

Update



Volume 54 • Spring 2009

BAE Grads Find Job Home Nearby

The Charles Machine Works Inc., (CMW) is one of the largest employers of Oklahoma State University Biosystems and Agricul-

Ditch Witch Power. The first of its kind, the trencher increased the efficiency of installing residential utility services.



Charles Machine Works, Inc. employees who were also BAE graduates gathered at a luncheon with department head Ron Elliott and BAE professors. Courtesy Photo

tural Engineering graduates in the area.

Located in Perry, Okla., the original business is just a hop, skip, and a jump from Stillwater. In 1902 Carl Malzahn, along with sons Charlie and Gus, opened a blacksmith shop in Perry. Several years later, after the oil boom, the business was reworked and became Charlie's Machine shop. Charlie had transitioned the business to accommodate the growing oil industry and oil field repairs became their specialty.

Years later, Charlie's son Ed Malzahn created the first compact trencher. The first prototype was known as DWP, which stands for

Ed was only 28 when the first DWP came off the assembly line. Ed had, at a very young age, applied his mechanical engineering expertise to the development of a machine that would lead to a complete compact trencher industry.

Today, CMW remains a leader in the industry they started so many years ago. Their trenchers are not only committed to installing residential utility services, but the equipment has evolved so they install water, sewer, gas lines, telecommunications, CATV and fiber-optic cables. The company now manufactures all types of high-quality underground construction

equipment.

Tiffany Sewell-Howard is the current CEO of CMW and is the fifth generation of the Malzahn line to head the company.

Oklahoma State University Biosystems and Agricultural Engineering students have had a big impact on the Charles Machine Works Inc. According to Joe Greenlee, manager of Product Design for CMW, BAE graduates make up a significant percentage of the company's engineering staff. Greenlee notes that BAE graduates have made contributions to almost all of the CMW products.

BAE graduates also lead several CMW divisions. Currently, BAE graduates head the risk assessment staff, product design staff, several design teams, the sales training group, the international market development effort, and the manufacturing division. BAE graduates are also strong contributors to the product development process.

Continued on page 9

In this Issue...

Inside Innovations...	Page 3
Udall Scholar.....	Page 4
BAE Gets Creative....	Page 5
Banquet Recap.....	Page 6
SIP and OK-FIRE.....	Page 8
Bioenergy Lab.....	Page 9
Alumni Success.....	Page 10

Student Success

BAE senior Cortney Timmons was honored at the CEAT banquet as the Dean's Outstanding Graduate in Engineering. Timmons was also honored at the CASNR banquet as one of the top 5 graduating seniors in the College of Agricultural Sciences and Natural Resources. At the university level, Timmons was named one of the 13 outstanding seniors at OSU.

Rachel Carson, BAE junior, has completed her term as President of the CEAT Student Council. Under her leadership, the Council again won the very competitive award for the best engineering student council in the nation. This is the second year in a row CEAT student council has won this honor when lead by a BAE student.

BAE junior Stephen Eller was elected as Agricultural Student Association president for the coming year.

Make your reservation today!

BAE Alumni & Friends Social ASABE Annual International Meeting

Reno, Nevada

Sunday June 21

6 to 8 p.m.

RSVP to ron.elliott@okstate.edu
or by phone 405-744-5431

New Employees

Aaron Mittelstet- Research Engineer.

Amanda Erichsen- Extension
Assistant, AgrAbility.

Mark Gilstrap- Research Lab
Manager.

Departures

Robert Harshman, lab Research Instrument Technician, retired after 22 years of service to the department.



A word... from the department head

Ron Elliott
ron.elliott@okstate.edu

Given the state of the economy, some ask about the budget situation at OSU. So far, we've not had to experience the types of cuts that are fairly common in higher education around the country. The Legislature is finishing up its work on the FY10 state budget, which begins July 1, 2009. It's expected to be a very tight year and caution is being exercised, both at the state level and on our campus. Many of the experts feel that Oklahoma's fiscal situation in FY11 will actually be of greater concern than FY10. Time will tell of course, but all in all, we seem to be doing relatively well.

Our student banquet was a big success and you can read more about it on pages 6-7 of this newsletter. We're so grateful to our scholarship donors. Over the past two years, the number of scholarships that we've been able to award has increased by 50%, and the total dollar amount of departmental scholarships has nearly doubled.

