Regional Horse Show.....	17
VT Breeds Licensed Stallion	18
VT Horse Judging Team	18
Virginia 4-H Judging Team	19
VT Livestock Judging Team	21
Impact of Emryonic Incubation Temperatures	22

Regular Articles:

State of the Department.....	2
New Faces in the APSC Department	3
Graduate Student News.....	5
Dean's List.....	6
Block & Bridle Club	9
Contact Information.....	23
Dates to Remember	23
Update Your Information	24

State of the Department

by Dr. Kenny Webb, Interim Department Head



I am going to take a different approach with my presentation for the current newsletter. First, I want to take the opportunity to give you a brief introduction to Dr. David Gerrard. When you read this newsletter, Dr. Gerrard will be in his early days (starting January 1, 2009) of his new position as Head

of the Department of Animal and Poultry Sciences. He brings with him a wealth of experience in teaching, research, and extension activities. He comes to us from Purdue University where he has been a member of the faculty of the Department of Animal Sciences since 1995. Prior to that, he was at the University of Missouri for three years.

Academically, Dr. Gerard describes himself as both a meat scientist and a muscle biologist. His research has dealt with maximizing the growth and development of muscle in meat-producing animals and then with the efficient conversion of those muscles into safe, high quality meat products for human consumption. His teaching and extension activities have been related to this area as well. In addition to his new administrative responsibilities, he will also continue to be actively involved with research activities in meat science and muscle biology in our department.

The department is blessed to be composed of outstanding faculty, students and staff and is highly accomplished in many areas. With the arrival of Dr. Gerrard and through his leadership, we anticipate even higher levels of achievement for all segments of the department. He has the assurance of being

able to hire faculty to fill positions that are currently vacant, to hire faculty to replace any new vacancies that may occur for the next several years, and to add some new faculty positions. All of this is very exciting, especially the addition of faculty to establish a new program in muscle biology. This fills a void in our current programs and creates opportunities for much synergy in teaching, research, and extension activities. Be on the watch for exciting things to be happening.

I encourage alumni and friends to take any opportunity to get to know Dr. Gerrard and I am confident that, having done so, you will share the enthusiasm we have about him as our new unit leader. Maybe this could begin with dropping him a line (dgerrard@vt.edu) to welcome him to the Hokie nation and to pledge continued support for departmental programs. I am sure he will welcome the opportunity to interact with everyone.

For the past three and a half years, I have had the privilege of serving the Department of Animal and Poultry Sciences as interim head and that will conclude with the arrival of Dr. Gerrard. The second thing I want to do then, is to say thank you to all alumni, friends, and other supporters of the department and for me personally. For me, the experience has been very gratifying. Sometime in the coming months, retirement is in my plans. I am in my 40th year as a member of the faculty of this department and I remind myself almost daily of how lucky and blessed I have been throughout my career at Virginia Tech. As I have said before, throughout all of that time and to this very moment, it has been great to be a Hokie!!! Thank you for your contributions to this!!!!

Paul Siegel Recognized by Merial Select



Paul Siegel, University Distinguished Professor and Active Emeritus at Virginia Tech, was featured in a Merial Select publication called "Merial Selections" in Autumn 2008. This article describes Dr. Siegel's lifelong fascination with poultry and describes the wide variety of contributions he has made to the poultry industry, genetic and evolutionary research and undergraduate and graduate education. The article can be viewed in its entirety at:

<http://www.merialselections-digital.com/merialselections/merialsel2008autumn/?pg=1&pm=2&u1=friend>

Please take a few moments and enjoy this summary of an exceptionally inquiring and productive career by a world-famous Virginia Tech faculty member.

New Faces in the APSC Department

Faculty

Staff



David Gerrard, Professor, became the new head of the Department of Animal and Poultry Sciences on January 1, 2009.



Tracy Scheffler, Research Associate, is managing Dr. Gerrard's laboratory.

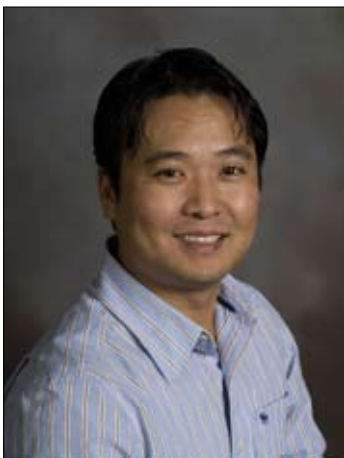


Jason Scheffler, Research Assistant Professor, will work in the area of muscle biology.



Amy Tanner, Laboratory Specialist Senior, began working in APSC in August 2008 for Drs. Wahlberg and Lewis.

Post-Doctoral Student



Dr. Sungkwon "Sunny" Park, Post-doctoral Associate, will be working with Dr. Gerrard in the area of muscle growth biology.



Ania Wysinski, Laboratory Specialist, is working with Dr. Wong and began in APSC in November.

Awards & Recognitions

Faculty Awards Fall/Winter 2008



Bill Beal, professor of animal and poultry sciences, was a recipient of the 14th Annual Students' Choice Award for faculty member of the year.



Dan Eversole, associate professor of animal and poultry sciences, was awarded an Honorary American FFA Degree. The award is presented to those who advance agricultural education and FFA through outstanding personal commitment.



David Notter, professor of animal and poultry sciences, was inducted into the Ohio State University Animal Science Hall of Fame. Inductees are recognized by their peers for their significant contributions to the animal industry.

Dr. Kenny Webb Receives The 2008 American Society Of Animal Sciences Fellow Award

By Lori Greiner

Kenneth E. Webb Jr. of Blacksburg, Va., professor and interim department head for Animal and Poultry Sciences in Virginia Tech's College of Agriculture and Life Sciences received the 2008 American Society of Animal Sciences (ASAS) Fellow Award-Research Category. He was honored at the society's annual meeting in Indianapolis, Ind.

The fellowship award is given to members of ASAS who have provided exceptional service to animal science and the livestock industry for 25 years or more. To be eligible, individuals must be current ASAS members, and must have been members for the three years leading up to their nomination.

Webb's research focuses on the nutritional physiology of the ruminant, with emphasis on protein utilization. His work led to the proposal and development of the idea of peptide absorption, whereby the gastrointestinal tracts of animals absorb small peptides that can provide amino acids essential to cells. Because of Webb's research, animal scientists across the globe now recognize peptide absorption as an important physiological process and are devising nutritional regimens for livestock and poultry that take this understanding into account, especially in younger animals.

Webb received his bachelor's degree from Ohio University and went on to earn his master's and doctorate degrees from the University of Kentucky. He began working at Virginia Tech in 1969; since that time he has served on 143 graduate committees in nine departments within the school. Webb has published 304 publications and holds a United States patent.

Graduate Student Award



Robert VanWyhe, an MS student advised by Dr. Audrey McElroy, was twice honored at the Poultry Science Association meeting in Niagara Falls, Canada. Robert won a Student Research Paper Certificate of Excellence in the graduate student competition for his presentation "Broiler Performance on a Coban Anticoccidial Program with Exposure to a Mixed Eimeria Population". Robert was also elected by his peers to represent the graduate and post doctoral members of Poultry Science, the PSA Hatchery, on the PSA Board of Directors for 2008-2009.

Graduate Student News

The following graduate students finished their degrees in the Summer and Fall Semesters of 2008:

Student	Degree	Advisor	Thesis/dissertation title
Forrest Axson	M.S.	Bill Beal	Incidence of follicular wave regression and new wave emergence following administration of a CIDR before and after selection of the dominant follicle in cycling beef cows with an experimentally-induced follicular wave
Rebecca Carter	Ph.D.	Ray Goer	Equine obesity and its role in insulin resistance, inflammation and risk of laminitis
Katie Jordan	Ph.D.	Jim Knight	Characterization of seasonal reproduction in Virginia Tech Selection Line, St. Croix, and Suffolk ewes
Dackson Zulu	M.S.	Ed Smith	Genetic characterization of Zambian native cattle
Amanda Liles	M.S.	Scott Greiner	The effects of Resynchronization of Estrus Using the 5 d CO-Synch + CIDR System
Elizabeth Gilbert	Ph.D.	Eric Wong & Kenny Webb	Dietary and developmental regulation of nutrient transporter gene expression in the small intestine of two lines of broilers

In Memoriam: Remembering Chick Wisman



Dr. Everett Lee "Chick" Wisman, 85, of Blacksburg, died Saturday, September 13, 2008 at the New River Valley Medical Center. He was born in Woodstock, Virginia on October 1, 1922 to the late Clinton and Grace Swartz Wisman.

