

# APSC

*The Department of*  
**Animal and Poultry Sciences**

[www.apsc.vt.edu](http://www.apsc.vt.edu)

## Dear Alumni and Friends:

I had the privilege of attending our December graduation ceremony a couple of weeks ago, where more than 20 animal and poultry sciences undergraduates received diplomas for their efforts. As exciting for me, however, was meeting the family and friends of our graduates earlier that morning when our faculty and staff prepared the traditional omelet/crepe breakfast for the occasion. This is a marvelous time of the year for students and faculty alike.

Even though we had a chance to catch our breath over the holidays, everyone is in the midst of another busy and exciting spring semester. We currently boast an enrollment of 515 undergraduates, an enrollment among the top 10 departments across campus. Of this total, over 70 percent come from a suburban or urban background and have an interest in horses or companion animals. Moreover, about 30 percent of our undergraduates originate out-of-state, creating a very dynamic and diverse educational environment.

Once again, we have had the opportunity to add a couple new faces to our faculty. Assistant Professors Mike Persia, who specializes in poultry nutrition, and Kiho Lee, who specializes in reproduction, relocated to Blacksburg a few weeks ago and are busy developing their respective programs. As a reflection of all these new faculty members, our graduate student population has risen to an all-time high of 55 students, or just over two students per faculty member. These students, with their major advisors, are responsible for creating new knowledge about animal sciences, and exploring topics ranging from how to feed

livestock to minimize illness, to discovering how stem cells help animals grow faster. These areas, plus a number of others, are extremely germane to production agriculture, yet have implications to human health and well-being. This has helped keep us relevant and safeguards our future.

Facilities remain one of our biggest challenges. However, we are heavily engaged in discussions with our colleagues in dairy science to create new animal teaching, research, and outreach facilities close to campus and at Kentland Farm. We feel privileged to have such an opportunity and look forward to their availability.

Remember, if you happen to be on campus, please do not hesitate to stop in for a visit.

Sincerely,



David E. Gerrard  
Professor and Head  
Department of Animal and Poultry Sciences



*David E. Gerrard, professor  
and department head*





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VT/0214/WEB/APSC-55

## In Memoriam

*From the Roanoke Times, January 19, 2014*

### Teresa L. McDonald

Teresa "T" L. McDonald, 58, of Blacksburg, died Thursday, Jan. 16, 2014. She was born to the late Fred and June Little in Marion. Teresa graduated from Marion High School. She received her Equine Instructor's Certificate from Fox Hollow Equestrian Center in West Chester, Pa., in 1976. She received a bachelor of science in journalism from Radford College in 1980 and her master of science degree in educational media and instructional design from Radford College in 1985. Teresa was the senior instructor for the Equitation Program at Virginia Tech since 1994 and served as coach for both the Intercollegiate Horse Show Association Hunter Team and the Intercollegiate Dressage Association Team. She was passionate about making a difference in the lives of her students and coached riders to national titles on both teams. She was honored with inclusion in the Southwest Virginia Hunter Jumper Association Hall of Fame in 2004, the Intercollegiate Dressage Coach of the Year award in 2008, and the Intercollegiate Horse Show Association Lifetime Achievement Award in 2009. Before taking her faculty position at Virginia Tech, Teresa coached and taught at Radford University, Ferrum College, and Teresa Little Coaching. Teresa is preceded in death by her parents, Fred and June Little of Atkins; her brother-in-law, James Blevins, of Galax; and her father-in-law, Jim McDonald, of Blacksburg.



Teresa is survived by her husband, Bill McDonald, of Blacksburg; her son, Joseph McDonald, of Blacksburg; her sister, Jane Blevins, of Galax; her sister and brother-in-law, Donna and Doug Fender, of Wytheville; her mother-in-law, Martha McDonald, of Blacksburg; and her brother and sister-in-law, Jim and Brenda McDonald, of Fairfax. She also is survived by several nieces and nephews, Samantha Bohanan, Stephanie Blevins, Douglas Fender, Savannah Fender, Matthew McDonald, and Ashlyn McDonald.

Donations can be made to the Teresa "T" McDonald Equitation Support Fund to honor her memory. Checks may be made out to the Virginia Tech Foundation. Please include "Teresa McDonald Fund" on the memo line. Donations may be mailed to Barbara Martin, College of Agriculture and Life Sciences (MC0402), Hutcheson Hall, Suite 216, Virginia Tech, 250 Drillfield Dr., Blacksburg, VA 24061.

## Faculty recognition

### BEEF Magazine honors W.E. “Bill” Beal as one of top 50 industry leaders

BEEF Magazine honored W.E. “Bill” Beal in September 2013. Beal is a Michigan native who earned degrees from Michigan State University, the University of Wyoming, and Cornell University before joining Virginia Tech in 1979, where he has contributed greatly to research in improving cattle’s reproductive efficiency.

Beal was instrumental in discovering methods to control estrus and ovulation in cattle, utilizing ultrasound to evaluate ovarian function, as well as early pregnancy diagnosis and fetal sexing.

