Highlighting Activities of 2012

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Promoting a better awareness of global issues and providing international experiences are expectations of higher education. Purdue University and our College of Agriculture both indicate that engagement in international activities is a primary goal of their respective strategic plans. Our Department of Animal Sciences aims to increase our students’ understanding of, and appreciation for, the greater international community and food animal production worldwide. Without a doubt, many of our graduates will move into careers that involve international production, marketing, communications, research and development, or they will be impacted by global products, issues, or events during their careers. Thus as students, they need to begin to think beyond their state and national borders if they are to be successful in those careers. Our College of Agriculture has long recognized that it is critically important for those who study and teach in the agricultural sciences to have an understanding of other countries and cultures, which drive our export markets, add value to our agricultural products, provide us with products and inputs, or represent our competition. Through the International Programs in Agriculture (IPIA) office, under the Directorship of Dr. Jess Lowenberg-DeBoer, Purdue Agriculture facilitates opportunities for faculty and students to engage in international activities, multi-national projects, and global dialogs relevant to agriculture. Through international study programs, students and faculty can see first-hand the diverse ways by which other countries have confronted complex issues, and can better determine what may or may not work in the U.S.

Many of the U.S. companies which will be hiring our students are really international in scope. Large and small agribusinesses often have a global presence, maintaining overseas offices, production facilities or subsidiaries, and/or regularly do business in other countries. Those companies are seeking graduates who have international experiences to fill positions for their global networks. Our Department of Animal Sciences has been well ahead of the curve in providing international experiences for our students. In 2012, a large number of Animal Sciences students participated in international activities, including in Romania, Haiti, China, Taiwan, Ireland, England, Wales, Italy, Costa Rica and Australia. Those experiences included international exchange programs, study abroad activities, and international service learning courses. The students who participated in the 2012 Animals & Food Security Service Learning course in Haiti produced an award-winning YouTube video about their experience, which can be viewed at www.youtube.com/watch?v=n7tlWtWnqSU (a direct link is provided on our Department’s main webpage). The service projects – which included expanding livestock production among a small community, building livestock enclosures to facilitate rotational grazing and planting cocoa plant seedlings – were aimed at helping people in need to better their lives. Another service learning course offered students a similar experience in Romania. Each of the participating students will tell you that their international service learning activity was a life-changing experience which added to their own personal development.

As a Department, we also seek to enhance our global visibility through educational and research collaborations with academic and research institutions around the world, and thus a number of our Animal Sciences faculty members have research or educational collaborations with international universities and scientists. Just as with our collaborations with other U.S. universities, the combined efforts of researchers and educators in multiple countries results in more rapid progress for the good of all agriculture, and directly benefits all of society, including those of us involved in U.S. animal agriculture. Additionally, through these international activities, our teaching faculty gain a stronger sense of the global nature of agriculture and international issues, which are critical to their ability to teach topics encompassing global food animal production and animal product markets and trade. There is no better way to build teaching expertise in these areas than to experience them first hand through an international experience or collaboration.

I hope you have enjoyed this brief look at our international activities. I thank each of you, as friends, alumni, and supporters of Purdue Animal Sciences, for your continued support and advocacy of our programs. Please feel free to contact me at any time if you would like to know more about our Department, including international opportunities for our students and faculty around the globe.

All the best,

Alan G. Mathew
Professor and Head

Acknowledgment

- The Newsletter Student Editors are Samantha Schmidt and Rachel Hayn.
- The Newsletter Committee members include Donna Lofgren (Co-chair), Zoltan Machaty (Co-Chair), Layi Adeola, Candace Croney, Barry Delks, JoAnn Galyon, Pat Jonas, and Katherine McCormick.
- We hope this Newsletter will increase your enthusiasm and ignite your pride in the exciting research, extension, and educational programs taking place in Purdue Animal Sciences. It is designed to provide information to our many alumni, students, staff, and special friends.

We regret that we ran out of space for photos! More photos are online in the html version of the newsletter.
It is linked from the Alumni page - https://ag.purdue.edu/ansc/Pages/Alumni.aspx.
2012 Distinguished Animal Sciences Alumni Awards

The Distinguished Animal Sciences Alumni Award honors lifetime, mid-career and early career Purdue Animal Sciences graduates. The recipients have demonstrated excellence in the animal science industry, academia, governmental service, or other endeavors as exemplified by leadership, community service, and professional accomplishments. Six Animal Sciences alumni were recognized by the Department of Animal Sciences on October 12, 2012.

Lifetime Career Award Recipients

Bud Harmon received a B.S. in Agriculture in 1958 from Purdue followed by a Ph.D. from Michigan State University in 1962, studying swine nutrition. He was a member of the Animal Science faculty at the University of Illinois before joining Ralston Purina in St. Louis as Director of Swine Nutrition Research, where he later became Director of Monogastric Nutrition Research. In 1986, Harmon returned to Purdue as Head of the Animal Sciences Department and remained on the faculty until his retirement in 2004. Since retiring, Harmon has founded three companies: Wisesharmon International, in Beijing, China, provides education and market programs including the introduction of U.S. companies into China; Railsplitter Feed Technology, Inc. markets selected ingredients in the international arena; and Agri Processing Services LLC was founded to commercialize a patent obtained by Purdue for his research. He received the ASAS Retiree Service Award in 2011.

Steve Nichols received his B.S. in Animal Sciences from Purdue in 1973, and was involved in the Meat Judging and Livestock Judging Teams. He stayed at Purdue to manage the Purebred Swine Unit, and received his M.S. in Animal Sciences in 1975. He took a position with the Purdue Cooperative Extension Service in Clark County, and later moved to Carroll County, spending the rest of his Extension career in the state’s largest swine producing county. He was instrumental in getting the 4-H Community Building at the county fairgrounds and starting the Carroll County Agriculture Hall of Fame. He has judged hogs in over 35 states and Canada, and is one of the most sought-after swine judges in the country. He has received numerous awards over the course of his career. Since his retirement, he has worked part time for Livestock Engineering Solutions, Inc. as a Nutrient Management Planner.

Mid-Career Award Recipients

Andy McVay received his B.S. in Animal Sciences from Purdue in 1982, where he was involved with the Livestock Judging Team. Upon graduation, he served as the first swine breed association field representative for multiple breeds, in the initial combined effort of the swine registries to work together. After five years, he became Manager of the Iowa Swine Testing Station in Ames. After five years there, he became Director of Genetic Outreach for another combined swine registry organization in West Lafayette, IN, supervising and coordinating the field representatives. When that disbanded, he started his second career in the animal feed industry. For twenty years, he has worked for Peet’s Feed and Kent Feeds in various roles in Sales and Management, and currently serves Kent Feeds as an account manager for northern Indiana.

Early Career Award Recipients

Orville Haney received his B.S. in Animal Sciences from Purdue in 2002. After graduation, he returned home to partner with his father on their family farm north of Akron, IN. To gain experience, he also worked off the farm, as farm manager for Maple Leaf Farms and as a dairy inspector with the Indiana State Board of Animal Health. After two years, he became a full time dairyman. When his brother Jeremiah joined the partnership in 2005, they started Haney Hilltop Holsteins LLC; they are the 6th generation on the farm. The herd has grown from 26 milk cows in 2002, to 200 head in 2012. They sell registered bulls from the best cows, have a finishing lot for the steers, and also produce hay, corn, silage, and straw. Haney serves on several boards, including the Kosciusko County Farm Bureau, Indiana Farm Bureau Indiana Dairy Development Board, Beaver Dam Community Corporation, Beaver Dam Pre School Board, Fulton County Dairy Herd Improvement Association, and Fulton County Farm Service Agency County Committee. He and his wife Jessica won the 2012 Indiana Farm Bureau Young Farmer Achievement Award.