I'm pleased to report that the department received a very significant estate gift to establish BAE's first endowed faculty chair or professorship – the Orville L. and Helen L. Buchanan Chair in Biosystems and Agricultural Engineering. This gift of \$500,000 will be matched 1:1 by Boone Pickens' major gift to the University, and that total will be matched 1:1 by the State of Oklahoma. So this will eventually enable us to establish a \$2 million endowed faculty chair. Great news!

We continue to be very proud of our students. They study hard, engage in extracurricular activities, and assume key leadership roles in student organizations. And I should point out that many students are holding down one or more jobs while they're going to school full-time. As reported in this newsletter, Jesi Lay is one of 80 undergraduates across the country to be named a 2009 Udall Scholar. Cortney Timmons was recognized as a 2007 Udall Scholar, a 2008 Truman Scholar, and as the 2009 outstanding senior in OSU's College of Engineering, Architecture and Technology (CEAT). In 3 of the past 4 years, a BAE graduate has been awarded a NSF Graduate Research Fellowship. All of these recognitions are very prestigious and highly competitive. BAE students have served as CEAT Student Council president for the past two years, and in each of those years, the Council was named as the outstanding engineering student council in the nation! In the coming year, another BAE student will be serving as president of the Agricultural Student Association. Wow!

This fall, we're expecting to welcome an unusually large freshman class in Biosystems Engineering. We always appreciate your help in identifying and recruiting future students. They're our lifeblood. Thank you for your support and have a great summer!

BAE Gets “Innovative” *By Jill Banzet*

Innovation is a term often misunderstood and misused. But for the teaching faculty of Oklahoma State University’s first Innovations course, innovation means the key to the future of problem-solving and the answer to a long-time deficit in undergraduate education.

“We teach our students that innovation is the process by which value is created for customers by transforming knowledge and technology into profitable and marketable products and services,” said Paul Weckler, associate professor in the OSU Department of Biosystems and Agricultural Engineering.

Weckler and five other OSU professors recognized the opportunities innovative thinking provides people in the working world. They devised a plan to offer College of Agricultural Sciences and Natural Resources and CEAT students these opportunities within undergraduate-level coursework.

In January 2006, the Innovations teaching staff – which includes Cindy Blackwell, Ron Delahoussaye, Rodney Holcomb, Shelly Sitton, Dan Tilley and Weckler – began formulating a proposal for the U.S. Department of Agriculture Higher Education Challenge Grant.

OSU partnered with California Polytechnic State University – San Luis Obispo and the University of Nebraska-Lincoln for a joint-institution project grant and received \$465,595 for a three-year period., with OSU receiving the largest portion.

In the proposal, the team of professors outlined goals for the Innovations course:

“[We hope to] 1) create work-place-ready graduates capable of participating in and eventually leading private sector innovation; 2) enhance the educational experience of students in agribusiness, engineering and communications so the enrollment in those disciplines will increase; and 3) develop and disseminate interdisciplinary curricula for adaptation and use by other universities.”

The course extends through three semesters. Students enroll in an introductory class in the spring semester of their junior year to learn leadership and teambuilding skills.

In the senior Innovations class, students are assigned to teams as well as a client with a real-world problem. Each team must research its client’s problem and possible solutions, formulate engineering assessments and designs, author a business plan and financial estimates, and develop a marketing plan to execute the new idea efficiently.

The unique scope of the project calls for students in the areas of mechanical engineering, biosystems and agricultural engineering, agricultural communications, and agribusiness.

“The class is innovative in the way it approaches teaching and learning differently,” said Ed Miller, associate dean of academic programs for CASNR. “It takes integration to

a whole new level.”

With four degree areas included in the pilot course, instructors had to take special care to see senior level curriculum was being covered in addition to new material.

“The feedback from [the engineering] department advisory community is that our students have very good technical knowledge and skills, but the area they lack is in the business world – from things like teamwork, initiative and communications skills to the financial and economic aspects [of a business],” Weckler said. “There are only so many things you can do in a four-year bachelor’s degree.”

Weckler not only wants his students to learn how to develop and evaluate design solutions and systematic design processes in the new course, but also he wants them to know how to communicate effectively with their clients, understand conventional business practices and project management skills, and recognize the importance of professional and ethical responsibility.