Cattle producers across the world can thank this professor emeritus of animal and poultry sciences and renowned reproductive physiologist for his work in bovine reproduction. His diligence in investigating methods for controlling estrus and ovulation in cattle provided the industry with higher conception rates and tighter estrus synchronization in their herds.

While receiving his advanced degrees, Beal studied the effects of gonadotropin releasing hormone (GnRH), as well as induced parturition in cattle. He subsequently helped develop estrus synchronization programs for cattle using various progesterone and GnRH sources. Today, many cattle producers use a combination of GnRH, prostaglandin F2-alpha CIDR, or MGA in their breeding programs to closely synchronize a group of cattle in heat for better efficiency of time during breeding season.

[www.beefmagazine.com](http://www.beefmagazine.com)



Congratulations to Ron Lewis (center) and his team members Eric Gilmore (left) and Oodbjoem Hestness for winning the XCaliber Award.

This is a superb accomplishment and a truly great contribution to the discipline.

Below is a link to a USDA blog outlining the impact of the team’s efforts.

[blogs.usda.gov](http://blogs.usda.gov)

## Faculty activities



Animal and poultry sciences faculty member Rami Dalloul at the reception for Timothy Sands (right), who will begin his tenure as Virginia Tech’s 16th president on June 1, 2014.

## Staff recognition



Left to Right: Dave Gerrard, Ron Lewis, Ellie Stephens, Alan Grant

### Ellie Stephens – Employee of the Month

Ellie Stephens was selected as the College of Agriculture and Life Sciences Staff Employee of the Month for November 2013.



Left to Right: Alan Grant, Lee Johnson

### Lee Johnson was named College of Agriculture and Life Sciences Employee of the Year for 2013.

Johnson also received the 2013 Virginia Tech Outstanding Performance in Labs Award. This award was created to recognize an individual for performance supporting research in a non-administrative position.



## Student recognition



Assistant Professor of Animal and Poultry Sciences Samer El-Kadi cooking crepes at the December Omelet Breakfast honoring animal and poultry science graduates and their families.

## Phi Beta Kappa inductees

Please congratulate the following animal and poultry sciences majors who were recently invited to join Phi Beta Kappa. Fewer than 10 percent of the colleges and universities in the United States have earned the privilege of hosting Phi Beta Kappa chapters, and fewer than 10 percent of their students are eligible for Phi Beta Kappa membership, so these students represent our very best.

**Camilla Hughes**  
**Jessica Repep**  
**Courtney Scarborough**

## Feeding the neonate: the piglet benefits agriculture and human health

By Samer El-Kadi and Rob Rhoads

Traditionally, agricultural research involving pigs has focused on improving the efficiency of meat production, pork quality, and animal health. In recent years, there has been a greater appreciation of a role for agriculturally important domestic animals to improve human health as basic and translational research models.

The pig, which possesses many physiological similarities to humans, is especially well suited to fill this dual-purpose role with benefits highly relevant to both agricultural and biomedical research that have recently become a well-established model for infant formula nutrient interactions.

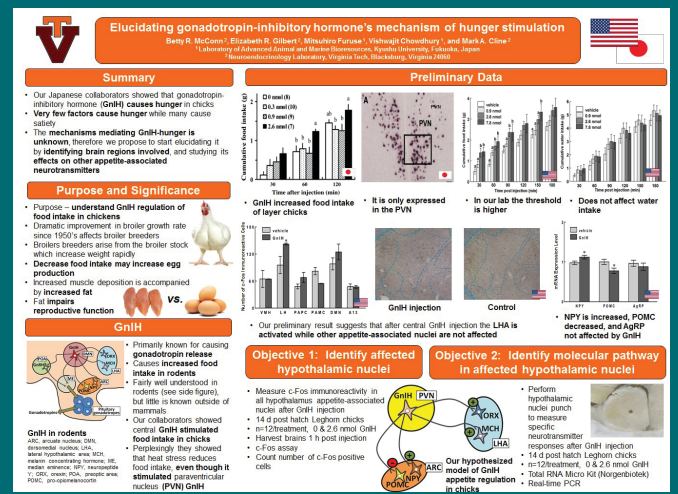
One of the reasons the pig makes a good model is anatomical and functional similarity of the pig digestive tract to that of the human. In addition, the accelerated growth rate (~10-fold) of neonatal pigs relative to human infants enhances the sensitivity of the former to the effects of toxicological agents. Thus, the similarity of developmental program and anatomy of the large intestine, in combination with an accelerated growth rate, render the neonatal pig an appropriate

representative for human infants in nutrition studies.