Liane Hart received her B.S. in Animal Sciences from Purdue in 1997, where she participated on the Equestrian Team, competing in Western Pleasure classes. She participated in an internship at Biggs Farm, Inc., in Lexington, KY, specializing in Thoroughbred and Sport Horse breeding. She received her M.S. in 1999 in Equine Genetics, looking at age at peak performance in Quarter Horse racing, making her the first graduate student at Purdue to study equine racing. She initially became an Extension Educator, but then had the opportunity to work at Elanco Animal Health, first in clinical research and later in new product planning. She is currently the Global Marketer for Companion Animals, focusing on parasiticides, osteoarthritis, and equine developments. She owns Cedar Brick Farm LLC, which focuses on breeding, breaking, training, boarding, and appraisals. Her horses currently race in Indiana, Ohio, and Kentucky.
Two Book Harmon Leadership Forums Held in 2012

The first forum held February 14 started with an Ag Summit on the topic “Agriculture Addresses Global Challenges.” Participants were Dr. Dean Boyd, Technical Director, The Hanor Company; Dr. Mike Siemens, Leader of Animal Welfare and Husbandry, Cargill; Dr. Angie Siemens, Vice President of Technical Services, Cargill; Mark Stapleton, Global Marketing Director, Philbro Animal Health; Jill Greene, Senior Marketing Development Manager, Applied Biosystems; James Herbert, Neogen Corporation; Dr. Patsy Houghton, Owner/General Manager, Heartland Cattle Company; Dr. Don Orr, President, JBS United; and Carol Mutter, Three Star General, U.S. Marine Corps. The participants were all Book Harmon Fellows. The Summit was moderated by Dr. Jay Akridge, Dean of the College of Agriculture.

Dr. Dean Boyd was the keynote speaker, and spoke on “Preparing to Make an Impact in Animal Agriculture.” Dr. Boyd is Technical Director for The Hanor Company, an integrated pork production and food processing firm. He has been in academic and industry positions for 30 years. From this perspective, he could provide insight on “The How” of “Preparing to Make an Impact in Agriculture.”

Dr. Boyd obtained a B.S. degree in Animal Nutrition from Colorado State University and a Ph.D. from the University of Nebraska. He then joined the faculty in Animal Science at Cornell University, where he gained an international reputation for his pioneering work in regulating nutrient use by growing pigs. Later, Dr. Boyd became global Director of Nutrition for the Pig Improvement Company, where he led research on amino acids, energy nutrition and resilient growth. Joining Hanor and Triumph Foods in 2002, he manages nutrition for 88,000 sows and 2.1 million pigs annually.

Former Secretary of Agriculture Clayton Yeutter spoke at the second forum on October 23. At the forum, he spoke on “Effective Leadership is a Progressive Journey.” At the Book Harmon Leadership Challenge, he spoke on “Grand Food and Agriculture Challenges Require Grand Leadership.”

Dr. Yeutter is a graduate of the University of Nebraska-Lincoln from which he received a B.S., a J.D. and a Ph.D. in Agricultural Economics. He was the United States Secretary of Agriculture after serving as Assistant Secretary for Marketing and Consumer Services, for International Affairs and Commodity Programs, and as the Representative for Trade Negotiations.

Since public office, he is working as a senior advisor at Hogan Lovells (formerly Hogan & Hartson LLP) in Washington, DC and has been a director of the boards of ConAgra Foods, Caterpillar Inc., Texas Instruments, and President and CEO of the Chicago Mercantile Exchange. Yeutter is also an owner of the Keating Mercantile Exchange, LLC, a company designed to help small and medium sized businesses.

The Book Harmon Leadership Program now has a web site. Visit https://ag.purdue.edu/ansc/BookHarmon/ to learn about the program, the academic forums, leadership resources, and more.

2012 Distinguished Agricultural Alumni Awards

Dr. Gary M. Weber received his B.S. in 1977 and M.S. in 1979 in Animal Sciences from Purdue University. In 2008, Dr. Weber was named President of Bioniche Food Safety-USA, a division of Bioniche Life Sciences, Inc. Dr. Weber provided leadership to Bioniche’s efforts to license and commercialize a vaccine to reduce the shedding of E. coli for cattle in the United States and Canada by working directly with cattle producers and beef processors, Congress, regulatory agencies and the media. He recently accepted the position of Manager of Prevention/Interdisciplinary Scientist at the FDA. Dr. Weber has participated in agricultural tours of Australia, Canada, Mexico, New Zealand, Panama, Syria, Uruguay and the United Kingdom.

Malcolm S. DeKryger received his M.S. in Animal Sciences from Purdue in 1983. He joined Belstra Milling in 1991 as head of Business Development and Sales, and he currently serves as Vice-President and co-owner. Under his leadership, the pork business has steadily grown to 11,500 sows with an annual production in excess of 310,000 breeding and market animals, far surpassing the 600 sows that were there when he originally joined the company. DeKryger was a founding member and past President of the Indiana Pork Advocacy Coalition and serves on the Indiana Pork Producers Board of Directors. He is an active member of the National Pork Producers Council’s Animal Health and Food Security Committee in Washington, DC. He is a current member of the Purdue College of Agriculture Dean’s Advisory Council.

Malcolm S. DeKryger

Dr. Gary M. Weber

The Distinguished Agricultural Alumni Award honors mid-career Purdue Agriculture graduates who have made significant contributions to their profession or society and have a record of outstanding accomplishments. Mr. Malcolm S. DeKryger and Dr. Gary M. Weber were recognized by the College of Agriculture and the Department of Animal Sciences on March 2, 2012.
Promotion
Dr. Paul Ebner was promoted to Associate Professor of Animal Sciences.

Staff Years of Service Honors
25 years - Candy Byers (Indiana State Egg Board) and Leon Houghton (Assistant Manager, ASREC Beef Unit)
20 years - Paul Brennan (Executive VP, Indiana State Poultry Association), Scott Cronk (ASREC Beef Unit), and Craig Williams (ASREC Coordinator)
15 years - James Emilson (ASREC Swine Unit)
10 years - Jennifer Crodian (Research Assistant, Dr. Plaut lab) and Kenneth Welther (ASREC Dairy Unit)

New Faculty and Staff
Dr. Maja Makagon joined the faculty as an Assistant Professor. She received a B.A. from the University of Virginia, an M.A. from Cornell University, and a Ph.D. from the University of California-Davis. She completed post-doctoral training at Michigan State University. Her current research projects center on understanding social interactions in commercially housed poultry, understanding the effects of an animal’s physical and social environment on its behavior and welfare, and development of valid and reliable measures of welfare.

Ashley York joined the department in a new position, Director of Academic Advising and Student Services. She coordinates student advising activities, provides students with the knowledge and tools for academic success, and promotes leadership and self-development skills for student career success. She received a B.S. from Purdue and M.A. from Ball State University, and previously served as an Agricultural Science and Business Instructor and FFA Advisor at Fountain Central Jr./Sr. High School.

Dr. Jolena Waddell joined the faculty as an Assistant Professor. She received her B.S. and M.S. from Texas Tech University in animal science and growth and development, respectively. She completed her Ph.D. in molecular genetics, followed by a post-doc in muscle biology, both at Purdue University. She worked as a lecturer and Director of Meat Science Programs at Purdue before accepting this faculty position in meat science extension and teaching. Her current outreach interests include helping small meat processors understand and expand their markets, training more workers for the meat industry, and educating consumers and youth about the meat industry and food animal production.

Department
Dr. Mickey Latour became Dean of the College of Agricultural Sciences at Southern Illinois University Carbondale. He had been on the Animal Sciences faculty since 1997.
Dr. Todd Applegate received the 2012 Animal Sciences Outstanding Advisor Award.

Dr. Mike Neary received the 2012 Animal Sciences Career Service Award.