He was a professor in the Biochemistry Department at V.P.I. & S.U. He received his B.S. from Virginia Tech, M.S. from Cornell and his Ph D. from Penn State University. He was a member of the Virginia Academy of Science, also served as a director for Virginia Junior Academy of Science, 1964-72, director, American Junior Academies of Science, 1965-68. He received a Distinguished Service Award, Na-

tional Association of Academies of Science, 1971. He was a member of these Honorary Societies, Alpha Zeta, Phi Kappa Phi, Omicron Delta Kappa, Scabbard and Blade, Phi Lambda Upsilon, Sigma Xi, Block and Bridle, and Gamma Sigma Delta.

Chick was a veteran of World War II and retired as Lt. Colonel from the Army Reserves. He is survived by his wife of 60 years, Melba F. Wisman, of Blacksburg; daughter and son-in-law, Grace Wisman and Lanse Carpenter, of Pearisburg, Va.; two sons and daughters-in-law, Everett Lee, Jr. and Nikki Wisman, of San Antonio, Texas, John Phillip and Susan Wisman, of Wytheville, Va.; cousins, Lois Ryman and Snooky Hoover, of Woodstock, Va.; six grandchildren, Brooke Wisman and husband, Daniel Delp, Corey Frost Wisman, Collin Lee Wisman, Anna Elizabeth and husband, Bradley Lockwood, Jenna Grace Carpenter, and Christopher Lanse Carpenter; two great-grandchildren, Rex Delp and Willow Delp.

Dean's List Spring 2008

Agnew, Morgan E.	Eberly, Heidi R.	Knoebel, Nicole A.	Smith, Garrett P.
Aguilar, Michelle	Economos, Theresa J.	Knopp, Christopher J.	Snyder, Shannon C.
Alberti, Kyle	Faris, Laura L.	Koegel, Adrienne L.	Southern, Kelly M.
Allen, Kimberly M.	Felts, Katelyn E.	Kopanko, Ashley M.	Spellerberg, Rebecca M.
Altholz, Kelsey S.	Fiktus, Richard A.	Kyle, Ashley E.	Strauss, Amanda K.
Altizer, Samuel K.	Fisher, Kimberly D.	Lahaie, Amanda N.	Subbarayan, Priya A.
Arnold, Rebecca L.	Flinn, Candace D.	Lamb, Katherine G.	Surotchak, Jennifer L.
Ashton, Caitlin C.	Flugel, Dale S.	Liskey, Thomas H.	Swartzwelder, Anne
Baccus, Kelly L.	Gershon, Aveetal	Lyons, Jessica A.	Swieter, Greg
Beavers, Kelli N.	Gibson, James A.	Marino, Amanda F.	Sysak, Stephanie C.
Beckley, Katherine L.	Grams, Christopher T.	McGill, Claire G.	Todd, Danielle A.
Bell, Ashley L.	Greiner, Jacquelyn E.	McGinnis, Erin E.	Tomaszewski, Heather L.
Bennett, Whitney S.	Grove, Sylvia E.	McGuire, Kirsten E.	Traywick, Riley E.
Blatcher, Christina M.	Hall, Erin K.	MicKey, Julie A.	Tubesing, Monica E.
Bowry, Jennifer R.	Hall, Veronica A.	Mitchell, Stephanie L.	Tucker, Lindy C.
Boyle, Matthew D.	Harris, Leah M.	Nelson, Clara R.	Van Dyke, Valerie L.
Bramble, Thomas W.	Harris, Shannon R.	Newsome, Shannon T.	Vanderhoof, Christopher
Bridges, Allison M.	Hay, Daniel E.	Park, Chaelee A.	Virts, Kathryn A.
Brown, Christopher M.	Heller, Erin L.	Park, Meredith K.	Walker, Michelle
Campbell, Diana L.	Hensley, Meagan A.	Parker, Alison M.	Walls, Lora B.
Carrington, Julia L.	Hess, Jessie V.	Perry, Ashley K.	Walters, Jessica N.
Charlton, Brynn A.	Hilgartner, Eric T.	Preskitt, Jessica L.	Walton, Ashley N.
Clark, Meredith K.	Horricks, Brianna R.	Pullen, Lyla D.	Waters, Kelly K.
Collins, Mary K.	Howell, Grace M.	Quay, Heather M.	Weakley, Amanda L.
Correa, Bethany R.	Huff, Elise M.	Renalds, Samantha J.	Webber, Diana N.
Cossaboom, Caitlin	Ihling, Jessica A.	Richardson, Brittany E.	Williams, Elizabeth A.
Cromer, Michael K.	Jacob, Joanna C.	Rinehart, Dustin J.	Williams, Megan A.
Crouse, Zachary J.	Johnson, Andrea B.	Roberts, Ashley C.	Wilt, Brittany N.
Davis, Brooke E.	Jones, Christine S.	Rockwell, Erin L.	Won, Samantha G.
Davis, Carrie V.	Jones, Kari B.	Romine, Jessica F.	Wood, Jessica L.
Donovan, Sarah M.	Jones, Katherine E.	Ross, Whitney K.	Wyderko, Jennifer A.
Dorman, Hunter A.	Kadotani, Saki	Roudabush, Benjamin E.	Wyszynski, Megan J.
Dunn, Rachael M.	King, Ben P.	Sager, Kimberly A.	Yager, Cody M.
Earman, Matthew P.	Kinter, Lauren E.	Shearer, Danielle L.	Yokota, Emari M.
East, Caitlin M.		Shores, Regina M.	

A Celebration Of The 150th Anniversary Of Darwin's Origin

By Ron Lewis



The year 2009 is the bicentennial of Charles Darwin's birth and the sesquicentennial of the publication of his *On the Origin of Species by Means of Natural Selection*. In recognition of the scientific, historical, and philosophical contributions of Darwin to contemporary society, a multidisciplinary faculty committee at Virginia

Tech is planning a series of events in celebration of the Origin, and of Darwin himself.

In fall 2009, a university-wide course on the Origin will be offered. It will be comprised of lectures covering historical background, the content of the Origin, and its continuing scientific and societal influence. In addition to the common lectures, the course will include separate weekly workshops specifically for senior undergraduates, honors students, and graduate students.

On November 4, 2009, an academic conference will be held at the Inn at Virginia Tech and Skelton Conference Center designed to encourage a sophisticated examination of the Origin and its wider influences. By this date, which coincides with the month of publication of the Origin, the students in the course will be prepared for a serious academic debate covering the full range of topics to which they were introduced. Through a combination of plenary keynote lectures by renowned Darwin scholars, panel discussion, and parallel sessions of submitted papers (and perhaps posters), the conference will provide an engaging and multi-disciplinary forum focused on the interpretation and reception of the Origin, the current scientific issues to which it is relevant, and on its wider conceptual, social, and intellectual influences.

Another event, scheduled for the day following the academic conference, will be the Choices and Challenges forum. Choices and Challenges is a continuing series of public forums organized by the Department of Science and Technology in Society at Virginia Tech since 1985. It engages regional and University publics with scientific and techno-

logical issues. The 2009 forum will be devoted to "animal minds," in the process following up on Darwin's treatment of the place of humans in the animal kingdom and his work on the expression of emotions in humans and animals, placing that work in a contemporary perspective.

