

Biological and Agricultural Engineering Newsletter

Summer/Fall 2011

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The BAE Newsletter is distributed annually during the summer months. Previously the newsletter was mailed during the winter months. We continue to encourage alumni to provide updated information via the form located on our website, www.bae.ksu.edu/alumni.

**See Page 8 for
BAE Fall 2011 Events!**

Message from the BAE Department Head

The question I frequently find myself struggling to answer is: Am I making a difference or impact? My current role provides opportunities to see the impact faculty have on the lives of students and the impact research and extension are having on the betterment of society. However, I've come to appreciate how much the educational experiences of our students are broadened because of the impact of our alumni and friends.

Scholarships established in honor of BAE Alumni annually provide over \$50,000 towards BAE undergraduate educational tuition. Alumni and friends of the University also support our scholarships based on academic performance. BAE Alumni and faculty provided time and energy this past year to support the design teams. Undergraduate students' educational experiences were broadened through participation in our fountain war, robotic, and ¼ scale tractor teams. The impact of these design experiences were possible due to support from alumni and friends.

Twelve alumni currently give of their time to serve on the BAE Advisory Council providing guidance and direc-

tion to the engineering curriculum and department. One alumni coordinated and taught a winter intercession course which was well received by the undergraduate students.

This past year BAE hosted four industry career nights. Since this was a first time experience, alumni gifts were used to support catered meals for each event. Seventeen students received internships as results of these sponsored activities. In terms of economic impact, for each alumni dollar invested in supporting industry nights, students earned about \$150 in summer salary to apply towards their educational expenses. This impact was only possible through the support of others. During the upcoming academic year, 12 industry nights are being scheduled with industry supporting the catered meals but it all started because of alumni and friends.

Your financial support has afforded students the opportunities to participate in other unique educational experiences. One BSE student traveled to Guatemala as part of the Engineers Without Borders project and another traveled to Washington D.C. to present a summer research project.



Dr. Joseph P. Harner III

This past year your support provided employment opportunities for 15 students with needs. Alumni and friends make a positive difference here at Kansas State University and provide educational experiences creating lifelong learning opportunities.

THANK YOU! Stop by Seaton Hall and discover the impact you are making on the lives of others.

NEW BAE WEBPAGE
[http://](http://www.bae.ksu.edu/)
www.bae.ksu.edu/

WHAT A YEAR ! The KSU Tradition of Excellence Continues

Ms. Allie Archer (senior in Biological Systems Engineering, second major Natural Resources and Environmental Sciences, Master's student in Biological and Agricultural Engineering) was selected as the first recipient of the Pharos of Alexandria Global Learning Award for 2011! Ms. Archer was honored with the presentation of this award during the 2011 ASABE Annual International Meeting in Louisville, Kentucky on August 10. This award was established in 2010 by Awatif El-Domiaty Hassan, Professor Emeritus of North Carolina State University. The award honors and recognizes an outstanding undergraduate upper-class level (junior or senior) or Graduate ASABE student member who exhibits interest in engineering problems and global learning outreach.

2011 ASABE Robotics Competition

1st Place KSU BAE Robotics Team

Robotics Team Members: *Dan Bigham, BAE BS/MS (Meriden, KS); *Joe Dvorak, team captain, BAE Ph.D. student (Manhattan, KS); Audrey George, IAR senior (Salina, KS); Ryan Goetsch, ARE Ph.D. student (Overland Park, KS); *Spencer Kepley, BAE BS/MS (Chanute, KS); *Xu "Kevin" Wang, BAE Ph.D. student (China); *Brent Ware, BAE BS/MS (Shawnee Mission, KS). Advisor is Dr. Naiqian Zhang.

*Competition Team

2011 ASABE Fountain War Competition

1st Place KSU BAE Fountain War Team

Fountain War Team Members: *Jessica Barnett, BSE junior (Belleville, KS); Lorinda Bejot, BSE senior (Dodge City, KS); *Kelly Borgen BAE BS/MS (Ensign, KS); *Erin Mason, team president, BSE junior (Greenfield, MO); Ginger Pugh, BSE senior (Mayetta, KS); Breanna Stout, BSE senior (Garden City, KS); *Levi Sutton, BSE senior (Manhattan, KS); *Brent Ware, team treasurer, BAE BS/MS (Shawnee Mission, KS). Advisors: Dr. Phil Barnes and Dr. Mahbub Alam.