Dr. Mike Schutz received the 2012 Steve Atkisson Indiana Dairy Service Award. The award recognizes outstanding contributions to the Indiana dairy industry, and was presented at the annual Indiana Milk Quality Conference in Fort Wayne. He has developed several key Extension programs on milk quality and he co-founded the Indiana Milk Quality Conference. He is known internationally for his research in genetic selection for milk quality and use of technologies for precision dairy farming.

Dr. Ron Lemenager received the Outstanding Cattleman of the Year Award from the Indiana Beef Cattle Association (IBCA) at their awards banquet. He was honored as a great role model for young students studying animal science and a great friend and supporter of all segments of the industry.

Dr. Layi Adeola received the 2012 Broiler Research Award, sponsored by the National Chicken Council and presented at the Poultry Science Association annual meeting. The award is given for distinctive research that has a strong economic impact on the broiler industry. Dr. Adeola’s research focuses on energy and nutrient utilization of nonruminant animals for improving the efficiency of lean meat production while minimizing environmental impacts.

Dr. Ron Lemenager received an award from the Trask Innovation Fund. This fund, managed by the Purdue Research Foundation, is a resource for Purdue researchers who are in the final stages of moving a discovery to market but need short-term funding to finalize their research. Dr. Collodi received funding for his project “Large-scale Production of Non-fertile Fish for Aquaculture and the Pet Industry.”

Dr. Alan Mathew was selected to represent the Animal Science Department Chairs/Heads on the U.S. Pork Center of Excellence Board of Directors.

Dr. Tamilee Nennich was accepted into Class 15 of the Indiana Agricultural Leadership Program (ALP), sponsored by AgrIInstitute Inc. ALP provides individuals involved in agriculture with the opportunity to improve leadership skills, gain understanding and develop the expertise needed to provide leadership in public affairs. Dr. Nennich also received the Early Career Award from the Purdue Cooperative Extension Specialists Association.

Dr. Amy Lossie received a Teaching for Tomorrow Award. The award is provided to foster continued excellence in teaching and learning at Purdue and to facilitate the development of the teaching potential of the faculty.

Drs. Jolena Waddell and Paul Ebner participated in the President’s Council “Back-to-Class” program with a session entitled “What’s Really in Your Burger? Facts on Meat Production.” As a result of the success of their class, they were invited to present their program at “Best of Back-to-Class” at the President’s Council Weekend in Naples, FL in February 2013.

The handbook “Cow-Calf Production in the U.S. Corn Belt”, published by the Midwest Plan Service, received a 2012 ASABE (American Society of Agricultural and Biological Engineers) Educational Aids Blue Ribbon Award. Co-authors include Drs. Ron Lemenager and Terry Stewart.

Barry Delks achieved Master Teacher recognition through the Academy of Instructional Excellence sponsored by Ivy Tech.

Marion Welsh is a graduate of the 32nd class of Accomplished Clerical Excellence (ACE) certification.

Dr. Charles Plumb (1860-1939) was selected as a Pioneer of the dairy industry by the National Dairy Shrine. Dr. Plumb was the first professor of Dairying at Purdue University in 1890. There he started the Indiana State Dairy Association. He later was Professor of Animal Husbandry at The Ohio State University from 1902 until 1931. The Ohio State University in 1932 named the building housing the Dairy Department as Plumb Hall in his honor.
**Faculty & Staff International Involvement**

Dr. Layi Adeola attended the International Phytase Summit in Rome, Italy; the World Poultry Congress in Salvador, Brazil; and the British Society of Animal Science Meeting in Nottingham, England. He gave presentations on “Phosphorus utilization and the requirement for digestible phosphorus” in Beijing, China; “NRC 2012 models for estimating responses to energy intake and nutrient requirements of swine” in Puerto Vallarta, Mexico; “Exogenous phytase and its use in low-phosphorus feeding” at the Manitoba Swine Seminar in Winnipeg, Canada; and “Amino acid data required for factorial estimates of standardized ileal digestible amino acid requirements of pigs” in Changsha, China. He discussed nutrition studies in Nigeria, and amino acid utilization studies in Sao Paulo, Brazil. He also hosted several visiting scholars and scientists: Andre Favero from Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil; Eustace Iyaiy from University of Ibadan, Nigeria; Rejun Fang from Hunan Agricultural University, China; and Jingbo Liu from Sichuan Agricultural University, Ya’an, Sichuan, China.

Dr. Todd Applegate gave talks at nutrition forums in Beijing, China; Singapore; Vienna, Austria; and Rome, Italy. He hosted a visiting faculty member from Ghana who was on sabbatical with a Fulbright Fellowship, and hosted graduate students from Zagazying University in Egypt and China Agricultural University in Beijing, China.

Dr. Jon Schoonmaker hosted Amoracy Nunez, a graduate student from Brazil. He was involved in a “sandwich” program, where the Brazilian government funds a four-month stay at a U.S. research institution to do research.

Dr. Allan Schinckel hosted Vivian Almeida, a graduate student in the same Brazilian program. He also hosted Matheus Ferreira from Brazil.

Dr. Zoltan Machaty spent a sabbatical leave at Cardiff University in Cardiff, Wales, United Kingdom. He was conducting research in Dr. Karl Swan’s laboratory. He also attended the annual conference of the Society for Reproduction and Fertility at the University of Edinburgh in Scotland, United Kingdom.

Dr. Bill Muir was on the organizing committee for the International Congress of Genetics, held in Scotland.

Dr. Paul Collodi visited China and presented seminars at Suzhou and Nanjing Universities. While there, he visited his former student, Qingshun Zhao, who received his Ph.D. from our department in 2002 and is currently a professor at Nanjing University.

Dr. Shihuan Kuang hosted three visiting scholars from China: Dr. Yong Cai, an Associate Professor from Northwest University for Nationalities; Ms. Xinyuan Xu, a Ph.D. student from China Agricultural University; and Mr. Pengpeng Zhang, a Ph.D. student from Huazhong Agricultural University. He was invited to present seminars at the College of Animal Sciences, Zhejiang University; Institute of Oceanology, Chinese Academy of Science; Peking Union Medical College; and Institute of Medicinal Plant Development, Chinese Academy of Medical Sciences.

Dr. Mike Schutz attended the 2012 European Association of Animal Production meeting in Bratislava, Slovakia in August. He presented an invited paper on his recent work to develop a genetic selection index for pasture based dairy producers and reported on a comparison of genetic preferences of U.S. and Romanian dairy producers obtained through a survey.

Essam Abdel fattah has been a visiting scholar in Dr. Susan Eicher’s laboratory. He is completing his research here for his Ph.D. to be awarded by Benha University, Moshtohor, Egypt. His primary focus is behavior in dairy calf group housing.

Dr. Ryan Cabot spent a research sabbatical working in the laboratory of Dr. Michael Bader at the Max-Delbrück Center for Molecular Medicine in Berlin, Germany. Dr. Cabot’s research program is focused on understanding the molecular networks that control mammalian embryo development. It is well-established that 30-50% of mammalian embryos stop developing by the end of the first third of pregnancy. This reduction in fertility highlights one of the grand challenges we face in animal agriculture, that of improving animal production efficiency. Dr. Bader and Dr. Cabot have been able to undertake some preliminary studies during this research stay to determine how a class of proteins specifically expressed in the embryo work to control development. They have continued their collaboration since Dr. Cabot’s visit and are currently working to address how this class of proteins regulates development in the domestic pig.

Dr. Paul Ebner taught a mini-course at Zhejiang University, Hangzhou, China on microbiology and food safety in food animal production. The course was developed for Zhejiang University undergraduates in the university’s College of Animal Sciences.