The academic conference, course, and Choices and Challenges, will figure in the planning of a production by the Virginia Tech Theatre Workshop in Science and Technology Studies (TWISTS). By combining theatre, music, movement, and discussion, TWISTS seeks to facilitate dialogue about contemporary scientific and technical controversies amongst student, public, and professional communities. TWISTS will develop and produce a play touching on Darwin's life, and on contemporary social issues to which Darwin is relevant. Performances of the TWISTS production will be coordinated with the timing of the academic conference and Choices and Challenges.

A world-wide web-based celebration – Singing Darwin – will be housed on the Virginia Tech campus. Singing Darwin is a large scale new-media arts project that will engage a global, cyber network of science, art, and academic institutions, as well as individual new-media artists, scientists, and scholars, in creating a celebrative, 24-hour cyber event marking the publication of the Origin on November 24, 2009.

The aim of these diverse yet synergistic activities is to stimulate a living and ongoing debate over the implications of Darwin and evolutionary thinking within biology, our culture, and our society, at Virginia Tech and within its surrounding communities.



Charles Darwin's library

Conferences & Meetings

2008 Poultry Science Association Meeting

The Poultry Science Association held its 100th anniversary meeting at Niagara Falls in July 2008. Virginia Tech was well represented by students, faculty and alumni.

Alum Dr. Frank Robinson (Virginia Tech, M.S. with Dr. Winn Beane) chaired the Centennial Committee and alum Dr. Mike Lacy (Virginia Tech, Ph.D with Dr. Harry Van Krey) was elected as President of the Poultry Science Association for the coming year. Alum Dr. Ernie Pierson (Virginia Tech, M.S. with Dr. Larry Potter) was elected to the Board of Directors.

To commemorate the Centennial, several symposia were organized in which Dr. Paul Siegel (Virginia Tech Professor Emeritus) gave presentations. He presented the invited World Poultry Science Association lecture entitled "The Poultry Scientist: Past,

Present and Future" which will appear in a future issue of Poultry Science. At the symposium "Future of Poultry Science" his presentation was entitled "A Historical Perspective".

In a special evening session Dr. Siegel was one of five individuals whose papers are designated "Landmark Papers"; these landmark papers were the five most cited papers ever to appear in the journal Poultry Science. The other individuals whose work was featured in the landmark series were: Drs. Bruce Glick, A. van Tienhoven, L. C. Grumbles and I. R. Sibbald. An interesting piece of trivia is that Dr. Glick's article on the bursa of Fabricius and antibody production and Dr. van Tienhoven's article on sulfamethazine and the endocrine system appeared in the same issue of Poultry Science (volume 35, 1956).

80th Northeastern Conference on Avian Diseases



Dr. Rami Dalloul was invited to speak at the 80th Northeastern Conference on Avian Diseases (NECAD) on September 16-17, which was held in conjunction with the PA Poultry Sales and Service Meeting (PSSC) at The Penn Stater Conference Center Hotel, State College, PA.

As one of three invited speakers at the "Gastrointestinal Health" symposium, Dr. Dalloul presented two back-to-back lectures covering "Gastrointestinal Immunity" and "Gastrointestinal Host-Pathogen Interactions." The symposium focuses on a specific theme each year and aims to educate the wide audience of academics, students, industry scientists, producers and farmers on relevant, current issues of the poultry industry.

2008 PSA Nutrition Symposium

Drs. Rami A. Dalloul and Paul B. Siegel were invited speakers at this year's Informal Nutrition Symposium of the Poultry Science Association (PSA) annual meeting held on Sunday July 20th in Niagara Falls, Canada. The symposium title was "Modulating Immunity: The Role of Nutrition, Disease, Genetics and Epigenetics" and included a total of five speakers. Their presentations were entitled "Dietary modulation of the immune system" (by Rami A. Dalloul and Audrey P. McElroy) and "Impact of genetic selection for growth and immunity on resource allocation" (by Paul B. Siegel and Christa F. Honaker). The lectures will later be published as review papers in the Journal of Applied Poultry Research. At the conclusion of the symposium, Dr. Siegel was one of two individuals honored as a "Great Academic Advisor and Life Mentor."

Block and Bridle Club

by Jessica Crockett

Fall of 2008 has been another successful semester for the Block and Bridle Club! One of the most memorable events of the fall semester was preparing and selling barbeque dinners at the State Fair in Richmond. In addition we held a successful Horse Judging Clinic, Agtoberfest and 4th Grade Days. We also participated in the Hokie Harvest Sale, Harvest Havoc, and the Academic Quadrathlon. New members were accepted into the club with its fall pledge class. The club is currently excited and gearing up for the National Block and Bridle Convention in February 2009 which will be held in San Antonio, Texas.

College of Agriculture and Life Sciences Welcome Back Picnic

The club kicked off their fall semester with the annual CALS picnic on September 2nd. It was a beautiful day and a great way to start off the new se-



Club member Kasey Arrington teaches some of the eager students during 4th Grade Days about agriculture at the Livestock Teaching Arena.



BBQ chair Blaine White, Brian Turner, and Jessica Crockett preparing meat at State Fair.

2008-2009 B&B Officers

President:	Nicole Browne
Vice President:	Laura Neff
Treasurer:	Chris Brown
Secretary:	Micah Orfield
Marshall:	Jessica Walters
Membership Coordinator:	Kelly Shuster
Reporter:	Jessica Crockett
Alumni Relations:	Whitney Dodge
Historian:	Sarah Joseph
BBQ Chairs:	Charles Debord Blaine White Stuart Saunders
Advisors:	Mark Wahlberg Dave Linker

mester. The CALS picnic has become a fall tradition, hosted by the Dean's Office in the Ag Quad, designed to help present freshmen with the array of opportunities available with the different departments and clubs in the CALS community. The picnic is always a great way for the club to promote its values and fun activities to prospective members. Not only do new students gain knowledge of the club, but they get a taste of the club's famous pork barbeque. The club prepared and served 925 dinners at the picnic.

State Fair

September 24th was the beginning of another fun and eventful week at State Fair. A few students traveled to Richmond Wednesday afternoon to organize the tents, campers, tables, and all that Block and Bridle barbeque entails! On Thursday morning members were ready and cooking barbeque, anxiously awaiting the customers. The club was extremely proud of the new pledges who were active at the event. The club returned October 5th proud and tired from the past week. The week was overall a success and the club was proud to collect over \$2,000 for the Emily Jane Hilscher Fund.

4th Grade Days and Agtoberfest

Block and Bridle members organized a livestock teaching day for several elementary students in the New River Valley area during the annual 4th Grade Days program in September at the Alphin-Stuart

Block & Bridle Club, continued on page 10...

Block & Bridle Club, continued from page 9...

arena. The event was run by Joe Epperly, who was assisted by several other Block and Bridle members, Virginia Tech faculty, staff and students. The students were taught about the different aspects of agriculture. The students visited with sheep, cows, donkeys, and pigs. Members taught the students about feed, terminology, gestation length, and weaning age for each animal.

Hokie Harvest

The 14th annual Hokie Harvest sale was held October 31st and hosted by the Livestock Merchandising class. The club was happy to support the students with their annual sale, which promotes Virginia Tech's equine, swine, and beef programs. The club served 620 plates of its delicious pork sandwiches and sides. Among the horses sold was a colt, "Riley's Reason," generously donated by the Guinti family of Williamsburg, Virginia. The colt was donated in honor of two young ladies lost in the tragic events of April 16th, Emily Hilscher and Nicole White. The proceeds from the colt were split equally between the memorial funds established in honor of them. More information about the colt is available on the APSC website at <http://www.equine.vt.edu/foals/riley.html>

Harvest Havoc

Block and Bridle members attended Harvest Havoc on November 9th to participate in a fun and friendly competition on a beautiful fall day. The day consisted of a variety of events: tug of war, hay bale stacking, a relay race, and many more. The club had two teams this year and competed with several other organizations in the CALS community. Harvest Havoc is always a fun way to support our agricultural sorority and fraternity, Sigma Alpha and Alpha Gamma Rho and their efforts in raising money for Heifer International.