*Competition Team

2010-11 Association of Equipment Manufacturers Trophy Awards for Outstanding Student Branches:

Student Engineering Branch Participation – First Place won by the BSE Club, Kansas State University
Student Mechanization Branch Participation – First Place won by the ATM Club, Kansas State University

More from 2011 ASABE Annual International meeting

Karnnalin Theerarattananoon (BAE Ph.D. student), **Xiaorong Wu** (BAE Research Assistant Professor), and **Donghai Wang** (BAE Professor), received a superior paper award. Other K-State co-authors were R. Madl, S. Staggenborg and J. Propher.

Dr. Naiqian Zhang received the distinction of ASABE Fellow during the recent ASABE International Conference for his outstanding and dedicated performance in educating engineering professionals and developing new sensors and control applications for agricultural and biological systems.

Dr. Kyle Douglas-Mankin received a 2010-2011 ASABE Leadership Citation -- Publications Council. The Leadership Citation recognizes service to ASABE for performance above and beyond the norm.

Norm Klocke, L. Stone and Steve Briggeman received an ASABE Blue Ribbon for outstanding educational materials in the electronic and web-based delivery category.

Collin Craig received third-place for the Undergraduate Project Poster Competition. His poster was based on his NSF/REU Summer Academy project at K-State, and was titled: "Modeling Corn, Grain Sorghum and Sweet Sorghum Yields in the Soil and Water Assessment Tool (SWAT)". He was mentored by BAE Ph.D. student **Sumathy Sinnathamby** and **Dr. Kyle Douglas-Mankin**.

Dr. Phil Barnes assumed chair of the Soil and Water Division which is the largest ASABE division.

2010 Honorable Mention Paper (top 5% of manuscripts published in 2010). Tuppad, P., **K.R. Douglas-Mankin**, **J.K. Koelliker**, and J.M.S. Hutchinson. 2010. SWAT discharge response to spatial rainfall variability in a Kansas watershed. Transactions of the ASABE 53(1): 65-74.

Professor Named Editor-in-Chief of International Journal

Kyle Douglas-Mankin, BAE professor, has been named editor-in-chief of the new Journal of Natural & Environmental Sciences, an international, open-access journal that publishes peer-reviewed, original research on environmental problems around the world and concerns with the sustainable use of environmental resources.

BAE FACT:
Fall 2011
58 BSE & ATM Freshmen

WHAT A YEAR ! The KSU Tradition of Excellence Continues

1st Place KSU BAE 1/4 Scale Tractor Team — 2011 ASABE 1/4 Scale Tractor Competition

The 2011 ASABE ¼-Scale Tractor International Student Design Competition was held in Peoria, Illinois June 2 through June 5. We are proud to report that the **K-State ¼-Scale Tractor Team** won first place overall and K-State's X Team placed second overall! At this year's competition, 27 universities were represented, including 4 from Canada.

The A Team placements were as follows:

- | | |
|--|--|
| 1 st place – Written Report | 1 st place – 1050 Hook 1 Pull |
| 1 st place – 1050 Hook 2 pull | 3 rd place – 1500 Hook 3 pull |
| 2 nd place – 1500 Hook 4 pull | 1 st place – Design Performance |
| 1 st place - Overall | |



A Team members at competition: Doug Grollmes, A Team president, BAE junior (Circleville, KS); Clay Reinecke, vice president, BAE senior (Centralia, KS); Brett McClain, secretary, BSE senior (Phillipsburg, KS); Nicholas Depenbusch, treasurer, BSE senior (Nashville, KS); Jonathan Zeller, shop foreman, BSE senior (Overbrook, KS); David Becker, BSE senior (Melvern, KS); Bradley McVey, BSE junior (Fredonia, KS); Doug Niehues, BSE junior (Goff, KS).