Here in the Department of Animal and Poultry Sciences at Virginia Tech, several faculty members are taking advantage of the versatile pig to pursue research important to both the biomedical and agricultural sectors. A good example is the research performed in the laboratories of Assistant Professors Samer El-Kadi and Robert Rhoads focusing on the growth and health of the neonatal pig. A component of this research examines the supplementation of replacement milk formulas with novel ingredients to enhance neonate development. Breast milk remains the optimum vehicle to deliver high quality nutrients in quantities sufficient to sustain normal growth. However, in many instances,

## Student presents poster at the Virginia Academy of Science Meeting in Richmond

On Oct. 26, 2013, animal and poultry sciences major Betty McConnell successfully defended a grant proposal entitled "Elucidating gonadotropin-inhibitory hormone's mechanism of hunger stimulation" at the Virginia Academy of Science Fall Undergraduate Research Meeting in Richmond, Va. The project is a collaborative effort between Virginia Tech and Kyushu University in Fukuoka, Japan. The Japanese were the first to document the hunger stimulating effects of GnIH in chickens, and McConnell's role was to determine which hypothalamic nuclei mediate the effect in addition to identifying other appetite-associated neurotransmitters that may also be associated with stimulating hunger. She has been doing undergraduate research in the laboratory supervised by Assistant Professors Mark Cline and Elizabeth Gilbert for over a year.





*Measuring body composition of pigs using dual-X-ray absorptiometry.*

breast milk insufficiency necessitates the use of replacement milk formulas. To accomplish the research at Virginia Tech, El-Kadi and Rhoads have teamed with a global company that manufactures infant formulas.

Examples of the neonatal pig model establishing safety of novel ingredients for replacement formula include determining the safety of long-chain polyunsaturated fatty acids and their effect on lipid accretion and adipose tissue metabolism.

Most recently El-Kadi and Rhoads conducted a study focused on the effect of probiotics on gastrointestinal tract, which has become the basis for the graduate study of Leanne Brooks. The main research objective consisted of adding prebiotics to infant formula in an effort to better and safely mimic the physiological attributes of naturally occurring prebiotics in breast milk. The study basis stems from advances in analytical techniques that have made it possible to better understand milk chemistry in combination with studies showing that breast milk contains a large variety of oligosaccharides. For that reason, oligosaccharides may be added to infant formulas to enhance their health benefits and to closely match the composition of natural breast milk. Ultimately, the outcomes of this research may provide information that allows development of a more natural replacement formula to support neonate health and development.

## Animal and Poultry Sciences students abroad: applied animal behavior and management in the UK and Ireland

*By C.M. Wood*

This past summer 19 students participated in a short-term study abroad program that focused on applied animal behavior and management in England, Scotland, and the Republic of Ireland. Students compared farming techniques found in the British Isles to those of the United States. In preparation for the trip, which took place May 21 – June 4, 2013, students studied livestock management systems, toured campus barns and a local farm, and learned principles of animal behavior. Prior to departure each student canvassed their local grocery store for animal products and was assigned a stop on the itinerary to research.

In addition to keeping a daily journal during the trip, students presented briefings on their tour, compared animal products available in grocery stores, and collected information for a research paper on a topic related to applied animal behavior and management. Nine of the students also chose to use this unique opportunity as their capstone experience by preparing a graduate-level literature review on their chosen research topic.

The group convened in Washington, D.C., on May 21 for a visit to the National Zoo and an introduction to some of the behind-the-scenes research conducted there before leaving for London, England, that evening. The trip itinerary included overnight stops in London, Warwick, and Leigh before leaving England; three nights in Edinburgh, Scotland; an overnight stay in Belfast, Ireland; five nights in the Republic of Ireland in Dublin; farm B&Bs in and near Kilkenny; and Cork.

In addition to numerous tourist attractions in London, Edinburgh, and Dublin, a number of castles, and Hadrian's Wall, the group visited a variety of animal enterprises, including traditional and grass-based dairies, sheep farms, purebred and commercial beef operations, an organic livestock farm, a goat cheese maker, an English county agricultural show, the Edinburgh Zoo, the Irish National Stud, and an Irish greyhound track.

Several days were devoted to visiting colleges and universities with animal science programs. These included Writtle College near London in Chelmsford that has a strong equine science program; Scotland's Rural College in Penicuik, home of the Roslin Institute and an internationally known research program in applied animal behavior and welfare; and University College Dublin, the other major university in Dublin that is very similar to Virginia Tech in its philosophy and programs.

During their whirlwind two-week trip, the group explored cities, towns, and the countryside both as tourists taking in the sights and sounds, including a performance of "The Phantom of the Opera," and as animal scientists comparing approaches to animal behavior and management in the U.S., the U.K., and Ireland.

**Planning for a repeat trip the summer of 2015 is currently underway. Anyone interested in joining us should contact Cindy Wood at [piglady@vt.edu](mailto:piglady@vt.edu) or 540-231-9637.**





## An introduction to equestrian club officers

By Kellsie Mullikin

Some of the equestrians at Virginia Tech are active and enthusiastic members of the Intercollegiate Dressage Association. The association is a national organization of collegiate dressage programs that offers organized competitions and the opportunity for students to make competitive dressage part of their college experience. Team members attend four shows throughout the semester and are also members of the Equestrian Club. Members of the club and the teams work together to hold events and shows, and also raise money for horses and barns. Team members are required to take a riding class, which is sponsored by the Department of Animal and Poultry Sciences and is one credit each. In addition to riding in a class twice a week, students take quizzes, complete project hours, and care for horses assigned to them.