Academic Quadrathlon

Two of our own members, Samantha Renalds and Ashley Perry, competed on a team with Cody Yager and Kyle Cromer and won in the Academic Quadrath-

lon this year. The event consisted of four events. The first is a written exam on any subject ranging from nutrition to reproduction to genetics. The second event is a quiz bowl, the third was a presentation followed by a question/answer session. During the fourth event the teams go to the barns and have a practical at each one; they then return to the arena and answer more questions at three different sections, nutrition, meat science, and reproduction. The club was very proud to have two of its own members on the winning team this year. The winning team will go on to compete in Atlanta, Georgia on January 30th and 31st.

Horse Judging Clinic

Morgan Agnew was the competent supervisor of a successful clinic for the middle and high school students of the New River Valley area on November 8. The club was proud to have approximately 350 students visit the campus to gain knowledge on the basics of horse judging to prepare themselves for the upcoming judging season in the spring semester. The clinic consisted of several sessions that took place in both the classrooms and the arena, all taught by club members. The students spent time at the arena to see live demonstrations put on by the equestrian team. The demonstrations included stock horse conformation, a horsemanship demonstration, and a hunter under saddle demonstration. Overall the clinic was a big success and we were proud of the amazing turnout!

Pledging

The club was very excited to welcome 22 new members this fall semester. From the very beginning this pledge class was eager and willing to work. From learning to prepare large quantities of baked beans, cole slaw and barbeque at the State Fair to obtaining signatures on their initiation "B"s, the new members were an enthusiastic and busy group. The new members have been a fun addition to the club this fall semester!



Block and Bridle members serving our delicious barbeque to hungry customers at Hokie Harvest.

APSC Department Participates In 8th Annual Governor's School For Agriculture

by C. M. Wood

The Animal and Poultry Sciences Department was well represented in the courses offered by the 2008 Governor's School for Agriculture, held on the campus of Virginia Tech June 30-July 25, 2008.

Dr. Dan Eversole was the lead instructor for the Animal Science core course, a 10-hour overview of the animal industries taken by all governor's school participants. In addition to an introduction to animal agriculture and several hours in the classroom learning about the principles of genetics, nutrition, and reproduction, students also spent half a day touring the livestock centers on Plantation Road. For some of the school's participants, this was their first opportunity to see livestock live and up close.

Teaching the Animal Sciences in-major classes, attended by 16 students, was a team effort by faculty and staff in Animal and Poultry Sciences as well as Dairy Science. Instructors included Drs. Ann Dunnington, Eric Wong, Mark Wahlberg, Mike Denbow, Rebecca Splan, Cindy Wood, and graduate student Matt Utt from APSC, along with Drs. Mike Barnes, Isis Mullarky, Katherine Knowlton, and Christina Petersson-Wolfe from the Dairy Science department. Students in these courses attended lectures and demonstrations on companion animal management, physiology, biotechnology and equine science. They also took field trips to the Copenhagen Sheep Center and the Virginia Tech Swine Center, as well as the Dairy Center, and they spent an hour in Kroger's meats department for a behind-the-scenes lesson on meats. This same group of 16 students also participated in several hands-on labs, learning to analyze feed samples, evaluate hormone assays, determine levels of microbial contamination, and



Learning to sort cattle...



Laboratory time!

run DNA analyses.

In addition to the required courses, two very popular elective courses were also taught in the department: equine management, and animal physiology and anatomy. Both of these offerings were open to any student in the governor's school and included plenty of hands-on experiences. The equine management course met at the Smithfield Horse Center each day, and students in the physiology elective spent quite a bit of time in the lab studying comparative anatomy of pigs and sheep.

Reproduction Course: New Learning Techniques

by Jim Knight

Dr. Jim Knight collaborated with Dr. Phil Senger on a project involving the fall semester course, ALS 4304, Physiology of Reproduction. Dr. Senger, a Virginia Tech alum, is the author of the textbook used for this course and owns the company Current Conceptions, Inc. The project involved testing the use of "Time Compressed Animated Delivery" (TCAD) modules developed to enhance student learning outcomes and shorten delivery time. Dr. Knight's Virginia Tech class is one of seven courses at land grant universities participating in the study.

The TCAD prototype integrates several technologies (step-animations, 3-dimensional anatomical reconstructions, 3-dimensional streaming animations, voice over, and script messaging) in a movie-like presentation so that difficult bioscience concepts can be easily understood and student learning enhanced. This is the second learning experiment in the past three years in which Dr. Knight's ALS 4304 class has participated. This study is sponsored by a contract recently awarded to Dr. Senger and colleagues by the U. S. Department of Education.

2008 Hokie Harvest Sale

by Dr. Dan Eversole

The 2008 Livestock Merchandising Class entertained a spectacular crowd of over 900 friends and supporters on a beautiful, autumn evening at the 14th Annual Hokie Harvest Sale on Friday, October 31st. Nine breeding swine were sold via silent auction before the horse and beef cattle sales. Twenty university horses and 37 head (26 lots) of beef cattle were offered at public auction in the Alphin-Stuart Livestock Arena and the Livestock Judging Arena, respectively. One hundred eighty-seven registered buyers attended the event from Kentucky, Ohio, Connecticut, South Carolina, Tennessee, West Virginia, North Carolina, Maryland, Pennsylvania, and Virginia. The beef cattle sale grossed \$64,875 with a sale average of \$2,495 with the following breed totals: Angus - \$48,200; Hereford - \$5,750; Simmental - \$7,950; and Gelbvieh - \$2,975. The horse sale grossed \$52,500 with a sale average of \$2,625 while the nine breeding swine averaged \$384. This year's sale gross totaled \$120,845.

In the cattle sale of four different breeds, Lot 6 was the top selling lot at \$5700. This Angus bred heifer is a daughter of the highly acclaimed sire, GAR New Design 5050, and ranked in the upper 3% on \$B and \$F. This highly valued brood cow prospect sold to Bud Phillips of Coeburn, VA.



Horse demonstration



Inspecting sale cattle

In the cow/calf division, Lot 2 was the sale topper at \$4,200. This Angus cow is sired by the \$250,000 Pathfinder, BR Midland, and posts a progeny WWR of 2@104 and YWR 2@107. She sold to Bud Phillips of Coeburn, VA. Her phenomenal February bull calf by Lemmon Newsline C804 sold to Thomas Thompson of Natural Bridge Station, VA for \$1,800.

VPI Professor T758 (Lot 26) topped the breeding-age bull division at \$2,450. This Simmental yearling bull is a calving-ease son of Circlet Antoinettes Star and has tremendous curve-bending carcass genetics. He sold to Zelmer Younce, Jr. of Stambaugh, KY.

The high-selling horse was Lot 1, the 2008 colt Riley's Reason, who sold for \$7000. This special colt was donated to Virginia Tech by the Giunti family of Williamsburg VA. After the events of April 16th, 2007, Rich and Donna Giunti, and their daughter Cira, decided to breed their champion Oldenburg mare Bella Mia to Virginia Tech's stallion Royal Appearance and donate the resulting foal, with the proceeds of its sale being split between the memorial funds established in the names of Nicole White and Emily Hilscher, two young equestrian students who were lost in the tragedy. Riley's Reason is an exceptional colt and was sold to Debbie Bowman, a well-known Grand Prix dressage trainer in Virginia and alternate for the 1984 Olympic Games. Debbie also took home the lovely yearling gelding Roswell VT, also sired by Royal Appearance.

Other high sellers included the two-year-old Oldenburgs Alfa Romeo VT (Lot 12) and Fantine VT (Lot 10), who sold for \$6700 and \$6500, respectively. The big bay gelding Alfa Romeo VT had been a Premium Foal and Champion Colt at his foal inspection, and was recently named Reserve Champion Colt at a Future Event Horse show in August 2008. He was purchased by Lizzie Wariner of Richmond. The beautiful Premium chestnut filly Fantine VT, sired by Fabriano, was purchased by Grand Prix dressage trainer Susan B. Cooper of Impulsion Unlimited, Inc., based in Huddleston Virginia.