X Team members at competition: Justin Sales, X Team president, ATM sophomore (Valley Falls, KS); Ben Bellar, ATM sophomore (Howard, KS); Brad Ellenz, ATM sophomore (Beloit, KS); Cody Hommertzheim, ATM freshman (Pratt, KS); Andrew Koch, BSE sophomore (Auburn, KS); Isaac Spear, BSE freshman (Littleton, CO).

Additional 2011 Team members include: Andrew Broeckelman, BSE senior (Selden, KS); Denton Haag, ATM senior (Bartley, NE); Devin Mangus, BSE junior (Kanorado, KS); Joshua Ogle, BSE senior (Manhattan, KS); Austin Smith, BSE senior (Wichita, KS); Dillon Thompson, BSE junior (Burdett, KS).

Team advisors: Jim Schmidt and John Kramer (BAE Alumni), Ed Brokesh, J. Pat Murphy, Darrell Oard, Lou Ann Claassen.

BAE Spring/Summer 2011 Graduates

Doctorate

Spring 2011

Li Guo

Gongzhuling, China
(Dr. Maghirang)

Summer 2011

Wei Han

Ste. Anne De Bellevue,
Canada
(Dr. Zhang)

Shuping Yan

Wenxian, China
(Dr. Wang)

Master of Science

Spring 2011

Katie Handley

Onaga, KS (Dr. Hutchinson)



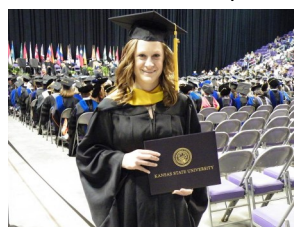
Above: Dr. Joe Harner with doctoral graduate Shuping Yan. Below: Doctoral graduate Li Guo with Dr. Ronaldo Maghirang. Below right: Katie Handley, concurrent BS/MS graduate.



BAE/BSE BS

Spring 2011

David Becker, Melvern, KS
Yvonne Cook, White City, KS
Katie Handley, Onaga, KS
Alan LeDuc, Concordia, KS
Muhammad Ahmad Lershaidd,
Sabah Al Salem, Kuwait
Jeremy Meeks, Liberal, KS
Clay Reinecke, Centralia, KS
Craig Ronnebaum, Axtell, KS
Maria Stevens, El Dorado, KS
Emily Tummons, Leawood, KS
Alan Winter, Mt. Hope, KS



ATM BS

Spring 2011

Andrew Baker, Marienthal, KS
Zachary Frederick, Alden, KS
Zayn Frederick, Alden, KS
Joshua Frank, Westmoreland, KS
Eric Frey, Wamego, KS
Cole Halbleib, Oakley, KS
John Hausman, Eudora, KS
Westin Holloway, Kincaid, KS
Neil Isaac, Meade, KS
Grant Keller, St. Francis, KS
Heath Kinser, Hugoton, KS
Ryan Mathewson, Axtell, KS
Dustin Norberg, Lindsborg, KS
Chase Rodecap, Meriden, KS
Barrett Smith, Macksville, KS
Benjamin Spare, St. John, KS
Jake VanAllen, Clearwater, KS

Departmental Highlights — Faculty Sabbatical Activities



Dr. Phil Barnes'

sabbatical provided opportunities to collaborate with other leading water quality engineers and scientists. He met with the "Cropping Systems and Water Quality Research Unit" during his visit to USDA ARS laboratory in Columbia, Missouri. Scientists at this USDA lab are conducting research on transport of pesticides in watersheds with clay pan soils which is a problem in Eastern Kansas. He also traveled to Texas A&M and presented a distinguished lecture and visited Dr. R. Karthikeyan. Dr. Karthikeyan's research involves bacterial data collection and modeling transport. Dr. Karthikeyan's lab uses Polymerase Chain Reaction, which is a scientific technique to amplify a single piece of DNA across several orders of magnitude, generating thousands to millions of copies of a particular DNA sequence to track the sources of bacteria in Texas's streams. The final stop during his six-month sabbatical was Purdue University. He met with Dr. Dennis Flanagan of the USDA ARS National Soil Erosion Research Laboratory and Dr. Indrajeet Chaubey in the Agricultural and Biological Engineering Department. Their laboratory is currently working on ephemeral gully research in Kansas and Indiana.