The four individuals shown here have been instrumental in making the dressage team successful this year through all their hard work and dedication. Caitlin Cleaver and Caroline Pearson are co-captains. They organize team events and support riders at shows and at practices. Megan Gildea is the manager and Kellsie Mullikin is the assistant manager. Megan, with the help of Kellsie, is responsible for coordinating tryouts, practices, show entries, and many other things. These girls have had a wonderful season and are excited to participate in IDA activities in Spring Semester 2014!



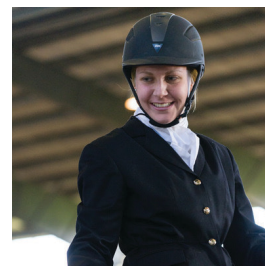
### **Megan Gildea, Dressage Team Manager:**

I am currently a junior majoring in marketing. I have been manager of the dressage team for two semesters. I love the diversity of our team and the experiences we get to have through the Intercollegiate Dressage Association. When not riding on the team, I love to go foxhunting!



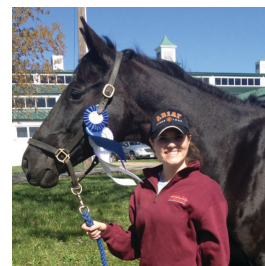
### **Kellsie Mullikin, Assistant Manager:**

I am currently a sophomore double majoring in animal and poultry sciences and agribusiness. I have been riding for 10 years, trying a variety of disciplines, but dressage is definitely my favorite. I started showing with 4-H and I haven't been able to stop! Being on the dressage team is such a wonderful opportunity because you get to practice together and build friendships that I am sure will last a lifetime. I am so excited to be the assistant manager of such a wonderful group of people!



### **Caitlin Cleaver, Co-Captain:**

I am a senior majoring in animal and poultry sciences. I have been riding for 10 years and am currently a lower training rider on the dressage team. After I graduate in May, I am getting married and moving to Washington State! I have two adorable pet rats named Maizy and Eloise.



### **Caroline Pearson, Co-Captain:**

I am a sophomore majoring in human nutrition, foods, and exercise. Before coming to college I was involved in Pony Club and competed in eventing and jumpers. When I came to Virginia Tech I wanted to try something different, so I tried out for the dressage team. Being in the equestrian club and on the dressage team has made my college experience better than I could have ever expected. Our team has so much fun together and has such a unique bond. I'm so excited to be co-captain this year of such a great group of girls!

To find all the activities for the Virginia Tech Equestrian Club and teams visit:

[www.vatechequestrian.wix.com](http://www.vatechequestrian.wix.com)

## Strong support at the 2013 Hokie Harvest Sale

By Dan Eversole

The 2013 Livestock Merchandising Class at Virginia Tech entertained a standing-room-only crowd of over 500 supporters and friends in the Livestock Judging Pavilion at the 19th Annual Hokie Harvest Sale on Friday, Oct. 25. As many of you know, the Hokie Harvest Sale has developed a significant reputation for selling high quality, university-owned livestock. Since the inaugural year of the Hokie Harvest Sale in 1995, 1,354 students have enrolled in this merchandising class and a grand total of 362 horses, 46 pigs, and 833 head of beef cattle have been offered at public auction, totaling \$2,145,693 in gross revenue.

This year's sale grossed \$120,200 and featured 48 lots of purebred and commercial beef cattle that were offered to 153 registered buyers from Ohio, Illinois, Tennessee, Florida, North Carolina, West Virginia, South Carolina, and Virginia. Aaron Ray Tompkins, Cowbuyer LLC of Mt. Airy, N.C., broadcast the entire sale live over the internet. Chris Terembes of Executive Sires Inc. of Charlottesville, Va., stopped by and interviewed Dan Eversole and several of his students for live sale day coverage on LivestockWorld.TV. The beef cattle sale featured 29 head of commercial bred females and 29 cattle representing three different purebred breeds — Angus, Hereford, and Simmental.



*Pre-sale comments by Dr. Dan Eversole and Mr. Ken Brubaker (auctioneer) along with Logan Miller from Glen Allen, Va. (student clerk) and Mason Thomas from Madison Heights, Va. (in sale ring).*

There were seven spring-calving pairs in the cow/calf division, which averaged \$4,388. Lot 2 was the sale topper at \$4,900. This four-year-old Angus cow is a daughter of GAR New Design 5050 and is a natural calf of the \$10,000 valued VT donor, HHF Alli Rita 704 317. She ranks in the top 10 percent among current dams for CED, MARB, and \$B at \$81.83 as well as the top four percent on her MILK EPD. Both she and her phenomenal February heifer calf sired by SS Incentive 9J17 sold to Dave Beachy of New Matamoras, Ohio.