Drs. Paul Ebner and Mark Russell led the third “Animals and Food Security: Service Learning in Romania” course in May and June. Twenty-five U.S. and Romanian undergraduate students participated in the course, which takes place in rural Romania. The course is a collaboration between Purdue Animal Sciences, Banat University (Romania) and Heifer International. U.S. and Romanian students work in binational teams alongside Romanian livestock producers to develop and implement solutions to challenges they face in their operations.

Each summer, a group of students from Zhejiang University and Taiwan University take part in a “Summer Research for Chinese Students” program. The students either worked in research labs at Purdue or interned at Novus International. Drs. Heng-wei Cheng and Todd Applegate organize the program and several faculty host the students in their labs. The students also participated in a day-long industry tour, visiting farms and companies. Barry Delks and several graduate students were involved with the tour.

**In Memoriam**

Dr. John C. Rogler, 84, passed away on March 17, 2012. He received an M.S. and Ph.D. from Purdue. He joined the Animal Sciences faculty and was professor of Poultry Nutrition from 1958 until his retirement in 1995. He received the American Feed Association Nutrition Research Award from the Poultry Science Association and was named a Fellow of that society. He was also named a Fellow of the American Association for the Advancement of Science.

Dr. James R. Carson, 98, passed away on May 2, 2012. He came to Purdue in 1959 and was the USDA Coordinator of the North Central Regional Poultry Breeding Program. From 1962 until his retirement in 1984, he was professor of Poultry Husbandry and later became head of the Poultry Section of Animal Sciences. He was honored as Outstanding Counselor in the School of Agriculture, a Fellow in the Poultry Science Association, and received the Golden Egg Award for service to Indiana State Poultry.
The Impact of the 2012 Drought on the Dairy Industry

By Allison Culp and Patrick Neff

Two of our Animal Sciences professors, Dr. Mike Schutz and Dr. Tamilee Nennich, along with Dr. Jonathan Townsend of the College of Veterinary Medicine, spent much of the summer of 2012 devoted to drought efforts within Indiana and the Midwest. The lack of rain in mid-May was the first sign of drought as forage growth began to be reduced in several areas of the state. By mid to late June, concerns about forage shortages and decreased development of corn were greatly increased as dairy farmers became more worried about the drought. By the beginning of July, state-wide Extension meetings were held to brainstorm about responses to the serious drought situation.

All three Extension specialists collaborated to develop fact sheets as well as hold meetings with presentations. Along with live presentations, information was distributed by website, podcast and videos. Drs. Schutz and Nennich were involved in individual consulting to address questions on forage shortages, pricing drought stressed corn silage, and concerns about nitrate levels in forages. They worked to inform dairy farmers about alternative feed strategies as a result of decreased forage and grain supplies. One of these strategies was culling bottom-end production cows in order to stretch forage and feed inventory. Some of the unique responses to the need to replace starch and energy sources in the diet included feeding gummy candy and beet by-products to the dairy cattle.

Under normal conditions and adequate rainfall, nitrates are converted to proteins within the plant. However, the drought this past summer left high levels of nitrates within the stalks of corn plants. In order to minimize the risk of nitrates, farmers were encouraged to ensile the crop and consider cutting higher on the stalk. In addition, farmers were urged to test their forages to determine nitrate levels. Drs. Schutz, Nennich, and Townsend made and distributed nitrate test kits to agriculture professionals to assist dairy farmers in determining whether nitrates were present in their corn crop. Along with nitrate concerns, aflatoxin levels also became an issue as there were isolated cases of aflatoxins found in the milk. For this problem, they made sure that dairy farmers had information and resources available to help reduce the risk of aflatoxin in milk.

Overall, the effects of this drought are not over yet, as many farmers do not have enough forage and grain supplies to carry over from this past summer. With the efforts made by Dr. Schutz, Dr. Nennich, and Dr. Townsend, there is now a database of drought-related dairy information so farmers can be more prepared in case of another severe drought. Through this next year, farmers are encouraged to continue to watch forage supplies closely and increase the use of commodity feeds and byproduct feeds if needed.

Uno Mas Captures Champion Honors

Uno Mas was bred to be a great bull with proven genetics on both sides of his pedigree (Dream On x 770P), an excellent skeleton and look, and with a productive rib shape. That is why Purdue purchased the bull to enhance the cattle at the farms. He has developed into a mature Simmental bull that is exceptional from every angle. This is more impressive once you know that Uno Mas was basically developed in the Select Sire Bull Stud since a year of age. Despite not being in the show barn, he was Grand Champion Bull at the 2012 Simmental Sweepstakes and Reserve Grand Champion at the NAILE, and was definitely a crowd favorite.

He is truly a bull that can be utilized on heifers. At Purdue University he was put up against two low birth weight EPD Angus bulls, SAV Bismarck and SAV Final Answer. The Uno Mas calves all came unassisted and average birth weights were within one pound of the Angus sires. He is in the top 1 and 2% for CE and birth weight as well as API (see EPDs in the table below). He is a bull that should produce the kind of cattle that can perform well in the pasture and the show ring. Champion and Reserve Champion Simm-Solution heifers at the Hoosier Beef Congress Show and Sale were Uno Mas daughters.

Feel free to stop by the ASREC farm off of Highway 231 to see the offspring and the cattle in production. Visitors are always welcome. Contact Brian DeFreese or Justin Holmes for a tour at 765-583-2622. Semen and gender selected semen are available at Select Sires, Inc.

Table 1. Spring 2013 ASA Sire Summary EPDs for Uno Mas

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<tr>
<th>EPD</th>
<th>CE</th>
<th>BW</th>
<th>WW</th>
<th>YW</th>
<th>MCE</th>
<th>Milk</th>
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<td>20</td>
<td>2</td>
<td>15</td>
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Alumni Updates

Carrie Spencer (B.S. 2005, D.V.M. 2009) is working as a relief veterinarian in southern Indiana. She and Ben Spencer have two children, Caleb and Mason.

Pam Boocher (B.S. 2005) was featured in Progressive Dairyman on May 9, 2012. She is a member of Elanco Animal Health’s U.S. Dairy Marketing Team. In a video on the Progressive Dairyman web site, she talked about Elanco’s new app, Dairy Source. She calls the app a “one stop shop for the dairy industry.” Pam and Andon are now the proud parents of a future Boilermaker.

William D. Price (M.S. 1967, Ph.D. 1969) was named an ASAS Fellow - Administration at the 2012 national meeting. He has spent the past 40 years at the FDA’s Center for Veterinary Medicine, and was involved in the approval of major new animal drugs and food additives.

Heather Hostetler (Ph.D. 2003) is Assistant Professor in the Department of Biochemistry & Molecular Biology at Wright State University. In September 2011, she had triplet girls, (from left in the photo) Mahala, Samantha, and Autumn. They were born 2 months early, but they are now doing well and are healthy.

Patrice Holmes (B.S. 2004) works for Campus Crusade for Christ, specifically with the sister ministry, The Impact Movement, in Indianapolis, IN. She serves as a Field Ministry Coach to equip, train, and develop college students of African descent to be leaders who will take the good news of Jesus Christ to reach their campus, community, and world.

Jim Bishop (B.S. 1995, M.S. 1997) is the District Sales Manager in the U.S. Poultry Business with Elanco Animal Health. He was selected to participate in Class 15 of the Indiana Agricultural Leadership Program (ALP), sponsored by AgriInstitute, Inc. ALP provides individuals involved in agriculture with the opportunity to improve leadership skills, gain understanding and develop the expertise needed to provide leadership in public affairs.

Heather Hill (B.S. 1999), with husband Marc and family, owns Hill Farms LLC. She is a pork account manager for Pfizer Animal Health, and serves as president of Indiana Pork. She was featured in the March 2012 issue of Indianapolis Woman magazine as part of their “Hoosier Hero” series.

Holly O’Hara (B.S. 2010) is attending Vet School at St. George’s University in Granada. She is pictured with three other students on the night of their White Coat Ceremony - Holly is third from left, and Nicole Pakan (B.S. 2011) is second from left.