The major objectives of **Dr. Ronaldo Maghirang's** sabbatical leave were to enhance his research capabilities on characterizing and predicting the fate and transport of air emissions

from agricultural operations, and to strengthen his involvement in international programs. Overall, he was able to accomplish what was proposed in the original plan of work.

He visited several international institutions, attended many workshops, visited with potential collaborators in the U.S., and completed several journal articles. He visited the following institutions to learn about current and emerging techniques on air quality sampling and measurement and to establish potential collaborations: Prairie Swine Centre, Inc. Saskatchewan, Saskatoon, Canada; Canadian Light Source National Synchrotron Facility, Saskatchewan, Saskatoon, Canada; Department of Chemical and Biological Engineering, University of Saskatchewan (was also an invited speaker for a special seminar on "Biological Systems Engineering at Kansas State University—Lessons Learned and Challenges Ahead"); Mariano Marcos State University, Batac, Ilocos Norte, Philippines (presented two special seminars/lecture forum on "Elements of Air Pollution, Generation, and Control" and "Air Quality Research at Kansas State University"; University of the Philippines at Los Baños, Laguna, Philippines).

Dr. Maghirang attended and presented at the following workshops/conferences: USDA AFRI Annual Project Directors' Annual Meeting, Amarillo, TX; Air Quality Workshop Series for Feedyards and Dairies in Hereford and Stratford, TX and Garden City, KS; Kansas NSF EOSCoR Statewide Conference, University of Kansas, Lawrence, KS; workshop on standardization of test methods, Sponsored by Center for Study of Open Sources, Research Triangle Park, NC.

This leave enabled Dr. Maghirang to gain new knowledge on air quality measurement and modeling, and establish international presence for Kansas State University's teaching and research programs. It also allowed him to cultivate new partnerships and further cement existing collaborations with scientists at Kansas State University and other organizations. The new knowledge, new partnerships, and existing collaborations should

further enhance our capacity for research and education on air quality.



In 2010, **Dr. Naiqian Zhang** took a 6-month sabbatical leave at the University of Philippines Los Baños (UPLB) as a U.S. Fulbright Scholar. During the leave, he worked at the Institute of Agricultural Engineering at UPLB and helped the

Institute enhance their educational program through teaching an undergraduate course in instrumentation and control, developing an Instrumentation Laboratory, proposing curriculum changes and new courses, and organizing a student robotics design team. He also actively participated in other academic exchange and professional development activities by giving seminars and presentations at several local, national, and international conferences, and visiting various universities and research institutes.

During the sabbatical leave, Dr. Zhang also investigated the level at which the advanced technologies, especially the precision farming technologies, are applied in rice production worldwide, especially in developing countries. He was invited to an international conference on rice mechanization to give a presentation on this topic. In addition, Dr. Zhang co-organized an International Symposium on Wireless Sensor Network in Agriculture in Beijing, China, and visited several other Asian and African countries.

BAE FACTS

ASABE FELLOWS

Jim Koelliker
Pat Murphy
Mark Schrock
Naiqian Zhang

Annual Departmental Research Expenditures

\$2,800,000

Expanding Educational Experiences

By Dan Martin

Last fall, I had the opportunity to travel to Southeast Asia and gain experience with agriculture in the developing world. I spent the majority of my time in northeast Thailand working at a small grain processing facility established by a group of westerners to help develop agriculture in that region. The mill processes rice,

corn, and soybeans into food grade products for distribution by United Nations World Food Program.

In addition to Thailand, I spent time working in Laos. While in Laos, I was involved in a variety of development projects within the northern province of Phongsali. We worked to help develop agri-

culture, education, and health services among the Akah mountain tribes.

Along with the development projects, I had the chance to experience a different culture and have lots of new experiences. I worked and interacted with people who have backgrounds very different from my own. By seeing

how a majority of the world lives from day to day, I truly have a more complete worldview. The opportunity to gain insight into the perspective of the friends I made while in Asia was incredible. I enjoyed my time in the developing world and hope to be involved with agricultural development in the future.