In the Hereford cow/calf division, Lot 8 commanded the highest bid at \$2,700. This three-year-old female, sired by KCF Bennett 774 R413, ranks in the upper five percent for BMI\$, top 10 percent for CEZ\$, and top 15 percent on her MILK and M&G EPDs. She and her August baby heifer calf, sired by UPS Domino 3027, sold to Matthew Taylor of Sandyville, W.Va.

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## Noble Foundation

The Samuel Roberts Noble Foundation is an independent, nonprofit institute headquartered in Ardmore, Okla. Founded in 1945, the Noble Foundation conducts direct operations, including assisting farmers and ranchers, and conducting plant science research and agricultural programs to enhance agricultural productivity regionally, nationally, and internationally.

Two Virginia Tech students, Hope Wentzel and Kristen Ulmer, were 2013 Lloyd Noble Scholars in Agriculture and wrote the following articles.

### A new breed of cowboy

By Hope Wentzel

The sun breaks over the shrubby horizon, warming the Oklahoma landscape and setting the sky ablaze with the vibrant pinks and oranges of dawn. On the slight ridge that overlooks the cattle pastures of Oswalt Ranch, the cowboy surveys the fields from atop his trusty steed, a green four-wheeler. Wait a second! What happened to his horse?

Although I've always known that cattle ranching is no longer exactly like it was in the Old West (even my suburban upbringing couldn't confuse me that badly), it still took me a moment to get used to the sight of the gentleman in the cowboy hat seated atop an all-terrain vehicle. The use of all-terrain vehicles is just another example of how agriculture uses machines to increase the ease with which tasks can be done. This particular job was counting the steers in the pasture so we could be sure all the steers being used in Noble's study (one to investigate the effects of prescribed burning on grazing behavior) were accounted for.

Anya and I followed our four-wheeling cowboy in the Kubota, keeping our eyes peeled for the steers we were tasked with counting. Each section of the pasture held its own individual charm, a testament to the diversity of

*continued on page 8*



*Noble Foundation continued from page 7*

the landscape. However, navigating these lovely woods, fields, and creek on our own is a bit more of a task than I would like to attempt. With every change of direction, I was more and more thankful we had the four-wheeler to follow. Horses or not, these cowboys at Noble possess an incredible skill set and the more time I spend with them, the more I respect all their work with the cattle that enables the research to proceed smoothly. All in all, the four-wheeler cowboy is an interesting twist to the story of the West.



## Burning in blaze orange

*By Hope Wentzel*

Growing up with Disney has led me to connect wildlife and fire with the image of a terrified Bambi running from an uncontrollable blaze. But, as is clearly demonstrated by the Noble Foundation's use of prescribed burns, fire can be incredibly beneficial for the land, wildlife, and agriculture.

So the happy news is that fires, when controlled, are good for Bambi and all his furry friends. They can be used to manage vegetation, combating undesirable plants and providing excellent growing conditions for those plants with high wildlife value. I had the pleasure of participating in this management practice last Thursday as we burned five acres at Coffey Ranch for the Summer Burn Workshop.

As we got suited-up for the burn, my plastic knee brace, which I have to wear on my post-ACL surgery knee, called for interesting burn attire. Since women's pants are rarely designed to be worn while setting a field on fire (while also wearing a knee brace), I was outfitted in a blaze orange jumpsuit. I looked like an escaped convict. Once they handed me the drip torch and let me go to work, I looked like an escaped convict committing arson...so happy this job is turning me into such an upstanding citizen!

**Hope Wentzel** is a 2013 Lloyd Noble Scholar in Agriculture from Alexandria, Va. She will be a junior at Virginia Tech in the fall, majoring in animal and poultry sciences with a production business option and livestock emphasis, and minoring in forestry.

## Git along, little doggies

*By Kristen Ulmer*

The mob grazing project for the Lloyd Noble Scholars in Agriculture came as a blessing for the early birds in our group, but a rude awakening to the night owls. As the sun highlighted the horizon with its blushing presence, soft mutterings from the herders followed the cattle into a knee-high pasture of native bluestem and tall fescue.

The cattle, heads down, ears forward, grazed the pastures, chewing on the

sweet blades, skipping the tangy weeds and grasses, as we moved them from pasture to pasture. This multicolored bovine mass removed the waving green blanket that overlaid the warm summer ground.

The effort to maximize forage utilization and put weight on cattle efficiently goes agriculturalists day in and day out, so the mob grazing demonstration offers a way to incorporate both these areas of interest. Small, but necessary, components of the project itself are the labor and fencing. Labor — the scholars. Fencing — thin wire strands pulsing electricity to keep the grazers in check. A word of caution: one has to quickly apply common sense in order to prevent the inevitable — or as some might say enlightening — experience. The relationship that the fence and laborers share is not one of mutual trust, but that of wariness and warranted respect. The work belts we were given at the beginning of the summer have another notch in them: professional fence hoppers or crawlers — a shock in itself.