Orville and Jessica Haney (both B.S. 2002) won the 2012 Indiana Farm Bureau Young Farmer Achievement Award. This award recognizes young farmers whose management techniques and commitment set a positive example for everyone involved in agriculture production. The Haney are the sixth generation on their family farm, where they milk nearly 200 cows and grow corn, hay, wheat, beans, and oats.

Max Rodibaugh (B.S. 1974, D.V.M. 1977) received a Distinguished Alumnus award from the Purdue College of Veterinary Medicine. He is the founding partner of Swine Health Services in Frankfort, IN and is a nationally recognized swine veterinarian.

Dr. Chuck Dietzen (B.S. 1983) is the founder and president of Timmy Global Health, which is based in Indianapolis. Timmy Global Health was the only Indiana non-profit, and one of two from the Midwest, to be selected for Chase Community Giving’s 2012 American Giving Awards. The 25 nominees, in five categories, had one week to generate as many online votes as possible. The five category winners received their share of grant money based on the amount of votes they received. Timmy Global Health received $250,000 in grant money, plus gained a national presence. Visit http://www.timmyglobalhealth.org/.

Kendra Lancaster (B.S. 2010) was on the U.S. Paralympic Women’s Sitting Volleyball Team at the 2012 Summer Paralympics in London, and served as team captain. The team won the silver medal. Kendra suffered serious injuries in a car crash in May 2011, but recovered to rejoin the team. This was Kendra’s third Paralympics competition; she has a bronze medal from Athens in 2004 and silver medal from Beijing in 2008. She also received her M.S. in Youth Development and Agricultural Education in May 2012.

Robert “Bob” Book (B.S. 1952), 82, passed away on December 9, 2012. After his Purdue degree, he earned an M.B.A. from Indiana University and completed the Senior Executive Program at Columbia University. He joined Elanco Products Company, a division of Eli Lilly Company, as a sales representative in 1955. After retiring in 1983 as group vice president of agricultural marketing, he became the first president of The Indiana Institute of Agriculture, Food and Nutrition, Inc., serving until 1992. He also spent more than 35 years in the U.S. Marine Corps and U.S. Marine Corps Reserve, retiring in 1983 with the rank of Colonel. In 2005, Book and Dr. Bud Harmon established the Book Harmon Leadership Program in Animal Sciences, which has the goal of promoting leadership in animal agriculture. In May 2012, Book received an honorary Doctorate in Agriculture from Purdue University.

Frank Clark (B.S. 1954), 79, passed away on May 22, 2012. He owned and operated a farm operation including corn, beans, wheat and a cow-calf enterprise. He was a past president of the Indiana Beef Cattle Association, past National Cattlemen’s Beef Association dues director and an active NCBA committee member. In 1992, the Indiana Beef Cattle Association named Clark the Outstanding Cattlemaster and in 2002 he was awarded IBCAs highest recognition, the Robert Peterson-Lynnwood Farm Lifetime Achievement Award. In 2001, Clark and his wife, Wini, endowed a beef scholarship at Purdue for an outstanding student demonstrating academic, leadership and beef industry excellence. In addition to his professional duties, he served on numerous boards including the St. Vincent Hospital Board and Warren County Council.
Purdue Dairy Club

The Purdue Dairy Club has wrapped up another very exciting and busy year. We started the fall 2012 semester off with recruiting at the College of Ag welcome back picnic and the Ice Cream Social. Because our fall semester is usually not as busy as our spring one, this year we came up with an awesome new event. For the first year ever we had a Fall Freeze where we passed out free ice cream in front of the Class of ’50 building. The club members had a lot of fun handing out the ice cream and teaching people about the dairy industry.

To wrap up the fall semester, the club attended the World Dairy Expo in Madison, WI. Club members had the opportunity to meet with people from all over the country and all throughout the dairy industry and also watch a few cow shows while they were there.

The spring season is always the busiest. We started out with a trip to Iowa for the Midwest ADSA-SAD conference. At that annual dairy conference, club members had the opportunity to meet people from the industry, learn new things, and make friends from schools all over the Midwest. The first week of March was the annual Dairy Club Invitational. Members of the club were out at the farm throughout the week clipping, washing, and breaking the cows to lead. That Saturday, the club showed the animals, while FFA and 4-H clubs from all different counties took part in a judging contest. The next event was Milk Monday, which is the Monday of Ag week. This was our second year and it was a huge success. The club members passed out free milk and grilled cheese sandwiches in front of the Class of ’50 building while telling people about the industry. During SpringFest, the club has a booth where we teach kids and adults how to milk a cow. We also have people that work in the food tent and sell grilled cheese, milk, and ice cream. Our final event for the year is our annual Heifer Sale. The heifer sale is our biggest fundraiser and it takes everyone in the club to help make it a success. For the three days before, members of the club have to be out at the farm 24 hours to make sure that the heifers are taken care of. This year we even had two cows in the sale.

The dairy club has once again had a very successful year. We could not have made any of these events a success without the help of all of the club members and of course the support of our advisors. As we wrap up the year, we continue to look forward to next year and all of the new opportunities that it offers.

Purdue Block and Bridle

In January 2012, seventeen Block and Bridle members traveled to their national convention, held in Nashville, TN to network with students from across the country. We stayed busy for the rest of the spring semester. We hosted Tot’s Day, which is an educational event at the Purdue Farm for area elementary students. Block and Bridle also participated in Junior Pork Day in March 2012, where members taught 4-H youth about swine production, and hosted an invitational livestock judging contest. We also hosted our annual hog show in Tipton County in May.

The Purdue Block and Bridle club was very active around campus during the fall semester. Our club had a large pledge induction of over 70 new members. In October, we hosted another successful Royal Showmanship Competition, where our members (and faculty) had a chance to dust off those show sticks and halters and enter the ring one more time. This show is an exciting day of all levels of showmanship from beginner to advanced, to the growing alumni class. We also completed our Christmas Meat Sales fundraiser in hand with the Purdue Butcher Block again this year. Members sold boxes of high quality meat cuts, processed at Purdue, and packaged by members of the club.

Animal Science and Basketball

Brittany Rayburn graduated with a B.S. in Animal Sciences in May 2012 after a distinguished career on the basketball court and in the classroom.

In basketball, she led Purdue in scoring as a sophomore, junior, and senior. She tied an NCAA record with 12 three-pointers in a game against Minnesota in January 2012. She led the team to the 2012 Big Ten Tournament championship, and was named the Most Outstanding Player of the tournament. She earned second team All-Big Ten. She left Purdue with 1795 career points (including 201 three-pointers), 427 rebounds, 248 assists, and 151 steals.

Brittany is also a three-time Academic All-Big Ten honoree. She was named to the 2012 Capital One Academic All-American Division I Womens’ Basketball second team. She was Purdue’s recipient of the Big Ten Medal of Honor. This award is given to one student-athlete from each school’s graduating class who has demonstrated the greatest proficiency in scholarship and athletics. She was also a finalist for the Lowe’s Senior CLASS Award. This recognizes achievements in four areas of excellence: community, classroom, character, and competition.

Brittany is continuing at Purdue, studying for a D.V.M. in the College of Veterinary Medicine.
Graduate Student Association Highlights

The beginning of 2012 was an eventful time for the members of the Graduate Student Association. During Spring Break, the GSA hosted an appreciation brunch for all of the ASREC staff.

During SpringFest, they helped in the animal sciences food tent and held a great fundraiser selling animal sciences tee-shirts. In June, the graduate students hosted the annual Barnyard Olympics and Animal Science Workshop for Youth. This 4-H event allowed youth to interact and learn about animal agriculture while graduate students mingle and encourage future scientists.