The 93 students did a marvelous job of preparing for the sale. They gained 'hands-on' experience in sale management, budgeting, cataloging, advertising, livestock photography, clerking, and health requirements. Special thanks is extended to Col. Jeff Marsh of Eurosport Auctions, Ltd., Boston, VA and

Hokie Harvest Sale, continued on page 13...

Hokie Harvest Sale, continued from page 12...

Col. Ken Brubaker of Brubaker Sales and Marketing, Harrisonburg, VA for serving as auctioneers for the horses and beef cattle, respectively. Students Kim Fisher, Milton, WV; Jacob Gilley, Madison, VA; Cory Spiker, Strasburg, VA; and Cathryn Whitt, Richmond, VA served as ring people for the beef cattle sale while Justin Brooks, Union Hall, VA worked the ring. Bid-takers for the horse sale were Rebecca Arnold, Martinsville, VA; Ashleigh Barron, Vinton, VA; Ben Craig, Raleigh, NC; and Cody Yeager, Christiansburg, VA. Students who were clerking 'in the block' were Katie Wall, Blacksburg, VA and Rachel Graham, Bernville, PA for the beef cattle and horses, respectively.

The Food and Beverage Committee, with assistance from the Block and Bridle Club in the Department of Animal and Poultry Sciences, served a complimentary BBQ dinner to over 750 guests. Their support and cooperation are greatly appreciated. The response from the 187 registered horse, swine, and beef cattle buyers and feedback from the students in the class continue to be overwhelming in favor of hosting another student-run livestock sale. Plans are currently underway for the 15th Annual Hokie Harvest Sale on Friday, October 30, 2009. We hope to see you there!



Cattle sale



Swine silent auction

Local Academic Quadrathlon Held November 8-9, 2008

by C. M. Wood

The Academic Quadrathlon is a four-part undergraduate competition for animal sciences students held in four regions around the country. Virginia Tech participates in the Southern Region competition, which was last held at Texas A&M University and in Dallas, TX early in 2008. Teams of four students work together on a written exam, a lab practical, an oral presentation, and a quiz bowl over a

two-day span. A local contest is held at each university to determine which team will represent that university at the regional competition. This year's local competition was held November 8 and 9, 2008. The winning team will represent Virginia Tech at the 2009 regional competition January 30-February 1, 2009 in Georgia.



The Freshman Team puzzles over the reproduction practical.

The Animal and Poultry Sciences Department and the Dairy Science Department jointly sponsor the local quadrathlon in Blacksburg, and it takes a lot of effort from faculty, staff, and graduate students to make it happen. This year, most of the planning and logistics for the local competition was carried out by a team of three seniors who represented Virginia Tech at the regional competition two years ago: Morgan Agnew, Claire McGill, and Jessica Romine. They lined up all the classrooms and labs, organized the faculty and graduate students who led each

Academic Quadrathlon, continued on page 14...

Academic Quadrathlon, continued from page 13...

section of the quadrathlon, and made sure everyone was well fed. Having already had the experience of competing, they were able to couple that knowledge with organizational skills and leadership needed to run a successful contest. Saturday afternoon, contestants took the written exam, gave their oral presentations, and completed the quiz bowl. On Sunday afternoon, the group convened at the Aphin-Stuart Livestock Teaching Arena for the practical. The teams rotated among the livestock, horse and dairy centers to demonstrate their expertise in animal handling and management, and they also completed stations at the arena that dealt with nutrition and feeds, reproductive physiology, poultry and eggs, breed ID's, and meats.

This year, a total of three teams competed in the local quadrathlon: one freshman team and two upperclassmen teams. The all-freshman team, which won the quiz bowl section, was made up of three students: Kristen Berke, Katie Knight and Laura Snow. It was a tight competition between the two upperclassmen teams to represent Virginia Tech at the regional competition. The winning team included APSC majors Kyle Cromer, Ashley Perry, Samantha Renalds, and Cody Yager. The runner up team members were Kelsey Altholz, Caitlin Cassaboom, Candace Flinn, and Melissa VanWitzenburg.

Many thanks to all the people who made the local competition happen: Rebecca Splan, Dan Eversole, Mark Hanigan, Ann Dunnington, Mike Denbow, Paul Siegel, Mike Ashby, Gina Lehman, Lindsey Williamson, Jacob Gilley, Chasity Cox, Susan Speight, Sarah Blevins, Ping Xu, Marissa Smith, Kelly Waters, Regina Shores, Sungwon Kim, Hassan Mahsoub, Regina Lehman, and Joe Emenheiser.



Awaiting results



First Place Team

New APSC Mock Interview Program Launched

by C. M. Wood

In partnership with Career Services, the Department of Animal and Poultry Sciences launched a new mock interview program in the fall of 2008. Designed to give students practice interacting with potential employers in an interview setting prior to an actual interview for an internship or other employment opportunity, the program invites alumni and animal industry representatives to serve as interviewers for students enrolled in APSC 2004 Animal Sciences Seminar. Interviews are conducted in the Smith Career Center, as they often are for real interviews. Students craft resumes and cover letters for internships of interest to them as one class assignment, and those are provided to the interviewers ahead of time. Students are expected to dress appropriately for the interviews, and are graded on everything from their initial greeting and handshake to the final answer to questions asked

by the interviewers.

The program got off to an excellent start in October, with 18 interviewers meeting with 57 students over a 24-hour period. The majority of interviews took place one evening, with the remainder occurring the following morning. Many thanks to our interviewers, who volunteered their time to help these students: Mr. Pete Adamson, Chief, Farm Loan Programs, USDA, FSA; Ms. Rachel Ashby, Credit Analyst, First Bank & Trust Company; Mr. Frank Colosimo, Human Resources Manager, Perdue Farms, Inc.; Mr. Gene Copenhaver, Vice President/Regional Supervisor Ag Lending Office, First Bank & Trust Company; Dr. Rami Dalloul, Assistant Professor, Animal and Poultry Sciences; Mr. Ben Grove, Assistant Director of Development, CALS; Ms. Rachel Hensley, Instructor, Agricultural Technology; Mr. Dave Linker, Agricultural

Mock Interview, continued on page 15...

An Alternative Spring Break at the Heifer Ranch

From Connections - Summer 2008

While their peers enjoyed a break from the rigor of classes and studying, eight Virginia Tech students decided to turn their spring break into a learning experience unlike any other. In March, Susan Clark, associate professor of human nutrition, foods and exercise (HNFE) and director of the department's dietetics program, led a team of undergraduates from various departments in the College of Agriculture and Life Sciences to the Heifer International Ranch in Perryville, Ark.

The Virginia Tech students visiting Heifer International were Allison Bridges, senior in animal and poultry sciences; Cindy Green, senior in agricultural sciences; Karri Honaker, senior in crop and soil environmental sciences; Melissa Hendricks, junior in human nutrition, foods and exercise; Jess Martin, freshman in human nutrition, foods and exercise; Brittany Richardson, junior in animal and poultry sciences; Stephanie Riviere, sophomore in human nutrition, foods and exercise; and Teresa Tubia, senior in dairy science. There, they not only learned about community development and agricultural sustainability in the United States and abroad but also the mission of Heifer International, a nonprofit charitable organization dedicated to relieving global hunger and poverty.

Heifer International began in the 1940s after an American relief worker in Spain, Dan West, searched for a solution to limited food supplies. West founded Heifers for Relief to provide a young cow for families in need provided that they learn about animal husbandry and agree to donate the heifer's offspring to neighboring families.

"Today, it's not just about giving a family an animal," Clark said. "Heifer International uses livestock as a tool to build sustainable communities. Each recipient of a gift animal must pass a gift of equal value to others in their community in need. The passing of the gift assures that each participant in the program becomes a donor to others, enhancing dignity and building a sense of community in each Heifer project. Passing on the gift also helps communities become self-sustaining. Heifer lets the community decide who needs the animal and provides the family with education on how to take care of the animal with a low impact on the environment."