Students realize the forward-thinking attitudes and advanced opportunities built in to the course and appreciate the edge they will have in the competitive job market after graduation.

The clientele list for the first senior Innovations course included Aero Component Repair LLC in Durant, Okla., which repairs and refurbishes wind turbine and airplane components; Bergan LLC,

Continued on page 11

Lay Named Udall Scholar

BAE junior Jessica Lay of Broken Arrow, Okla., was named a Udall Scholar on April 6. Lay was surprised with the news by OSU President Burns Hargis. Jessica was one of 80 students nation-wide to receive the \$5,000 scholarship.

Lay is the seventh OSU student to receive the scholarship and an unprecedented fourth OSU student in three years.

The scholarship honors Arizona congressman Morris K. Udall. Created in 1992, the scholarship is awarded to outstanding sophomores and juniors who are studying the environment and related fields. Congressman Udall fought to preserve the environment, public lands, and natural resources.

As part of her application, Lay



Students, faculty, and staff along with OSU President Burns Hargis, gathered to surprise Lay of her newest accomplishment.

Lay is pictured, left, with President Hargis.

wrote an 800 word essay discussing a significant public speech, legislative act, or public policy statement by Congressman Udall, and its relationship to her interests or coursework.

She will attend the Udall Scholar

Orientation Weekend in Tucson, Ariz., in August.

"I'm so excited to go and meet the other Udall scholars and learn from their experiences and share my experiences with them," Lay said.

B.S. Graduates • Spring 2009	M.S. Graduates • Spr & Sum 2009	Ph.D. Graduates • Summer 2009
Andrew Brown Stillwater, Okla.	Praveen Bennur India	Maria Librada Chu Agor Philippines
Joshua Hayes Guymon, Okla.	Clinton Cosgrove McAlester, Okla	Cara Cowan-Watts Claremore, Okla.
Justin Hurst Loco, Okla.	Brian Faga Chicago, Ill.	Where are they now?
Derek Livesay Guymon, Okla.	Tyler Gibson Tulsa, Okla.	Kyle Dollins John Deere Coffeyville, Kan.
J.D. McElhaney Ponca City, Okla.	Josh Grundmann Shawnee, Okla.	Stewart Reed Baker Hughes-Centrilift Claremore, Okla.
Brian Pfeiff Tulsa, Okla.	Michael Mueller Germany	Amit Sharma Caterpillar, Inc. Mossville, Ill.
Craig Spencer Stillwater, Okla.	Anushadevi Pannerselvam India	Ryan Woolbright BAE Graduate School Stillwater, Okla.
Cortney Timmons Ada, Okla.	Aaron Mittelstet Enid, Okla	

BAE Students Place in OSU Creativity Challenge

Biosystems and agricultural engineering students Cortney Timmons and Jessica Lay, accompanied by Environmental Science student Savanna Smith, received first place honors in the first OSU Creativity Challenge. Their proposal, “Real Pokes Pass It On” was one of the ten finalists selected out of the 180 proposals that were submitted.

The creativity challenge is part of the OSU Creativity Initiative. This year, OSU hosted a Creativity Festival during OSU Research Week. Other events included guest speakers and creativity workshops.

The winner was decided by audience vote and the BAE Department was there to cheer the girls on.

“We probably wouldn’t have won without the support from the department,” said Lay.

The girls received \$1,500 in scholarship money for their proposal that focuses on OSU students, faculty and staff donating unwanted items that can be recycled or reused.

“This is an idea we have been talking about for a long time,” said Lay.

Timmons claims she got the idea while on the subway in Washington D.C.

“I was reading an article about a similar program at Yale and thought OSU should implement something similar,” said Timmons. “The Creativity Challenge was the perfect opportunity to promote our version.”

Yale’s program has been around since the 1990s. Formally named the “Spring Salvage” in 2003, it is sponsored by Yale Recycling. Yale has improved the program over the years to streamline collection and



increase efficiency.

The University of Texas at Austin is the only other university in the Big 12 that has a similar program. Their program called “Trash to Treasure” enlists a committee to collect unwanted items and then markets them back to students in a garage sale. The proceeds go to supporting environmental programs on campus.

“Our program is unique because what works at other schools will not necessarily work here,” said Smith.