The GSA was able to learn about the animal science industries and career opportunities through the Book-Harmon Graduate Student Industry Tour. The tour included visits to Pfizer, IAMS, Provini NA, Elanco Animal Health, Harlan Laboratories, Indiana Farm Bureau, and Dow AgroSciences.

With the end of summer and the academic year beginning, GSA elected a new set of officers. We hope to move forward and focus on giving back to the community, learning about new opportunities and careers in animal sciences, and continuing our ongoing research.

Graduate Student Association Officers

October 2011 to September 2012

President: Tana Dennis
Vice President: Megan Stanley
Treasurer: Sarah Fraley
Fundraising (Merchandise): Katie Boesche
Social/Philanthropy: Jon Klein
Graduate Programs: Heather Tucker
Seminar: Laurie Mack and Feifei Yan
Department Newsletter/Youth Workshop: Katie Boesche and Heather Tucker
Program Development/Student Outreach: Jiaying Hu

October 2012 to September 2013

President: Tana Dennis
Vice President: Megan Stanley
Treasurer: Katie Boesche
Social Chair: Emily Taylor
Philanthropy Chair: Emily Taylor
PGSG Representative: Shalyse Tindell
Student Outreach: Christie Shee
Graduate Programs: Tana Dennis
Department Newsletter: Katherine McCormick

Graduate Student Awards and Honors

Department of Animal Sciences Awards

LOUJA Graduate Travel Awards
Tana Dennis - “Evaluation of feed delivery methods for growing dairy heifers”
Sarah Fraley - “Effect of dietary potassium on water intake and rumen dynamics”
Chiao-Ling Lo - “Notchless impacts multiple signaling pathways during pre-implantation development”
Chia-Li Shih - “The role of MMP-13 in adipocyte differentiation”

Book-Harmon Leadership Scholarship
Collette Thogerson
G.W. Friars International Graduate Student Fellowship - Abraham Tesfamichael
W.R. Featherston Off-Campus Training Fellowship - Nathan Horn
W.R. Featherston Early Graduate Career Award - Pengpeng Bi
W.R. Featherston Outstanding Graduate Teaching Award - Patrick Gunn
W.R. Featherston Outstanding Ph.D. Award - Patrick Gunn

Other Awards

Zachary Rambo was selected as the Department’s Committee for the Education of Teaching Assistants (CETA) Teaching Award winner. Winners are selected for their commitment to undergraduate education.

Tana Dennis placed third in the Graduate Student Competition at the Tri-State Dairy Nutrition Conference with her presentation, “Evaluation of feed delivery methods for growing dairy heifers”.

Patrick Gunn and Zachary Rambo were selected for the 2012 NACTA Graduate Student Teaching Award.

Blaire Aldridge received a 2012 Wilson G. Pond International Travel Award. She also received a 2012 Fontenot Appreciation Club award for travel to the 2012 ASAS National Meeting.

Two Animal Sciences graduate students received awards at the national ADSA/ASAS/AMPA/CSAS joint meeting in Phoenix in July.

Heather Tucker was the first place winner of the Land O’Lakes, Purina Feed LLC Graduate Student Poster Contest in Dairy Production (Ph.D. Division). Her presentation was, “Genes for lysine catabolism in lactating dairy cows are responsive to postruminal lysine supply.”

Keegan Gay was the first place winner of the National Milk Producers Federation Graduate Student Paper Presentation Contest in Dairy Production (M.S. Division). His presentation was, “Development of a lifetime merit-based selection index for dairy grazing systems.”

Purdue Heifer International

In just a few years, the Purdue Heifer International Chapter has grown into one of the most popular college clubs. The club continues to host several fund raisers on campus throughout the year with the goal of raising money for Heifer International’s development programs. The club has also developed several successful outreach projects including the Read-to-Feed program, where Purdue students work with local elementary school students to encourage reading, while creating greater awareness of hunger and food security issues. Kelli Kirtley, ANSC senior, is the current president of the Purdue Heifer Chapter. Paul Ebner, ANSC Associate Professor, is the club’s faculty advisor.

Pork Interest Group

The Pork Interest Group had meetings on new technologies and the Pipestone System during the Spring semester. In October, they held a Pork Industry Career Night. The career night involved multiple speakers giving short presentations on careers in the pork production, feed, genetics supplier, technical support and pork processing industries. Additional speakers talked about the impact of internships and making the transition from college to the workplace. The Pork Interest Group involves students, faculty and pork industry people in a discussion of issues, new technologies and careers in the pork industry.

In 2009, Purdue started a “5 Students Who” series, to recognize students who are outstanding in many different areas. Through early 2013, seven Animal Sciences students or alumni have been recognized, four in the past year.

Amber Courter (B.S. 2011) was one of “5 Students Who Lead” in September 2010. Whitney Pavalko (B.S. 2010) was one of “5 Students Who Are Discovery Makers” in February 2011. Kendra Pavalko (B.S. 2010, M.S. 2012 in YDAE) was noted as a “Change Maker” in November 2011. Amanda Emery (B.S. 2012) was one of “5 Students Who Are Example Makers” in February 2012. Brittany Rayburn (B.S. 2012) was noted as a “Record Maker” in June 2012. Bailey Farrer (sophomore) was cited as a “Legacy Maker” in October 2012. Most recently, Jasmine Cote (B.S. 2010, currently a student in Purdue’s Vet School) was noted as an “Equality Maker” in January 2013. Visit https://ag.purdue.edu/ansc/Pages/FiveStudents.aspx to read more about these outstanding students.

Highlighting Activities of 2012
The 2012 Livestock Judging Team consisted of the following team members: Joe Grinstead, Lebanon; Ethan Stephenson, Fillmore; Ben Estinger, New Paris; Taylor Plank, Walton; Hudson Badskey, Avilla; and Jeremy Russell, Eaten.

The team was 5th in placings and finished 6th at the National Barrow Show in Austin, MN. Hudson Badskey was 6th off the floor and ended up 15th overall.

Many teams from across the country participated in the Boilermaker Classic hosted by Purdue University. This event is not for awards, but serves as a mock contest for the students. The next day the team traveled to the Stockman Contest held in Dekalb County. The College division does not have team awards in this event; however, the event was an excellent training contest for the team.

Kansas City was an educational event for the team. The team struggled placing classes and finished 20th.

In Louisville, the team improved from Kansas City. They moved up to 14th. In the reasons room, Joe Grinstead gave 3 high sets of reasons and was recognized by those officials in the critique.

Many thanks to everyone for the support and time provided with workouts and classes for the team to prepare for the educational events while building the valuable skills for their careers. The “out of the classroom” experiences are valuable and irre-
Dr. Jolena Waddell has only been part of Purdue Animal Science faculty since February 2013, but she is certainly not a new face. She obtained her undergraduate degree at Texas Tech University in animal sciences. She furthered her education and gained her Master’s Degree at Texas Tech University in animal growth and development, and then traveled to Purdue University in 2004 where she earned her Ph.D. in molecular genetics and completed a post-doc in muscle biology. In 2010 she became a lecturer for the Department of Animal Sciences, teaching four classes throughout the year. In 2011, she continued teaching and became the director of Meat Science Programs, managing the Boilermaker Butcher Block and the many activities that take place in the Purdue Meat Lab. She continues many of these duties in her current faculty role.

During her freshman year of high school, Dr. Waddell did not achieve a spot on the livestock judging team, but knew she wanted to be involved. She joined the Meat Science judging team and placed 4th in the state. She never really planned on a career in the meat science industry at the time, but throughout college she redeveloped an interest for research and meat sciences.