Teaming up with peers from the College of Saint Rose in Albany, N.Y., the Virginia Tech students

learned about this mission through service-learning activities throughout their stay at the ranch. These activities included composting with earthworms, turning over organic gardens, landscaping, animal husbandry, and construction.

"Through these activities, the students learned that the U.S. is the main consumer of resources in the world, even though we have a relatively small population," Clark said.

They experienced the realities of life for some of their world neighbors, too. The week culminated in a night at the Global Village, a site on the ranch with housing representing Guatemala, Zambia, urban slums, rural Appalachia, and a refugee resettlement camp. After dividing into groups with their respective housing, the students learned about the resources they had on hand, such as eggs and cornmeal in Guatemala or firewood in rural Appalachia. They worked together to reach a consensus about how to share their resources for a community meal.

"The next morning, we had to wash dishes outdoors in cold water like a Kenyan family would because our housing represented a refugee resettlement camp," Clark said. She added that the students met one of the early recipients of a Heifer International grant, a Kenyan woman who later became the first in her village to attend school.

Mock Interview, continued from page 14...

Program Coordinator, Animal and Poultry Sciences; Dr. Julia McCann, Instructor, Animal and Poultry Sciences; Mr. Trey McCoy, Multiple Line General Agent, McCoy & Associates; Mr. Milton McPike, Complex Manager, Cargill; Mr. Steve Purdy, Multiple Line General Agent, Innovative Insurance Solutions, Ltd.; Dr. Donna Ratcliffe, Director, Career Services Auxiliary; Dr. Rebecca Splan, Associate Professor, Animal and Poultry Sciences; Mr. Scott Stevens, General Manager, Southern States Roanoke Cooperative, Inc; Ms. Lindsay Stuard, Laboratory Specialist I, Animal and Poultry Sciences; Ms. Amy Tanner, Laboratory Specialist Sr., Animal and Poultry Sciences; Mr. Matt Utt, Lab & Research Spec II, Animal and Poultry Sciences; Dr. Mark Wahlberg, Associate Professor, Animal and Poultry Sciences. Feedback from students and interviewers alike was very positive, with the result that the program will be expanded to include students in APSC 3004 Junior Seminar in spring 2009.

Swine Production Students Go Whole Hog With Hands-On Experiences

by C. M. Wood



Twenty-eight juniors and seniors in the Fall 2008 Swine Production class recently wrapped up an intensive experience in the principles and practical applications of raising pigs, ranging from classroom lectures to labs at the Swine Center, a project centering on the care of a sow and her litter, the Hokie Harvest sale, and an overnight field trip to the Tidewater area of Virginia. The course also

serves as one of the department's writing intensive courses, so students prepared reports on their experiences and summarized one area of current research in swine.

The field trip is always a highlight of the course, giving students firsthand experience of the size and scope of the commercial industry in Virginia. On the trip this year, they visited a large feed mill and associated farrow-to-finish farms, followed by a tour of one of the packing plants in Smithfield. The trip was sponsored by the Virginia Pork Industry Board, with in-kind contributions by Murphy-Brown, LLC and Smithfield Foods, Inc.

In addition to meeting with folks working in the industry, students in the class also heard from a number of people working with pigs at Virginia Tech, with



Evaluating pork carcasses



Nicole Browne and friend

guest lectures and/or labs given by Dr. Allen Harper, Extension Specialist and Director of the Tidewater Agricultural Research and Extension Center; Dr. Jeffery Escobar, Nutritional Immunologist and Assistant Professor in Animal and Poultry Sciences; Dr. Kevin Pelzer, Associate Professor, Large Animal Clinical Sciences; Dr. X. J. Meng, Professor, Biomedical Science; and Ms. Susan Speight, PhD candidate.

The Sow Project and Hokie Harvest sale give students in Swine Production the opportunity to work with several different age groups of pigs. These are group projects, which also give students the chance to work in teams. With the sow project, they are responsible for the care and management of a sow from the time she is due to give birth until her pigs are weaned. They attend the farrowing, care for the baby pigs, and evaluate their sow's performance compared to all the other sows in the same group. Groups of students also work with the bred gilts and young boars consigned to the Hokie Harvest sale, from the beginning of the semester through sale day the last Friday of October. They designed sales flyers on the animals, generated accompanying photographs, and cared for the animals at the Alphin-Stuart arena the week prior to the sale. At the conclusion of the silent auction, students helped load out their animals for their new owners. This year's swine auction set a new record, grossing \$3,470.00 before expenses.



Watering Hokie Harvest pigs



Murphy-Brown's feed mill

Virginia Tech Wins at Dressage at Devon!

by Rebecca Splan

During the week of September 22, four Virginia Tech students traveled with a Virginia Tech-bred foal to Devon, PA, to compete at Dressage at Devon, the most prestigious dressage competition in the hemisphere and the largest sport horse breeding show in the world. The students competed against top professional handlers and the country's leading horses to earn an unprecedented win in the famed Dixon Oval. This is the first time any horse owned by a university or campaigned by university students has ever taken a blue ribbon at Dressage at Devon!

The students, Rebecca Arnold of Martinsville, VA, Kelli Beavers of Lebanon, VA, Claire McGill of Monroe, CT, and Alison Parker of Herndon, VA, had all participated in the Virginia Tech Summer Sporthorse Internship Program, in which they received instruction in conformation analysis, biomechanics and proper handling and presentation techniques for sporthorses. In addition, students in the internship participate in all aspects of running a large breeding farm and assist with ongoing research at the horse center. Coaching the students was Dr. Rebecca K. Splan, Associate Professor of Equine Science in the Department of Animal and Poultry Sciences.

The winning foal was Landmark VT, who was barely

five months old at the time of the competition. Landmark VT is no stranger to success and already has a stellar resume. In July he was shown by Virginia Tech students to multiple wins and two Reserve Champion titles at the Dressage at Lexington breed show, and on September 20th was named Champion Colt of his foal inspection. In addition to his win at Devon, he also placed fifth there in the GAIG/USDF Regional Breeders' Colt Championships under an international panel of judges and against older horses. He is one of the first foals in North America by the international dressage stallion Lingham, whose owner Karin Offield generously donated frozen semen from her incredible stallion to the Virginia Tech's nationally-recognized sporthorse breeding program.



Virginia Tech Students and Horses Successful at Regional Show

by Rebecca Splan



As part of the Virginia Tech Equine Science Summer Internship program, four undergraduate student interns under the guidance of Rebecca Splan, associate professor of animal and poultry sciences, and Kristine Doyle, manager of the Smithfield Horse Center, presented horses owned and bred by the Virginia Tech Foundation

at the Dressage at Lexington Breed Show in July. The show is one of the largest in the area, with more than 70 entrants from some of the country's top breeding farms. The interns, all Animal and

Poultry Sciences majors, were senior Rebecca Arnold of Martinsville, Va.; senior Kelli Beavers of Lebanon, Va.; senior Claire McGill of Monroe, Conn.; and Laura Gladney, a senior Animal Science student from Rutgers University who also participated in the internship.

In the weeks leading up to the show, the students received instruction in conformation analysis, biomechanics, and proper handling and presentation techniques for sporthorses. At the show, the students competed against seasoned professional handlers with tremendous success. In addition to helping prepare horses for show, the summer interns assisted with veterinary, reproductive and foaling work, engaged in daily feeding and horse management prac-

Regional Show, continued on page 18...

Regional Show, continued from page 17...

tices, participated in ongoing research projects, and developed skills in training young horses. This was the third year the summer internship has been offered.

Kelli Beavers exhibited Landmark VT in the Colts of 2008 class and won with the highest score of any horse at the entire show, as well as one of the top three scores given nationwide this year. Landmark VT was named Reserve Champion Colt and Reserve Champion Young Horse and is now qualified for the Regional Championships. He was shown by Virginia

Tech students at the prestigious Dressage at Devon in Pennsylvania in September.