“Real Pokes Pass It On” is a collection of ideas from several different sources put together to work for OSU and its students, said Lay.

The program consists of three basic components. First is the Spring Semester Collection Event. Bins will be passed out to greek and residential life housing as well

as common places around campus to collect students’ unwanted items. This will be at the end of April when the amount of waste increases, according to OSU Physical Plant.

The next component is donations. The collected goods will be divided into categories and will be donated locally to places such as the Food Pantry, the Humane Society, Elite Repeat, and Habitat for Humanity. This is one of the components that separates OSU’s plan from other universities.

“Although the other programs serve as great models we could follow, not everything would work for us. Donating the reusable items is just one aspect that sets our program apart,” said Timmons.

The third component is Pistol Pete’s Trading Post. The items that are not donated will be available for OSU students the weekend before school starts at a low price, or free of charge. The proceeds made from the Trading Post will benefit organizations that assisted with the program’s execution.

Along with the prize money, the team also earned the opportunity to submit a proposal to OSU Administration for funding and to formally implement their plan. The Student Government Association Sustainability committee, ECO OSU, the OSU Parents Association along with other campus organizations will work together to make the program a success.

Scholarships Awarded at Annual Banquet

Students, faculty and staff in the Biosystems and Agricultural Engineering department were recognized for their hard work and achievements at the annual banquet on March 28 at Meditations in Stillwater, Okla.

The OSU Student Branch of the American Society of Agricultural and Biological Engineers sponsored

the event. There were 160 people in attendance. Special guests at the event included the scholarship donors. The recipients were given the opportunity to sit and mingle with the donors before, during, and after dinner.

This year, the BAE department presented 49 scholarships totaling \$54,000.

New scholarships awarded this year included those given by Don and Kim Yarbrough under the John Deere OSU Alumni Scholarship fund. A 1973 graduate of the department, Don has had a distinguished career with John Deere.

The Jodie Whitney Scholarship was also awarded for the first time at this year's banquet. Dr. Whitney

Scholarship Recipients

James & Ruby Garton Scholarship

Mikayla Marvin

Dudley Barefoot Memorial Scholarship

Drew Sutterfield

John Deere OSU Alumni Scholarship:

Greg & Kristen Hart

Brice Abbott, Jessica Coryell, Elizabeth Crowder, Heath Hendricks, Kalan Holbrook, Justin Kirby, Justin Ludwig, Matthew Siebert, Sarah Smith, David Spires

John Deere OSU Alumni Scholarship:

Don & Kim Yarbrough

Scott Clark, Eric Tichansky, Kelsey Turner, Chase Vencl, Jess Webb, James White

BAE Development Fund Scholarships

Shelia Gladback, Joseph Marshall, Molly Shivers, Jeremy Weichel

Jay G. Porterfield Scholarships

Jeff Biggerstaff, Qualla Parman, Molly Vich

Kennedy Family Scholarship

Aaron Bartel

Si & Kay Grider Scholarships

Steven Imgarten, Jessica Lay, Allison Miller

Oklahoma Association of Electric Cooperatives Scholarship

Thomas Hyde

Wendell Bowers Scholarships

Tanisha Hamm, John Locklear

Oklahoma Grain & Feed Association Scholarship

Kevin Hufnagel

Annette & Bill Barfield Scholarship

Rachel Carson

W.B. Johnston Grain Company Scholarship

Brittany Looke

McKay Brothers Scholarship

Stephen Eller

Samuel Alton Clayton Scholarship

Grant Graves

Marvin Stone Scholarship

Ryan Johnson

Tom & Jan Haan Scholarship

Jorden Foster

Leon Crain Memorial Scholarship

Karl Garbrecht

Glenn Morgan Memorial Scholarship

Jessica Lay

Jodie Whitney Scholarship

Laura Merriman

Gerald Brusewitz Scholarship

Mitch Malone

E.W. Schroeder Scholarship

Levon Nichols

Ronald T. Noyes Scholarship

Taber Midgley

Lawrence O. Roth Scholarship

Sydney Herlocker

AGCO Engineering Scholarship

Jace Reed

Conoco Phillips Scholarship

Jared Kinder

Oklahoma Municipal Power Authority Scholarship

Kevin Stunkel

received his Ph.D. from the department and is a retired faculty member at the University of Florida.