**Kristen Ulmer** is a 2013 Lloyd Noble Scholar in Agriculture from Broadway, Va. She is a senior at Virginia Tech, majoring in animal and poultry sciences with two minors in agribusiness and crop and soil environmental sciences.

[www.noble.org/blog](http://www.noble.org/blog)





## Graduate students graduating in Sept. 2012 and Jan. 2013

Graduate Student	Degree	Date Grad.	Major Professor	Title of thesis/dissertation
Hannah Wladecki	M.S.	201209	McElroy	In vitro evaluation of particle size differences, various Ca sources, and different phytases on pH and calcium and phosphorus digestibility in a simulation of broiler digestion
Jayantha Adikari	Ph.D.	201209	Smith	DNA sequence and haplotype variation analysis of circadian genes in the turkey, Meleagris gallopavo
Elizabeth Riley	M.S.	201209	Greiner	Fecal phosphorus characteristics of grazing beef cattle
Jennifer Bradley	Ph.D.	201209	McElroy	Influence of incubation conditions on turkey poult intestinal development and susceptibility to poult enteritis
Diego Paiva	Ph.D.	201209	McElroy	Effects of calcium and enzyme supplementation on necrotic enteritis outbreaks
Lidan Zhao	Ph.D.	201209	Jiang	Mechanisms of growth hormone inhibition of adipose tissue growth
Chasity Cox	Ph.D.	201301	Dalloul	In ovo supplementation of primalac and the effects on performance and immune response of broilers
Ryan Roberson	M.S.	201301	Gerrard	(non-thesis master's)
Kaylee Kohlhaas	M.S.	201301	Splan	Resveratrol: therapeutic role in metabolic and reproductive function in obese broodmares

## Virginia 4-H Livestock Judging Team wins in Nebraska

The 2013 Virginia 4-H All-Star Livestock Judging Team traveled to Omaha, Nebraska, where they took first high team overall against 28 other teams in the Ak-Sar-Ben Livestock Judging Contest on September 28.

The team also took first in sheep and goats, second in reasons, third in swine, and fifth in beef.

The eight-member team from Virginia included:

**Cody Boden** of Frederick County

**John Clouse** of Montgomery County

**Carrie Cromer** of Augusta County

**Lindsey Fenster** of Rockbridge County

**Sarah Harris** of Rockbridge County

**Blake Hopkins** of Orange County

**Makayln Nesselrodt** of Rockingham County

**Jack Redifer** of Montgomery County

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## Congratulations go out to all the 4-H equine program youth representing Virginia in 2013.

### Winning team of the 2013 Eastern National Hippology Contest!

The 4-H Horse Program extends a special thanks to our 4-H parents, volunteer leaders, and coaches for their continued support!

For more information about the Virginia 4-H Horse Program, please visit our website:

**[www.4-h.ext.vt.edu](http://www.4-h.ext.vt.edu)**



*Members of Virginia's representation at Arabian Nationals in Tulsa, Okla. Team members (from left to right) included: Kerri Houser, Sarah Moran, Ellen Jordan, Anna Henderson-Cox, and Libby Arnold.*



*Team members (from left to right) included Delaney O'Donnell, Rachel Dominguez, Hunter Liles, and Michaela Yowaiski.*

These high school students earned their spot on the Virginia 4-H All-Star Livestock Judging Team by placing in the top 10 in the senior division at the State 4-H Livestock Judging Contest, held annually at Virginia Tech.

In the individual competitions, Cody Boden placed first individual overall in the national competition, first-place high individual in sheep and goats, fifth high individual in reasons, and ninth high individual in swine. Clouse placed second high individual in swine and sixth individual overall, and Redifer placed eighth high individual in sheep and goats.

The Virginia Livestock Judging Team will also compete at the Premier Stockman Livestock Judging Contest and the Boilermaker Contest in Indiana; the Southeastern Regionals in Raleigh, N.C.; and the North American International Livestock Exposition in Louisville, Ky.

Virginia youth livestock programs are supported by the Youth Livestock Endowment through the Virginia 4-H Foundation. For more information on youth livestock programs or how you can support these programs, please contact Paige Pratt, youth livestock Extension specialist, at 540-231-4732.



*The 2013 Virginia 4-H Livestock Judging Team. Front, from left, Makayln Nesselrodt, Rockingham County; Lindsey Fenster, Rockbridge County; Carrie Cromer, Augusta County; and Sarah Harris, Rockbridge County. Back, from left, Paige Pratt, youth livestock Extension specialist; John Clouse, Montgomery County; Jack Redifer, Montgomery County; Cody Boden, Frederick County; and Blake Hopkins, Orange County.*

## Virginia 4-H horse program youth garner great success in 2013!

Virginia 4-H Horse Program members have been highly successful competing in regional and national events in 2013! In late July, members attended the 2013 Southern Regional 4-H Horse Championships in West Monroe, La., where Virginia Hippology teams were first and fourth overall. Both teams had many additional wins and placings within the different team and individual sections of the contest. Delaney O'Donnell was the Overall High Individual in Hippology, Abbey Strickland placed third overall individually, with Casey Brown placing seventh overall.