Commitment to Vision 2025 - Enhancing BAE Research Experiences

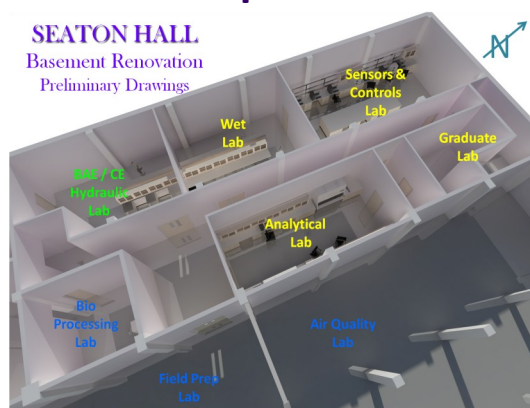
Currently over 80 percent of the counter space in some of our existing labs is occupied with equipment. The department is at the point where we need to develop some new laboratories to provide modern space for new faculty, attract graduate students from other universities, and expand our research programs. Many research labs operate solely with graduate students; however, the K-State 2025 Initiative (learn more at <http://www.k-state.edu/2025/>) promotes research opportunities for our undergraduate students.

Collectively the BAE faculty believe it is time to renovate Seaton Hall 34 into a modern research laboratory including a remodeled hydraulic lab. As a student you may have been involved in one of the following activities in Seaton 34:

- completed laboratory exercises in the hydraulic lab,
- used the open space for designing the fountain war display,
- conducted water-related research projects using the in-floor plumes, or
- been a student employee and carried research equipment into the area for winter storage.

Figures to the right show the architect's renditions of the renovated lab space. Remodeling this space will enable the faculty to have 8 to 10 ongoing research projects and provide room for additional classroom laboratory activities. Storage will be moved to off-campus sites and other space will be allocated for our design teams.

Renovation of this space is critical to the long term viability of the department. Within the next six months the department will be interviewing candidates for three new faculty positions. Often we hear of 5-star athletic recruits or coaches going to a university because of their excellent facilities. The same is true of new faculty members – facilities will make a difference in the hiring and the long-term growth of our program. The renovation cost is about 1/3 the cost of new construction and Kansas State is ready to begin construction as soon as funding is obtained. For additional information on how you might play a role in this major renovation and continuing the BAE tradition of excellence, please call Joe Harner at 785-532-5580 or jharner@ksu.edu.



Analytical Lab



Sensors & Control Lab

BAE Retirements



Judy Willingham, Extension Assistant, Kansas Environmental Leadership Program, retired on December 11, 2010, after completing over 12 years of service to

Kansas State University. She received her bachelor's degree in secondary education and her master's degree in Adult and Continuing Education from Kansas State University. She served over 20 years in public health positions prior to arriving at Kansas State University in 1998.

Her outstanding career included developing and implementing the Kansas Environmental Leadership Program (KELP), the "Food-A-Syst" curricula addressing food safety issues, and Home *A* Syst. Her involvement with these curricula development projects resulted in co-authorship of more than 50 Extension publications. Under her leadership, nine classes completed the year-long environmental leadership training program. This program serves as a national model for environmental leadership programming targeting decision makers and state agency personnel.

Ms. Willingham was active in many professional societies in Kansas. The KELP program under her leadership received the CF Industries National Watershed Award in 2003 and the 2009 Excellence in Conservation and Environmental Education Award by Kansas Association for Conservation and Environmental Education.

Her Extension outreach program has led to a greater understanding and appreciation of the importance of protecting the natural resources of Kansas.

Dr. Robert E. Wolf was also recognized for over 12 years of service to Kansas State University, at his retirement



on February 5, 2011. Dr. Wolf received his bachelor's, master's and doctorate degrees from the University of Illinois. Prior to his arrival at Kansas State University he was involved in Pesticide Applicator Training and vocational agricultural programs in Illinois.