Dr. Waddell’s research has focused on genes that control muscle growth and carcass quality. She often uses sheep as her experimental model because they are an easier and more affordable representation for larger livestock species like cattle. Her current research interests include calpastatin, a protein that makes a difference in the tenderness of meat. Some sheep in the Purdue flock are callipyge, a mutation that makes the animals’ muscles massive, but toughens the meat, in part due to calpastatin levels. Her general goal in research is bringing the “perfect” meat animal to harvest - one that is efficient, profitable, and yields a desirable product.

Since Dr. Waddell is so new to the Purdue team, we asked her a few questions about what her plans are for Purdue Meat Sciences. “I plan to make the meat lab a place of interest again. We are working on starting a meat sciences club, and someday I hope to have a meat sciences judging team again,” she said. With the help of enthusiasts like Dr. Waddell, Purdue will again be among the top colleges for meat sciences, with the likes of Texas Tech, Colorado State, Kansas State and Nebraska, before too long. As of right now, Purdue is about in the middle. We have the facilities, but not very many students and staff are interested. The new animal sciences building will be great for meat science programs because of the new meat lab that is planned.

Dr. Waddell supervises the Boilermaker Butcher Block located in Smith Hall. It is a public, state inspected store that has a variety of meat cuts from different species. Students, staff, and the general public can visit the store on Wednesdays and Fridays from 2:00-5:30. The main reason for the store is to cover the costs of slaughtering food animals for research and teaching. The Butcher Block is also a great place for teaching students about making and marketing processed meats.

The meat science industry is a very important and stable industry, since we eat meat in every country. Within meat sciences, our main goal is to provide a wholesome, safe, affordable, desirable product that the customer will come back and purchase again.

Although Dr. Jolena Waddell has not been a part of Purdue faculty for very long, she has set very high goals and intentions for the department. Any students or stakeholders are encouraged to contact her with any questions they may have about programs or the industry in general. We all look forward to the future of Meat Science at Purdue University.
Undergraduate Student Update
By Mark Diekman, Undergraduate Programs Coordinator

Table 1. Number of graduates in ANSC majors/concentrations.

<table>
<thead>
<tr>
<th>Major/Concentration</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Agribusiness</td>
<td>31</td>
<td>27</td>
<td>20</td>
<td>20</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>Animal Production</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>15</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Animal Products</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Animal Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biotechnology</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Behavior/Well-being</td>
<td>14</td>
<td>14</td>
<td>10</td>
<td>15</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Biosciences</td>
<td>13</td>
<td>10</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Pre-Vet</td>
<td>35</td>
<td>33</td>
<td>52</td>
<td>51</td>
<td>41</td>
<td>42</td>
</tr>
</tbody>
</table>

The number of degrees earned in each of the majors/concentrations from 2008-2012 is shown in Table 1. Even though two of the major/concentrations have low graduation rates (animal products and biotechnology), the number of graduates in each major/concentration has remained stable during the last five years.

Table 2. Pathway to graduation from ANSC graduates

<table>
<thead>
<tr>
<th>Pathway to</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always ANSC</td>
<td>37.5%</td>
<td>58.9%</td>
<td>47.6%</td>
<td>55.6%</td>
<td>63.3%</td>
<td>52.4%</td>
</tr>
<tr>
<td>Pre-Vet →</td>
<td>26.0%</td>
<td>14.4%</td>
<td>19.0%</td>
<td>9.6%</td>
<td>3.7%</td>
<td>14.2%</td>
</tr>
<tr>
<td>CODO*</td>
<td>22.1%</td>
<td>11.1%</td>
<td>7.6%</td>
<td>16.5%</td>
<td>15.6%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Ag → ANSC</td>
<td>2.9%</td>
<td>2.2%</td>
<td>2.9%</td>
<td>1.7%</td>
<td>5.5%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Transfer**</td>
<td>11.5%</td>
<td>13.3%</td>
<td>22.8%</td>
<td>16.5%</td>
<td>11.9%</td>
<td>15.2%</td>
</tr>
</tbody>
</table>

*Change of degree objective within Purdue University
**Transfer from another university

As shown in Table 2, approximately one-half of the students that graduated in Animal Sciences matriculated in our department. To serve those students that desire to obtain a degree in Animal Sciences, we must maintain flexibility in our curriculum to accommodate students that migrate to us during their stay at Purdue.

2012 Animal Sciences Awards

Outstanding Class Awards
Freshman - Jennifer Clouse
Sophomore - Kimberly Lutz
Junior - Bradley & Benjamin Schmitt
Senior - Melanie Papariella

Lilly Merit Scholarship
Freshman - Jennifer Clouse
Sophomore - Neil Dawson
Junior - Cora Carter
Senior - Nathan Shireman

Baltzell Agri-Products Scholarship: Jaclyn Bauer, Megan Brunn, Abbie Schultz

Book-Harmon Leadership Scholarship: Kelli Kirtley

Bratton-Webster Memorial Scholarship: Alyssa Haithcox

Frank & Wini Clark Beef Industry Scholarship: Jordan Eggersman

Owen & Fran Crisman Family Scholarship: Elisha Bault, Alexandra Lesniak, Ashley Potts

Elanco Scholarship: Kelsey Heron

R.L. Hogue Scholarship: Dion Scott

Emerson J. Kuhn Scholarship: Taylor Meyer, Holly Nobbe

Keith Lotz Memorial Scholarship: Bailey Farrer, Ethan Stephenson

LOUJA Undergraduate Scholarship: Cassandra Cromer, Joni Degler

John Henry Hinkle Memorial Scholarship: Paul Champion, Jennifer Colvill, Megan Crowther, Kendra Hedge, Charles Hegg, Kayleen Herb, Acacia Herr, Rachael James, Kimberly Karlin, Ryan Klobusnik, Bailey Landis, Amber Papp, Megan Raderstorff, Kathryn Sands, Katherine Smith, Alyssa Strumpf, Ashley Walker, Anna Washburne, Alexandra Wood, Kristin Zettel

Eric B. Luckman Award: Zachary Frazier, Sarah Garst

Truman & Marjorie Martin Study Abroad Scholarship: Abigail Northrup

Henry Mayo Scholarship: Lindsay Fredericks, Hannah Goeb, Nicholas Lancaster

Milton & Myrtle Miller Scholarship: Jenaya Hooks

Paul E. Newman Scholar Award: Jordan Keeney-Humphrey, Chelsie Lawyer, Ashley Norris, Shelby Stierwalt, Annie Van Proyen

Richard A. Pickett Memorial Award: Amelia Carow, Jessica Peters

W.A. Rafferty Livestock Leadership & Citizenship Award: Justin Carothers

Thrasher Family Award: Elizabeth Boller, Angela Moss, Patrick Neff


Charles L. & Jean Rueff Award: Taylor Brown, Morgan Cox, Amelia Foreman, Matthew Misch

Alyssa Haithcox was elected National MANRRS Vice President for Region 5. MANRRS is the student group Minorities in Agriculture, Natural Resources and Related Sciences. She also received the Black Caucus of Faculty and Staff Service/Leadership Award. Alyssa is conducting research with Dr. Karen Plaut, investigating ketosis in transition dairy cattle. She is also a Food, Engineering, Environment, and Life Sciences Fellow.

In the undergraduate competition at the Tri-State Dairy Nutrition Conference, Sara McCullough placed 2nd with her presentation entitled, “Effect of calf starter form and milk source on growth and intake of dairy calves.”

Animal Sciences seniors Neira Eisenmann, Heather Solomon, and Kristen Tschida were elected to Phi Beta Kappa. At the Purdue Undergraduate Research Poster Symposium, Kaylin Crosby received the CoA Dean’s Choice Award for the poster, “Sex biasing mothers: a look at sociobiological cues as predictors for maternal biasing of offspring sex ratio.”
**Dairy Judging**

*By Steve Hendress, Coach*

The 2012 Purdue Dairy Judging Team competed at four major contests this year. The team members included 2 seniors (Laura Stockwell-AGEC, Rick Koehn-AGEC) and 4 juniors (Doug Wicker-AGEC, Eric Wagner-AGEC, Mary Rodenhuis-ANSC, Heather Smith-ANSC). With several members lacking in experience, we moved forward with learning details for reasons and several farm visits to gain consistency and repetitions. We first travelled to Baltimore, MD for a non-contest experience. We had the opportunity to judge 23 classes with all breeds and ages and then proceeded to practice oral reasons on several of those classes. It was a great learning experience and enabled us to focus strictly on judging.