Virginia Southern Regional Horse Bowl competitors placed fourth overall as a team, with Delaney O'Donnell placing individually as third overall. Virginia youth claimed success in other contests, with Jordan Ruffner placing first in Public Speaking, and Eli and Abby Worth-Jones placing first in the Team Demonstration. Virginia teams were also fifth and 11th in the Horse Judging Contest, with numerous placings in the team and individual sections of the contest.

In October, Virginia sent five 4-Hers from the State 4-H Horse Judging team to compete in the Arabian Nationals Horse Judging Contest in Tulsa, Okla. With limited practices and lots of hard work in Tulsa, the team finished the contest as the second overall team. Individually, Ellen Jordan and Sarah Moran were eighth and ninth overall. The team and individual members secured several other placings within the various sections of the contest.

Wrapping up an already successful year, Virginia 4-Hers traveled to Louisville, Ky., to compete in the 2013 Eastern National 4-H Horse Round Up.

The Virginia Hippology team reigned supreme, earning High Team Overall, with Delaney O'Donnell as High Individual in the contest! The team and its members secured several other placings within the sections of the Hippology contest. In addition, Virginia's Horse Bowl team secured 10th place overall in a very challenging contest.

## State 4-H Championship Horse & Pony Show



*Preparing for the hunter classes.*

The 2013 Virginia State 4-H Championship Horse & Pony Show was held in Lexington, Va., at the Virginia Horse Center Sept. 12 – 15, 2013. This statewide event draws more than 700 youth from across the commonwealth to participate in a wide variety of contests, from educational events to the horse show itself.

Youth interested in educational events were able to compete in the District Challenge — an annual knowledge contest comprised of Horse Bowl, Hippology, and Horse Judging. Congratulations to the Southeast 4-H District on winning the 2013 District Challenge! Other contests run at the horse show included a statewide photography contest, and an art contest that are both open to all interested 4-H members.

The horse show portion of this event brought out nearly 450 participants





*Participants enjoying the ice cream social.*

who represented 55 counties across the state of Virginia. Competitors had the opportunity to compete in events ranging from Gymkhana to Pleasure and Dressage to Hunter Over Fences. Numerous champion, reserve champion, and high point awards were recognized at the show.

The 52nd Annual Virginia State 4-H Championship Horse & Pony Show drew more than 2,000 youth, parents, and volunteers from across the state. The State 4-H Horse Show is self-funded through entry fees, donations by friends of the State 4-H Horse Program, and corporate sponsors such as the Virginia Horse Industry Board, The Virginia Horse Council, Blue Ridge Trailers, Virginia Farm Bureau, Southern States, and First Bank and Trust Company. The Horse Show Hero Program also helps to fund this event by allowing participants to raise monies in lieu of paying entry fees.

For more information and detailed listings of results, please visit the Virginia 4-H Horse Program website: [www.4-h.ext.vt.edu](http://www.4-h.ext.vt.edu).



*Schooling before the western classes.*

## Virginia Tech Horse Judging Team successful at the All American Quarter Horse Congress!

Five Virginia Tech Hokies made a team effort to prepare and compete at the All American Quarter Horse Congress Horse Judging Contest in Columbus, Ohio, and came away with a victorious effort! Every Hokie received individual recognition for their evaluation skills in the limited collegiate contest that culminated in four of the top 10 individuals overall hailing from Virginia Tech!

One of the longest running and most prestigious horse judging contests in the country, the contestants were challenged to place 11 classes of four horses exactly as the official judges for the contest. The classes ranged from conformation to reining, pleasure, hunter hack, western riding, hunter under saddle, trail, and even equitation/horsemanship where rider skills are evaluated. Scores were tallied within the halter judging, performance class judging, and oral reasons when contestants explained their reasoning for class placings.

Members of the Hokie team included: Shelley Brown who placed fourth in halter judging; Taylor Ford who placed second in halter, eighth in reasons, and seventh overall; Hannah Geisler who was ninth in halter, eighth in performance, and fifth overall; Hannah McDonald who was third in halter, eighth in performance, fourth in reasons, and third overall; and Andrea Oliver who finished fifth in halter, tenth in performance, second in reasons, and sixth overall. All the students are majoring in animal and poultry sciences and coached by Julia McCann of the animal and poultry sciences department.

The Virginia Tech Horse Judging Team is appreciative of the Animal and Poultry Sciences department, faculty, and others who support their efforts. The Pat Stuart Funds financially supported the team expenses for practice workouts and the competition.