Dr. Wolf developed a leading regional, national, and international program in the area of application technology, improving pest control product efficacy and drift mitigation. He developed research based educational outreach programs related to the application of agrichemical materials for a diversified industry. His technology transfer methodologies included print media, web-based delivery, and demonstrations to effectively transfer the research knowledge beyond Kansas State University.

Dr. Wolf currently serves on the executive board for the Council for Agricultural Science and Technology and the Board of Directors for the National Agricultural Aviation Association. He is an active member of numerous professional societies and has received many awards recognizing his professional contributions. In 2009 he was elected Fellow in the American Association of Pesticide Safety Educators.

His extension outreach and research program has led to a greater understanding and appreciation of effective utilization of technology in spray application. His colleagues and others acknowledge his leadership, mentorship and friendship to the Kansas State University community.

Dr. Mahbub Alam retired on June 30, 2011 and was recognized for over 15 years of service to Kansas State University.



Dr. Alam received his bachelor's and master's degrees in Agricultural Engineering from the American University of Beirut. He provided leadership in developing water management educational programs at Colorado State University after receiving his PhD in 1985.

In 1996, he became an assistant professor at Kansas State University's Ag Experiment Station in Garden City. Dr. Alam's Extension and applied research focused on the sustainability of the water aquifers in the High Plains region. He has provided leadership in implementing educational programs related to effective management and utilization of water resources. Dr. Alam has authored numerous Extension publications and technical and conference papers in addition to helping develop the KSU Mobile Irrigation Lab program.

Dr. Alam assisted the Bangladesh Agricultural Research Council in reorganizing their national research strategy and outreach program as a Fulbright Scholar in 2003-04. He will be fulfilling a second Fulbright Scholar appointment in 2011-12. He is an active member of six professional societies and has received many awards recognizing his professional contributions.

His Extension outreach has led to a greater understanding and appreciation of water management.

BAE FACT

*2011-12 Graduate Students:
15 MS Students
18 PhD Students*

Special Thanks

We recognize our faculty and students have the talent and potential to transform possibility into reality.

With this in mind, we are dedicated to offering an educational environment rich with possibilities and opportunities for our students. In the laboratory we're pioneering to achieve our mission to advance the knowledge and application of engineering and technology to living systems, agriculture, and the environment. In the classroom we're consistently providing a world-class education that we believe will serve as a foundation for success throughout the lives of our students.

Indeed, many of our endeavors would not be possible without help from former students and friends of the department. This support, when expressed in the form of undergraduate scholarships or funding competition teams, enables students to pursue their educational goals and ultimately become leaders in academia and industry. When channeled in the direction of faculty development and research, these contributions help us recruit and retain the best possible teachers and scholars, ensuring that many generations of students receive an outstanding education.

We invite you to visit <http://www.found.ksu.edu/engineering/BAE.html> to continue the pursuit of excellence. With your support, the possibilities are truly limitless.