The department introduced two new scholarships sponsored by corporations who have employed recent BAE graduates. These are the AGCO Engineering and ConocoPhillips Scholarships.



Award recipients gathered after the banquet for a group picture. \$54,000 was awarded in scholarships.

Thank You!

The scholarship program of the Biosystems and Agricultural Engineering Department is entirely dependent on contributions to the OSU Foundation, designated for Biosystems and Agricultural Engineering Department. Its scholarship recipients are sincerely grateful to all donors. The following is a list of donors contributing \$50 or more to the BAE Department since last year's banquet. If we have inadvertently omitted anyone from this list please accept our apology and gently remind us of this fact.

AGCO Corporation	Rex & Sherrie Ishmael	Marvin Paulsen
Hasan Atiyeh	Zhenwen Jia	Rob Pollock
Bill & Annette Barfield	John Deere Foundation	Jay Porterfield
Joe Biggerstaff	W.B. Johnston Grain Company	Charles & LaDonna Rice
Wendell Bowers	Carol & Fred Jones	Rice Belt Warehouse
James Bradley	Kem & Teresa Kadavy	Kerry Robinson
Glenn & Barbara Brown	Steve & Susan Kennedy	Larry & Jo Roth
Jerry Brusewitz & Glenna Williams	Mike & Sheryl Kizer	Steve Searcy
Helen L. Buchanan Estate	Dennis & Carol Kuhlman	Lieu Smith
Russell & Darla Calvert	Min Li	Jay Solomon
Conoco Phillips Company	Pat & Earline Lewis	V.R. & Gayathri Sridhar
Glen Coppock	Jim Loftis	Marvin & Bonnie Stone
Bob & Betty Day	Harvey & Glenda Marbeck	Al & Regina Sutherland
Don & Sarah Day	David & Irene McKay	John Sweeten
Ron & Judith Elliott	Elizabeth & Zach Miller	Aditya Tyagi
Colby Funk	Ronnie & Sharon Morgan	Ning Wang
Haliburton Foundation	Wes & Judith Morrison	Jodie Whitney
Greg & Kristen Hart	Myles Mungle	Richard & Shellie Willoughby
Randy Haynes	Ron & Zona Noyes	Woolpert, Inc.
Don & Helen Henderson	Oklahoma Association of Electric Cooperatives	Don & Kim Yarbrough
Scott & Jeannine Henderson	Oklahoma Municipal Power Authority	Dean & Sharon Yoder
Ray & Sandy Huhnke	Shekhar & Sabitha Patel	Jim & Lou Young
Sherry & Brad Hunt		Peng Yue
		Jinhui Zhang & Jiansheng Yan

BAE Applications of the Mesonet

The Oklahoma Mesonet is a joint venture between Oklahoma State University and the University of Oklahoma. The program was formed when OSU needed to upgrade their weather instruments at research sites so they could more effectively use weather information in agricultural applications. Meanwhile, OU meteorologists in Norman wanted to expand the rain gauge network they had developed to respond to flooding in the Tulsa area.

The universities came together in 1987, and by 1993 the Mesonet had 108 fully functional monitoring sites across the state. Today, there are 120 and no other state, or nation, has a system that can do what the Oklahoma Mesonet can. Several applications have been developed using the data collected by the Mesonet.

SIP

The Simple Irrigation Plan, or SIP, uses data from the Mesonet and the National Weather Service to estimate grass water use in lawns. Al Sutherland is the BAE Mesonet Assistant Extension Specialist who has been working on SIP.

“We wanted to simplify the process instead of pointing the public to large publications,” said Sutherland.

Using the collected data, SIP can forecast up to three and a half days moisture information to determine when and how long bermudagrass, zoysiagrass, or tall fescue needs to be watered.

The website, <http://sip.mesonet.org>, allows the user to choose from a wide range of sprinklers and hoses available to insure lawns are being watered appropriately.

“People were overwhelmed by the data,” said Sutherland. “The website simplified the program and made it easy to use.”

SIP also includes a cost calculator that will determine the costs of watering lawns. It can also improve water efficiency. While it recommends when to water, SIP also tells you when not to water.

OK-FIRE

Another application of the Oklahoma Mesonet is OK-FIRE. OK-FIRE combines data from the Mesonet and the National Weather Service’s NAM model to determine fire conditions in a given area.