Two weeks later we travelled to Harrisburg, PA for the All American Dairy Show Contest. With some tough classes, we had limited success. However, Doug placed 3rd in Brown Swiss, 12th in reasons, and 12th overall, and Laura was 12th in Holsteins.

The national contest was held at the World Dairy Expo in Madison, WI on October 1. The contestants placed 12 classes and gave 6 oral reasons on 7 dairy breeds. Nineteen teams competed from coast to coast and 1 foreign country. There were some tough classes in the contest and the team was very consistent within the team, but the officials happened to see some of them differently. The highlight was Doug Wicker making the Top 25 individuals and being named to the All American Judging Team, which allows him the opportunity for national scholarships in undergraduate and graduate studies.

The NAILE contest was held at Louisville, KY for their third outing. The team was doing well until the Jersey breed was too challenging. Eric tied for first in the Holsteins with a 147/150 and the team was 5th. Doug was steady in the top 10 of all breeds except Jerseys and was 5th individual overall.

The final contest was at the Ft. Worth Stock Show. Team illness struck before and during the contest and took a toll on team performance. I guess the coach needs to be better trained in nurse skills. However, Rick rose to the top of the team after the other three contests showed his inexperience. It was a fun opportunity for the team as we toured Dallas Stadium and visited the “Old Fort Worth Stockyards” before returning.

The other educational opportunity took us to the Royal Agricultural Winter Fair in Toronto, Canada. We attended the National Holstein Show and then visited 6 high profile dairy farms with exceptional cattle and a variety of management and housing facilities. It was the first time for some students to travel outside the U.S. border and gave them a chance to interact with dairymen inside their farm.

The team members worked hard, sacrificed several fall weekends, developed personal skills, but had fun while learning and travelling to new destinations. All in all, this was a successful 2012 for the Purdue Dairy Judging Team.

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**2012 Indiana Livestock Breeders of Shorthorn Cattle, Modoc, IN**

Darrell D. Anderson
Executive Secretary, National Swine Registry, West Lafayette, IN

Darrell D. Anderson wasn’t born a “pig guy”; he was a country boy destined to be a great leader. For the first 38 years of his life he was focused on purebred sheep, livestock judging, auctioneering, and his family and faith.

In 1987, he added the swine industry to his focus. This was the beginning of an extraordinary 25-year career of leadership that lofted the purebred swine industry to new heights with unprecedented changes and growth.

Darrell’s list of contributions to agriculture and the purebred livestock industry is impressive. He was the youngest president of the National Suffolk Sheep Association. He brought four purebred swine breeds together to form the National Swine Registry (NSR). Darrell’s masterful business mind managed both the American Yorkshire Club and the NSR through tough economic times, while his vision helped create the National Junior Swine Association, the “Tested Best” at the World Pork Expo, and many other progressive industry programs.

Anderson’s leadership style is one of patience and the ability to listen to all sides that allowed the monumental merger to be successful. Darrell is quick to credit his dedicated staff and progressive breeders that serve as leaders on the association’s board. He has the ability to make the solid decisions for the good of the organization while embracing necessary change to advance the industry.

**Brian and Randy Cates**

**Breeders of Shorthorn Cattle, Modoc, IN**

Brian and Randy Cates started in the Shorthorn industry in 1962 when their father Rex purchased their first 4-H project heifers. Now, over 50 years later, Cates Farms is recognized as one of the most prominent and successful Shorthorn herds in North America. Since the 1980’s, the operation has consisted of 150 cows and has extensively utilized artificial insemination and embryo transfer to propagate the elite Shorthorn genetics. The annual fall Cates Farms sale has marketed cattle to neighboring Indiana Shorthorn enthusiasts and to breeders across the United States and Canada.

Exhibiting cattle at major livestock shows is an important part of the Cates operation. The success of the Shorthorn cattle raised at Cates Farms in the show ring has been well documented and has been nothing less than a legendary legacy. Their cattle have dominated local, state, and national shows for 40 years and they have won numerous All-American and National Championships. The cattle have gone on to be successful in different environments and under different management systems. They have raised and owned some of the most dominant sires in the breed for several decades. They have received the highest honor given by the American Shorthorn Association as Breeders of the Breed in 1980 and have continued to have a major impact.

Not only has the operation been a sustained leader in the cattle arena, but Brian and Randy have been leaders in the industry. Brian has served as President of the Indiana Shorthorn Association and the American Shorthorn Association. Randy was a member of the 1973 Purdue University National Champion Livestock Judging Team and has served as President of the Indiana Shorthorn Association. Both Brian and Randy have judged shows across the country.

**James F. Patton**

**Angus Breeder, Crawfordsville, IN**

The Patton Farms Angus herd was established in 1945 by James F. Patton’s now deceased father Forest Patton. It is now recognized as one of the Historic Indiana Angus Herds. James and his wife, Randee, have three children, Susan, Steve and Beth, and 7 grandchildren. All have been and/or continue to be very active in Patton Farms.

The current operation involves about 60 registered Angus females, most of which are descendants of many generations of nationally prominent Angus cattle bred and raised by James Patton. He makes extensive use of A.I. and embryo transfer in his breeding program. While it has never been a large herd, Patton Farms are well known throughout North America for producing Angus breeding cattle that are very competitive in the show ring and go on to be outstanding performers in the pasture. James and his family have earned many state and national championships with their home raised Angus breeding cattle extending well over 50 years. This includes the Grand Champion Bull at the 1991 National Western Stock Show in Denver, and many more.

Since 2003, James has hosted a very successful annual “Patton and Friends Angus Sale” at the farm. Many of these females have gone on to successful show ring and breeding careers for their new owners. One of the 2011 ROV Angus Show Heifers of the Year was produced by a female sold in dam by James Patton.

James has provided leadership as a Livestock Breeder in Indiana for his entire life. He is current member, past director, and past president of both West Central and Indiana Angus Associations. He is the current and long-time Angus Breed Manager for the Indiana State Fair and Hoosier Beef Congress. He served as Associate Judge at the NAILE Angus Show in 2003. He was awarded an Indiana State Fair Lifetime Pass in recognition of 50 plus years as exhibitor.

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**Highlighting Activities of 2012**

- **The 2012 Dairy Judging Team. Front row (left to right):** Mary Rodenhuis, Laura Stockwell, and Heather Smith; **back row:** Doug Wicker, Rick Koehn, Eric Wagner, and coach Steve Hendress.
Upcoming Events

**August**

- 2-18 Indiana State Fair (Year of Popcorn)
- 9 Purdue Day at the State Fair

**September**

- 27 2013 Distinguished Animal Sciences Alumni Awards Program
- 28 Purdue Homecoming (vs. Northern Illinois)

**October**

- 1 College of Agriculture Career Fair
- 29 Book Harmon Leadership Forum
  (Featuring Dr. Robert Easter, President of the University of Illinois)

Send Us Updates!

The Animal Sciences Newsletter Committee would like to include your alumni update in next year's newsletter. Let everyone know what you have been doing! Just send us your update information, and include “ANSC newsletter” in the subject line. Photos would be great, too! Email to Aimee Deno at adeno@purdue.edu.

Receive Email Updates!

Email Pat Jonas at jonasp@purdue.edu with “add to ANSC Alumni email newsletter” in the subject line. If you need to change your email address, send both the old and new addresses.

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