Honor Roll of Giving: July 1, 2010—June 30, 2011

Ronald and Phyllis Allen	James and Carolyn Fitzgerald	Mark and Darlene Locke	Roger and Rita Shenkel
Glenn and Robin Alpert	Bill and Dorothy Funk	Ronaldo and Elizabeth	Chad and Jennifer Simmelink
Walter and Stacey Appel	Jim and Lisa Garrison	Maghirang	John Stanfield and Christine
Dwight and Deborah Becker	Marvin Hachmeister and	Danny and Charlene Mangus	Lann
Shawna and Daren Beltz	Marjory Mortvedt	Jerry and Lori Marr	Marie and James Steichen
Stan and Pam Black	Joe and Lisa Haffener	Lewis and Marjorie Martin	Bradley Stewart
John and Rebekah Bloomfield	Milly and Joe Harner	Rodney and Kristin Menold	Edward and Judith Swenson
Mark and Terrie Boguski	Lucile Hawks	Elizabeth and Mark Meyer	Dale and Marilyn Turnbull
Edwin and Dea Brokesh	Jan and Dick Hedges	Kathleen Mundhenke	Olin and Janice Vanderslice
Warren Corbet	Edward and Lucille Heim	Pat and Ann Murphy	Joseph Vondracek
Craig Cowley and Lyn Haffaker	Daryl and Karen Heronemus	Carroll and Ann Nelson	Jeff Wessel
Bruce and Roberta Curry	Roberta and Joe Hodges	Leroy and Mary Joyce Pickett	Spencer and Mary White
Daniel and Margaret Denneker	Rodney and Kay Horn	Morgan and Kaye Powell	Audrey and Paul Williams
Charles and Joan Dorgan	Herman and Cleta Jasper	John and Haley Pringle	James and Martha Winzeler
Robert and Rita Dorgan	Bill and Wyoma Johnson	Edna Razote	Don Wiruth and Treva Fairbanks
Edwin and Casee Eisele	Dean and Nancy Kays	J.D. Rector	Wiruth
Dan and Julie Ellenz	Miles and Cortney Keaton	Kyle Riebel	Stanley Wood
Norman and Janet Elliott	Jim and Susan Koelliker	Ross Roepke	Ryan and Rebecca Zecha
David and Carol Fairbanks	Richard and Jane Koelsch	Dan and Bev Rogers	Naiqian and Yabao Zhang
Helen Fairbanks	Merle and Phyllis Krause	Mark and Shari Rooks	ESTATE GIFTS
Ellen Feldhausen	John and Diane Krupp	Ginger and Jason Rucker	Mary Helen Hawks Trust
Jon and Mary Feldhausen	Phillip Lange	Roger and Marilyn Russ	CORPORATE GIFTS
Scott and Susan Feldhausen	Jerrel and Marian Larson	Richard and Elaine Schleusener	Archer Daniels Midland Co.

Alumni Updates

This portion of the BAE newsletter is set aside to include alumni information. If you would like to include information/news for the 2012 BAE newsletter, please contact Ms. Barb Moore (bimoore2@ksu.edu)

Derec Yakel - 2001 BS-ATM. Derec is the Product Support Manager-Energy Division for Atlantic Cat in Halifax, Nova Scotia. He manages product support sales for Electric Power Generation & Marine Diesel Engines for Caterpillar.

His territory coverage includes eastern Canada and northeastern United States. Derec's e-mail address is dyakel@atlc.ca.

Glenn Caldwell - 1970 BS-BAE. Glenn is the president of Caldwell Farms, Inc., in Garnett, Kansas. He is a founding member of the Board of Directors of East Kansas Agri-Energy www.ekaellc.com. Glenn's e-mail address is: gacaldwell@embarqmail.com.

Please update your alumni information at <http://www.bae.ksu.edu/>

alumni Complete the alumni/friend information form and return to Ms. Barb Moore. Your information is important as potential high school students view our webpage. These young people explore websites and alumni and friends information helps them learn about career opportunities of BAE degrees. It may sound simple, but your information and story are vital in recruitment of incoming students. They want to discover the impact our alumni and friends are making globally towards the betterment of mankind. Thank You!

BAE FACT
You Make A Difference

Charitable Foundation
Carrico Implement
Caterpillar Foundation
CNH America LLC
ExxonMobil Foundation
Heritage Tractor Inc.
Hill's Pet Nutrition Inc.
John Deere Foundation
Kansas Section ASABE
Mundhenke Family LLC
Science Applications
International Corporation
Spring Run LTD
Todd Tractor Company Inc.
Triple T Farms

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Biological and Agricultural Engineering Newsletter

BAE Fall 2011 Events

AUGUST

22nd—Meet & Greet Incoming BSE/ATM Freshmen
26th—BAE Welcome Back Picnic

SEPTEMBER

19th—Leprino Career Night
20th—John Deere Career Night
21st—CNH Career Night
29th—AGCO Career Night

OCTOBER

10th—Engineering Scholarship Day
23rd-25th ABET Accreditation Team Site Visit

NOVEMBER

21st-25th—Fall Break Week

DECEMBER

7th—BAE Advisory Council Meeting
7th—Senior Design Presentations
9th—Graduate School Commencement
10th—College of Engineering Graduation
Reception/Order of the Engineer Initiation
10th—Undergraduate Commencement (Manhattan)
12th-16th—Finals Week
26th-January 2—University Holiday (all offices closed)