There are two applications of OK-FIRE. One is to prevent wild-

fires and help fire departments determine when extra staff is needed at times of increased fire probability. The other application is used to plan prescribed fires.

The website, <http://okfire.mesonet.org>, is set up so specific criteria can be entered to determine when there is a high risk for fire, or when conditions are right for a prescribed fire.

J.D. Carlson, Associate Researcher for the Biosystems and Agricultural Engineering department, is the OK-FIRE project director for the Oklahoma Mesonet.

Carlson has been involved with fire management applications of the Mesonet since 1996 and continues to work to improve it. Carlson conducts workshops to help educate users of OK-FIRE. He plans to increase the user groups to involve others such as city and rural fire departments and also private land owners in Oklahoma.

For more information please visit:

OK-FIRE: <http://okfire.mesonet.org>

SIP: <http://sip.mesonet.org>

Other applications offered by the Oklahoma Mesonet:

Ag Weather: <http://agweather.mesonet.org>

OK-FIRST: <http://okfirst.mesonet.org>

Flash Flood Guidance: <http://www.mesonet.org>

Charles Machine Works, Inc. *Continued from page 1*

Greenlee added that the engineers and designers at CMW are expected to have a good understanding of how the customers use their equipment. Because BAE students come with a strong background including hands on experience, they fit in well with the CMW team.

One organization that has given BAE graduates a taste of the real world challenges is the ¼ scale Tractor Team.

“My involvement in extracurricular activities like the tractor team was the best preparation I did for my career,” said Jacob Hamburger, Design Engineer in Advanced Concept Development for CMW. “On paper everything will work, but in the real world you have to deal

with any assumption that you make, and be able to fix any design issues throughout a project.”

The BAE Department provides students with skills to be a competent engineer in the workplace, said Greenlee. Because of the hands on opportunities and the encouragement to participate in college wide activities, well rounded engineers are produced.

Not only do students need to have hands on experience, but they also must have good written and verbal communication skills, said Greenlee. This is one area the BAE graduates felt needed to be emphasized. Communication is an important part of getting your vision across.

CMW employees want to assure current BAE students that the learning does not stop when you graduate.

“I learn something new every day,” said Hamburger.

BAE graduates employed by Charles Machine Works, Inc.

Current Employees:

Brent Bolay
David Campbell
David Crossley
Joe Dvorak
Joe Greenlee
Floyd Gunsaulis
Jacob Hamburger
Curtis Johnson
Levi Johnson
Mark Kiner
Matt Lemmons
Stan Mullins
Rex Nelson
Randy Richardson
Brad Schaufele
Kelvin Self
Autumn Steinert
Richard Willoughby

Retired:

Glenn Moore
Gerald Stangl
Gary Tripp
David Zavodny

OSU BAE Opens New Bioenergy Lab



Pictured in the new bioenergy lab from left to right, Dr. K.N. Patil, Dr. Ray Hubnke, lab manager Mark Gilstrap, and research engineer Dimple Kundiyana. The lab officially opened this spring.

Alumni Success Stories

Victor L. Hauser

Victor Hauser is a 1952 graduate of Oklahoma State University where he received his Bachelors' degree in Agricultural Engineering. While at OSU, Hauser concentrated on soil and water conservation, irrigation, civil engineering, soils, and agronomy.

Hauser went on to receive his Masters in agricultural engineering with concentration in fluid mechanics, groundwater, drainage, irrigation, and soil salinity from the University of California in 1957. He also received his doctorate in agricultural engineering with concentration in hydrology, water and sewage treatment, and irrigation

engineering from Texas A&M University in 1973.

After receiving his doctorate, Hauser worked for the United States Department of Agriculture in the Agricultural Research Service as a Research Leader. In 1991, he moved on to Miretec Systems in San Antonio, Texas where he developed an evapotranspiration cover for landfills. The cover uses indigenous soils and native grasses as a barrier to water flow in place of less effective artificial barriers.

Hauser has currently been writing the book "Evapotranspiration Covers for Landfills and Waste Sites", which will be published this year.

Jodie D. Whitney

Jodie D. Whitney was awarded his Ph.D. from the Oklahoma State University Agricultural Engineering Department in 1966.