Rebecca Arnold exhibited Odet II to a win in the broodmare class as well as the Champion Mare and Reserve Champion Mature Horse titles. Laura Gladney showed Bella Sera VT in the Yearling Fillies division to a second-place finish and went on to secure a Reserve Champion Filly title. Finally, Claire McGill earned a third-place finish in the Amateur Handler division and showed Bacarra VT to third place in the Yearling Fillies class.

Virginia Tech Breeds Licensed Stallion

by Rebecca Splan

The nationally-recognized sporthorse breeding program at Virginia Tech's Smithfield Horse Center has added another achievement to its long list of accolades in 2008 with the announcement that the 2006 dark bay stallion Liberando VT has been granted a certified breeding license with the International Sporthorse Registry/Oldenburger Registry North America.

The impressive young stallion was purchased from Virginia Tech in 2006 by Anne Sparks, owner of Horses Unlimited, Inc. in Albuquerque, New Mexico. In addition to standing many of the country's finest stallions at stud, Horses Unlimited campaigns horses at some of the world's most prestigious events, including the Pan Am and Olympic Games.

Liberando VT is by the Grand Prix dressage stallion Leonberg, also owned by Anne Sparks, who generously donated the breeding service to Virginia Tech's sporthorse breeding program. Liberando VT



Liberando as a colt
Photo courtesy of R. K. Splan

will continue his training in dressage at Horses Unlimited and will undergo performance testing in 2009. Upon successful completion of his performance test, he will be granted lifetime breeding approval.

VT Horse Judging Team Learns the Sport of Reining

by Julia McCann



The Horse Judging Team cracked the top five in their second appearance at the National Reining Horse Judging Contest at the Futurity in Oklahoma City on December 4-5, 2008. After a few months of preparing for the written test, video test, and the ability to rank two sets of ten horses, the team put in a solid performance to place fourth in a true coast-to-coast competition that was won by

West Texas State, followed by the University of Wisconsin River Falls and Cal Poly. Eighteen teams completed the field of competition to evaluate some of the most athletic horses in the industry and be compared to the five professional judges of these events as they happened in the Non-Pro final runs.

Dr. Julia McCann coached the team and is appreciative of the financial support of donors Markel Equine Insurance and Pat Mullins, Jeff Marsh, VT Judging Team alumni, Culpeper Farm Bureau, Northern 4-H District and the Animal and Poultry Sciences Department at Virginia Tech.

With over double the enrollment in the 2009 spring

VT Horse Judging Team, continued on page 19...

VT Horse Judging Team, continued from page 18...

evaluation class compared to last year, anticipation is high for a competitive spring team to attend the Middle Tennessee All Breeds Contest and the American Paint Horse Judge's Seminar and Contest in Fort Worth, TX. The group is raising funds through the sale of VT Equine Program key chains (orange horse head carabineers with maroon VT straps for \$5.00) and catering a few on campus functions when possible. The team welcomes donations to help fund the trips. Please contact Dr. Julia McCann (jsmccann@vt.edu, 540-231-7384) to join the team of supporters.



(l-r) Dr. Kim Sloan (President of the National Reining Horse Association), team members Bailey Smith of Bristol, TN, Lindsey Williamson of Culpepper, VA, Morgan Nati of Johnstown, PA, Ben Craig of Raleigh, NC, Jeni Lamb of Colorado, Julia McCann (coach) and Mr. Pat Mullins (Markel Equine Insurance).

Virginia 4-H Horse Judging Team

by Celeste Crisman



It is time to play a little catch up on the activities of the Virginia 4-Hers and their outstanding performances in National Competitions throughout the summer and fall – Horse Judging, Hippology, Horse Bowl, Individual Presentations and Public Speaking.

At Southern Regionals – we had two Hippology teams (Team A – Tori Ashley, Zoe Carroll, Lauren Hartburg and Emma Taylor; Team B – Madeline DuCharme, Sydney Fischer, Andrea Oliver and Julia Wenger), two Horse Bowl teams (Team A – Peyton Brandt, Madeline CuCharme, Sydney Fischer and Julia Wenger; Team B – Samantha Dalton, Sarah Dalton, Brittany O'Quinn and Darla Dale), two Judging Teams (Team A – Lauren Hartburg, Zach McCann, Erin Beach and Krystal Saint James; Team B – Andrea Oliver, Kaiti Sprouse, Victoria Wolfgang and Morgan Saint James), two Individual Presentation (Adrienne Dickerson and Abby Worth-Jones) and one Public Speaking (Baily Leonard).

For Hippology – Team A was 9th in Judging, 1st in Team Problem, 5th in Written Test, 6th in Stations and the 4th high team Overall. Virginia B was 4th

in Judging, 11th in Team Problem, 6th in Written Test and 9th in Stations putting them in 7th place Overall. Individually placing in the top 10, in the Written Test phase, Lauren Hartburg was 1st, for Stations, Lauren was 2nd, for Judging, Lauren was 1st, Andrea Oliver was 4th and Madeline DuCharme was 10th. Overall individual winner for Southern Regionals Hippology was Lauren Hartburg!!!

Horse Bowl Results – Virginia Team A was 4th place and Team B was 6th. Individually, Julia Wenger was 10th! In Individual Presentations – Adrienne Dickerson was 4th!

For Horse Judging - Halter Division: Team B was 4th, Team A was 6th, Performance Division: Team A was 1st and Team B was 5th. In Reasons – Team A was 3rd and Team B was 6th. Overall, Virginia A was 2nd and Virginia B was 5th. Individually in Halter (top 10) – Andrea Oliver was 5th and Morgan Saint James was 10th. Performance – Lauren Hartburg was 2nd, Krystal Saint James was 3rd, Erin Beach was 6th and Andrea Oliver was 9th. For Reasons – Lauren was 3rd, Andrea was 4th and Krystal was 9th. Overall individuals – Andrea was 4th, Lauren was 6th, and Krystal was 7th.

The Judging Team's second competition for the year was the Tennessee Walking Horse Celebration in Shelbyville, TN and what an exciting experience it was! We went early and practiced for a few days prior to

Virginia 4-H Horse Judging Team,
continued on page 20...

Virginia 4-H Horse Judging Team, continued from page 19...

the contest. Team A members were Erin Beach, Lauren Hartburg, Krystal Saint James and Andrea Oliver, Team B members were Zach McCann, Victoria Wolfgang and Kaiti Sprouse. Virginia A team was 3rd in Performance, 1st in Halter and 1st in Reasons and 1st place Team Overall. Virginia Team B was 10th overall. Individually, Krystal was 8th in Performance. For Halter – Erin Beach was 5th, Lauren was 6th and Krystal was 7th. In Reasons, Krystal was 3rd, Erin was 9th and Lauren was 10th. Overall for Individual competition – Krystal was 6th, Erin was 8th and Lauren was 9th. All of our other team members finished consistently in the top 20 which goes a long way to team rankings! The team was invited to Center ring on Saturday night which is a HUGE deal at the Celebration. They also came home with lots of Scholarship monies which goes a long way in the parent's minds towards justifying the expenses associated with the team! Rebekah Smith, former state team member, did most of the coaching for this contest as this is her specialty and a contest where she won high individual!

The next contest for the Judging Team was Arabian Nationals, held for the first time in Tulsa, Oklahoma. Arabian Nationals is always a busy and entertaining show. Team members were the same as at TWH Celebration. Virginia Team A was 2nd in Halter, 2nd in Performance, 1st in Reasons and 2nd place team Overall (by just 2 points)! Virginia B was 3rd in Halter, 8th in Performance, 5th in Reasons and 5th place team Overall! Individual placings were: Halter – Krystal was 1st, Erin was 5th, Katie Sprouse was 6th, Victoria Wolfgang was 8th. Performance – Krystal was 3rd and Erin was 6th. For Reasons – Erin was 2nd, Andrea was 3rd, Krystal was 5th, Zach was 7th, Kaiti was 9th. Overall, Krystal Saint James won the 4-H division! Erin Beach was 5th and Kaiti Sprouse was 7th overall! For her efforts, Krystal came home with a \$750.00 scholarship and a custom made Dale Chavez Reining Saddle valued at \$3000.00!!