*The team includes (from left to right:) Shelley Brown, a sophomore majoring in animal and poultry sciences from Gloucester, Va.; Andrea Oliver, a junior majoring in animal and poultry sciences from Charlottesville, Va.; Hannah McDonald of Cross Junction, Va.; Taylor Ford of Lewisburg, W.Va.; and Hannah Geisler of Westport, Conn. The team was coached by Julia McCann from the Department of Animal and Poultry Sciences.*

## CALENDAR OF EVENTS SPRING 2014

**January 21**  
Classes begin

**March 8 – 16**  
Spring Break

**March 25 – April 1**  
Course request  
for fall 2014 classes

**May 7**  
Classes end

**May 8**  
Reading Day

**May 9 – 14**  
Spring semester exams

**May 16**  
University Commencement  
Ceremonies

**May 17**  
Spring Commencement  
(College Ceremonies)

**May 27**  
First summer session  
classes begin

**July 3**  
First summer session  
classes end

**July 8**  
Second summer session  
classes begin

**August 14**  
Second summer session  
classes end

*Hokie Harvest Sale continued from page 7*

Lot 10 was the top-selling lot in the Simmental breed. Estes Farm from Eden, N.C., purchased the purebred cow by SAS T101 Sweet Meat at \$2,800 and her homozygous black January bull calf sired by Dikemans Sure Bet sold to Jessie Williams of Pembroke, Va., for \$1,800. Her herd sire prospect ranks in the elite two percent on his MARB EPD and the top 10 percent on API and TI.

The breeding-age bull division of eight yearling bulls was topped by Lot 13 at \$3,500. This Angus yearling bull is sired by GAR Prophet and out of a daughter of GAR Predestined and our featured donor cow, HHF Alli Rita 704 317. He blended a flawless phenotype with muscle and volume and will certainly add pounds, growth, and pedigree value to any cow/calf operation. This popular herd-sire prospect ranks in the elite one percent of non-parent sires for \$QG and MARB, the top two percent on WW EPD, and upper three percent on \$B, \$F, and YW EPD. Arvid Mykleburst of New Castle, Va., is the new owner.

The 29 head of commercial bred heifers and cows, mostly Angus or SimAngus breeding, drew considerable interest among cattlemen and averaged \$1,990. Bidding was lively and numerous buyers swept the ring on female groupings. Glen Shipway of Kiawah Island, S.C., and Carl Crookshanks of Covington, Va., were the volume buyers on these productive bred females.

This was the largest class of merchandising students in the 19-year history of the Hokie Harvest Sale. The 103 students which comprised nine committees did a superb job of preparing for the sale and all gained hands-on experience in sale management, budgeting, cataloging, advertising, livestock photography, clerking, and health requirements. Special thanks are extended to Col. Ken Brubaker of Brubaker Sales and Marketing, Harrisonburg, Va., for guest lecturing and serving as the sale consultant and auctioneer. In

addition to Aaron Ray Tompkins and Chris Terembes, a huge thank you is extended to our guest speakers Tom Burke, American Angus Hall of Fame, Smithville, Mo.; Julie and Martin Macqueen, High Road Livestock Photography of Covington, Va.; and Dr. Terry Swecker of the Virginia Tech College of Veterinary Medicine for sharing their expertise and time to support this year's class and Hokie Harvest Sale. Students Kurtis Devore, Mulberry Grove, Ill.; Abby Houchin, Raleigh, N.C.; and Stiles Milton, Shawsville, Va., served as bid-takers for the sale while Keagan Clevenger, Stephenson, Va., and Mason Thomas, Madison Heights, Va., worked the ring. Logan Miller, Glen Allen, Va., served as the student clerk in the block.

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 nearly 550 guests. Their support and cooperation are greatly appreciated.

Interest in the Hokie Harvest Sale continues to be overwhelming in favor of hosting future student-run livestock sales. However, as many of you know who host annual production sales, purebred and commercial animal inventory numbers need to remain strong to continually offer quality livestock at public auction. We are hopeful to host the 20th Annual Hokie Harvest Sale on Friday, Oct. 31, 2014. Mark your calendars now and we hope that you can come and experience the harvest!



*Ringman Stiles Milton from Shawsville, Va., taking bids on the high selling lot.*



## Update your information

We are interested in knowing what you are doing! Please help us keep our mailing list current by completing and returning this form to the Department of Animal and Poultry Sciences, Virginia Tech (0306), Blacksburg, VA 24061 or email [vtapsc@vt.edu](mailto:vtapsc@vt.edu) with the following information.

Name: \_\_\_\_\_ Year and Degree: \_\_\_\_\_

Home Address: \_\_\_\_\_

Employer: \_\_\_\_\_

Current Position: \_\_\_\_\_

Work Address: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

News about Yourself: \_\_\_\_\_

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Would you like to be contacted concerning support of one of our scholarship programs or extra-curricular group activities?

☐ Yes

☐ No

## 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 McCann ..... 231-9153

Dave Linker..... 231-9154

Equestrian Club ..... 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 Pavilion..... 231-9150

Alphin-Stuart Arena..... 231-9150