Whitney retired in 1992, but only after a full career working in Florida citrus. Throughout his career, his main interest was power and machinery. Whitney, with his wife Joyce, moved to Florida immediately following graduation from OSU.

At the University of Florida's Lake Alfred Citrus Research and Education Center Whitney conducted research on citrus harvesting, pesticide application, weed control, grove design and tree management, and also precision agriculture.

Before attending OSU, Whitney received his Bachelor's from Texas A&M in 1959, where he met his wife. He then entered the US Army as a commissioned second lieutenant and took a six month tour of duty. When he completed his tour, Whitney married Joyce and the newlyweds moved to Pennsylvania State University on their honeymoon.

While at Penn State, Whitney worked on his Masters, conducting research on apple harvesting. While earning his masters he often commented that if he could find a job working on a fruit crop in a warm climate he would take it. Little did he know, he would spend 37 years with citrus in warm, sunny

**Join Us...
In Reno, Nevada!**

BAE Alumni and friends social at the 102nd Annual International American Society of Agricultural and Biological Engineers meeting.
June 21, 2009

Contact Dr. Ron Elliott for more details at 405-744-5431 or ron.elliott@okstate.edu

Florida.

The Whitneys have two sons, and both have earned degrees in engineering. One now lives in Texas and the other in Tennessee.

In addition to their two sons, the Whitneys also raised Joyce's sister from the age of 13 through college. She now resides in Florida with her family.

After he retired, Whitney wrote the 50 year history of mechanical citrus harvesting which can be found on the University of Florida website.

Whitney currently resides in West Haven, Fla., where he does volunteer work and stays current on ASABE issues.

we want to know about you... your news is good news!

Return this form to:
BAE Update
111 Agricultural Hall
Oklahoma State University
Stillwater, OK 74078-6016
baenews@okstate.edu

We would like to include you in our "Alumni Success Stories." If you want to participate, please send a letter or e-mail to us describing your career (where you work and what you do on a daily basis), as well as any personal information you would like to share. If you have recently participated in the success story feature, we would still like to hear from you and about any changes you have had in your life.

Name _____

Home Address _____

City _____ State _____ Postal Code _____

Home Phone _____ Fax _____

Business Address _____

City _____ State _____ Postal Code _____

Business Title _____

Business Phone _____ Fax _____

E-Mail Address _____

Work Description _____

What year did you get your biosystems or agricultural engineering or mechanized agriculture degree(s)?

BS _____ MS _____ Ph.D. _____

Other Information _____

Innovations *Continued from page 3*

in Monkey Island, Okla., which develops pet products; The Charles Machine Works in Perry, Okla., which produces and markets underground tools; Vassar in Perkins, Okla., which produces farm implements; and the Oklahoma Department of Wildlife Conservation Paddlefish Project in Jenks, Okla., which focuses on research and the collection and sale of paddlefish caviar.

While the pilot class of Innovations students face graduation and the workforce, students sitting in the Tuesday morning introductory class look forward to the intriguing opportunities of "Senior Design."

"This class has been very different by far," said Mattie Nutley, agricultural communications junior. "It is neat to see the different types of majors come together as a team to build one product. I am learning

so much about the diversity among students and feel I will be better prepared for the real world after taking this class."

For more information on how you can get involved in this class please contact Paul Weckler at 405-744-8399. You can also contact him through e-mail at paul.weckler@okstate.edu.

BAE Update

Department of Biosystems and Ag Engineering
111 Agricultural Hall
Stillwater, OK 74078-6016

Non-Profit
Organization
U.S. POSTAGE
PAID
Stillwater, OK
Permit No. 191

Address Correction Requested

CALENDAR

- May 9: Commencement
May 28-31: ASABE 1/4 Scale Tractor Competition,
Peoria, Ill.
June 21-24: ASABE International Meeting,
Reno, Nev.
Aug. 17: Fall Semester Begins
Sept. 19: BAE Alumni Tailgate
Oct. 17: Homecoming
Dec. 12: Fall Commencement
- 2010
March 27: BAE Banquet
April 29-30: Advisory Committee Meeting

BAE Update

*BAE Update is a publication of OSU's
Department of Biosystems and Agricultural Engi-
neering and is published each semester to inform
alumni and friends of activities in the department.*

We invite you to submit comments,
story ideas or alumni updates to:

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baenews@okstate.edu

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