The final competition of the year was Eastern Nationals in Louisville, KY, November 7 – 9. Each State could bring one team for each competition area. This year we did not fill each area but we had a great showing in those that we did. Our Hippology Team members were Lauren Hartburg, Andrea Oliver, Zoe Carroll and Tori Ashley. The team was coached by Bertha Durbin. The Judging Team consisted of Zach McCann, Erin Beach and Kerry Cummings and was coached by Yvonne Miller and co-coach Rebekah Smith. Also, Adrienne Dicker-

son of Christiansburg, Va competed in the Individual Presentation Contest – Adrienne was coached by her mom, Gillian!

Virginia results were:

Hippology – Virginia was the 3rd high team in Problem Solving and the 9th high team Overall. Individually, Lauren Hartburg was 2nd in the Written Phase, 2nd in the Station Phase and was the Reserve Champion Overall.

Horse Judging - In Team Halter, Virginia was 4th, 5th in Reasons and 10th High Team Overall. Individually in the top 10, Erin Beach WON the Halter division, was 7th in Reasons and was 8th high Individual Overall!

Please give huge congratulations to all of these youth who represented the Virginia 4-H Horse Program in National Competition. While winning is great – I am most proud of these youth for their hard work, dedication, personal integrity and morals – I can honestly say that we always had great fun and I was able to sleep well at night (which is very important) and didn't have to worry about shenanigans – and believe me – not all states can say that!

I also want to thank all of the county level coaches who have worked with these youth for so long and really have gotten them to where they are. Kudos to the parents of these youth for their support and in making them who they are. You both have done all the really hard work, personally and competitively, we (state level coaches) just do a little tweaking and get to smile a lot!

You may visit the Eastern Nationals website to see more of the winning photos!

<http://www.4hroundup.com/results.htm>



2008 Virginia Tech Livestock Judging Team

by Mr. Lance Leachman and Dr. Dan Eversole

This Virginia Tech Livestock Judging Team recently completed the fall judging season. The team started practice in mid-August and worked-out three days a week and most Saturdays. The team attended the Eastern National in Timonium, Maryland; Keystone International in Harrisburg, Pennsylvania; Boilermaker Classic at Purdue University; Premier Stockmen in Frankfort, Indiana; American Royal in Kansas City, Missouri and the North American in Louisville, Kentucky.

Team members included Jonathan Ferguson, Lebanon; Jonathan Burner, Luray; Cindy Koontz, Harrisonburg; Katelyn Koontz, Harrisonburg; Sarah Weaver, Orange; Sarah Joseph, Elkton; Amanda Weakley, Brightwood; and Krisha Witt, Blue Ridge. The team, which was coached by Mr. Lance Leachman (graduate assistant), traveled in excess of 8500 miles, spending nineteen nights on the road away from Blacksburg and judging 168 classes of livestock along with 95 sets of reasons.

The team began the year winning the Eastern National placing first in cattle, sheep and oral reasons. Jonathan Burner was second high individual, third in swine, first in cattle, and third in oral reasons. Katelyn Koontz was fourth overall, second in sheep, third in cattle, second in oral reasons. Sarah Joseph was fifth high individual, second in swine, and fourth in oral reasons. Krisha Witt was fourth in sheep and cattle. Cindy Koontz was third in sheep. Amanda Weakley was fifth in swine.

At the Keystone Contest the team was second overall also winning sheep. Jonathan Burner was second high individual, fourth in cattle, fifth in swine, seventh in sheep, and fourth in oral reasons. Sarah Joseph was eighth high individual, sixth in swine and sixth in sheep. Katelyn Koontz was eighth in swine and ninth in oral reasons. Cindy Koontz was eighth in cattle and ninth in swine. Amanda Weakley was third in sheep.

Trips followed to Indiana and then to the two most prestigious contests at the American Royal and North American. The competition was excellent at these contests with a new team record being set at the North American by Texas Tech University.

Throughout the fall, team members traveled to the livestock operations of 25 producers while utilizing animal units at Purdue University, Kansas State

University and here at Virginia Tech. The support from the livestock community and alumni was tremendous and the quality of the people and the livestock in Virginia were a pleasure to work with.

The dedication, work ethic, enthusiasm, and time management from these eight students were admirable. Having began livestock judging a semester later than most schools, each one of the students strived to progress and competed successfully.

Thanks to all faculty and staff in cooperating with the students in making up course work or assignments they may have missed when traveling. The oversight of Dr. Eversole and financial support from the Department, Block and Bridle Club and the VA Pork Industry Board is also greatly appreciated in making this important activity possible.



2008 Livestock Judging Team photo.

Front: Amanda Weakley

First step (L to R): Cindy Koontz and Sarah Weaver

Second Step (L to R): Katelyn Koontz, Krisha Witt,
Sarah Joseph, and Lance Leachman (Coach)

Back Row (L to R): Jonathan Ferguson and Jonathan Burner

Impact Of Embryonic Incubation Temperature On Post-Hatch Performance Of Commercial Broilers

by Audrey McElroy



Virginia's poultry industry contributed \$937 million to the economy in 2007. With increasing feed costs, each 1% improvement in feed conversion can make a difference of \$500,000 annually in profit. Intestinal integrity and function at and post-hatch are key to maximum nutrient utilization and growth for broilers.

The current situation in commercial poultry incubation has resulted in increased metabolic heat production by the yield-type embryos that leads to accumulation of heat in the egg setters and hatchers, particularly in the latter phases of embryo development, that is difficult to dispose of due to poor airflow. As a result, hatch of fertile eggs and chick quality has decreased and more problems with embryonic development have become challenges for hatchery management.

Through funding provided by the Virginia Agricultural Council and the US Poultry and Egg Association, we conducted experiments to evaluate the effect of early and late incubation/hatcher temperature profiles and post-hatch transportation temperatures on the performance, intestinal development and immune response of commercial broilers. Data have shown differences in broiler hatch parameters, post-hatch growth and feed conversion, expression of intestinal nutrient transporters, and im-



mune organ development. At hatch of chicks, there were differences in intestinal tract weight as a result of embryonic incubation temperature. These differences may have contributed to differences between incubation temperature treatments observed in body weight through day 35 post-hatch. There were also differences observed in the expression of selected nutrient transporters at hatch and on several days after hatch, which can be indicative of differences in nutrient utilization.

Benefits of this research include a direct linking of embryonic incubation environment and the resulting development of broiler chickens, thus directly impacting strategies designed to improve hatchability and subsequent performance. Overall, the research indicates that current embryonic incubation environments can be improved to promote intestinal development and subsequent post-hatch performance and hence improve economic return for the industry.

Dates to Remember in 2009

January 20	Spring Classes Begin
February 21	B & B Horse Judging Contest
March 7 - 15	Spring Break
March 20 - 21	Livestock, Stockman's, and Meats Judging Contest
March 27 - 28	Hippology and Horse Bowl Contests
April 24	Ham Show
April 25	Little International and Ham Sale
May 6	Classes End
May 15	University Commencement
May 16	College Commencement

APSC Contact Information

Department of Animal and Poultry Sciences	Area Code (540)
Main Office and Extension Office.....	231-6311
Undergraduate Advising Office.....	231-6936
Club Advisors	
Block and Bridle Club	
Mark Wahlberg.....	231-9161
Dave Linker.....	231-9154
Equestrian Club	
Teresa McDonald.....	231-3555
Poultry Club	
Audrey McElroy.....	231-8750
Pre-vet Club	
Mike Denbow.....	231-6843
Facilities Contacts	
Farm Supervisor, Dave Linker.....	231-9154
Beef Center.....	231-6280
Sheep Center.....	231-6988
Smithfield Horse Unit.....	231-4366
Swine Center.....	231-6250
Poultry Center.....	231-5810
Turkey Center.....	231-6283
Campbell Arena.....	231-3555
Judging Pavillion.....	231-9150
Alphin-Stuart Arena.....	231-9150

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