

Unmanned aerial program gets new director

Kirk Demuth will be the director of the unmanned aerial systems program office at K-State at Salina.

The office is the first major initiative of K-State's recently formed Applied Aviation Research Center.



"Kirk will be working to develop policies and procedures in order to incorporate and facilitate the entry of unmanned aircraft systems into the national airspace," said Kurt Barnhart, head of K-State at Salina's department of aviation.

"In addition, Kirk will be trained as an unmanned aerial vehicle operator and be closely involved with the hands-on field work of unmanned aerial vehicle operations."

Demuth has more than 1,000 hours of unmanned aerial vehicle formation flying as a chase plane observer for the Predator and Reaper unmanned aerial vehicles. Most recently, he served as chief pilot and maintenance director for Chalk 2 Aviation in Victorville, Calif.

Division of Biology appoints associate directors

John Blair, university distinguished professor of ecology, and Lorena Passarelli, associate professor of molecular biology, have been appointed associate directors of Kansas State University's Division of Biology.

"The addition of Dr. Blair and Dr. Passarelli as associate directors adds outstanding teaching and research achievements, as well as discipline breadth, gender perspective and multicultural diversity to our administrative team," said Brian Spooner, university distinguished professor and director of the Division of Biology.

As associate directors, Blair will focus on faculty development, while Passarelli's focus will be on student development.

Group goes back in time, continued

cis Parkman and Horace Greeley, show how they were struck by the contrast in vegetation," Logan said.

"So you can imagine that Native Americans, whose livelihoods depended on the varied resources of these major plant communities, would have been impressed as well."

Though many groups occupied the area over thousands of years, Logan is particularly interested in the Steed-Kisker culture, whose members built the house the K-State team studied. Logan hoped

that this summer's dig would recover evidence of those people, whose territory centered on the Missouri River in the modern Kansas City area.

"Some archaeologists had suggested that Steed-Kisker groups hadn't crossed the Missouri, that they stayed in northwest Missouri," he said.

Among this summer's finds were a projectile point-knife that is among the oldest found in the region (about 8000-5000 BC) and corner-notched arrow points that point to occupation by people of

the Late Woodland period, AD 500-1000.

In addition to dirt-under-the-fingernails field methods, participating students learned laser surveying, topographical map interpretation and even the right way to walk around a site. They documented it for a geographic information system database maintained by the Kansas Geological Survey.

Lectures by Logan and guests included the region's prehistory and general geographic information science. ■

Delving into magic of children's literature, continued

literature, according to Nel. The first was Simmons College in Boston, which in 1977 started its Center for the Study of Children's Literature.

At K-State, the program has given rise to the Children's and Adolescent Literature Community, a student group that organized a conference on campus in April. Eighty people attended to hear keynote speaker Stephen Johnson, the illustrator and author of "Alphabet City" and "City by Numbers."

The conference looked at children's books from the viewpoints of educators, librarians and literature students.

"We're happy for any opportunity where we can share with others a love of literature," said Westman, one of the group's advisers.

"And we value the contribution

of the International Wizard of Oz Club in October 2009. That gathering would coincide with Wamego's OztoberFest and would offer panels for scholars, teachers and community members.

Nel, noted for his expertise in the works of Dr. Seuss and J.K. Rowling, says that the vantage point of an adult gives valuable insights into books intended for children.

"One of the pleasures of reading is interpretation, thinking about how and why books mean what they do," he said. "And our interpretations change over time. Your experience of a book at 8 may differ from your experience of the same book at 18 or at 38."

Such possibilities keep students and professors alike revisiting old standbys even as they search for the next generation's beloved classics. ■

Noteworthy, continued

ceedings of the National Academy of Sciences, Vol. 105, No. 29.

Sociology, anthropology and social work

Laszlo Kulcsar and colleagues

presented "Circularity or Settlement? Cultural and Economic Factors in Romanian Migration to Southern Europe," European Population Conference, July 9-12, Barcelona, Spain. They also presented "The Graying Periphery — Aging

and Community Development in Romania and Bulgaria," ■

Classified

A list of employment opportunities is posted at <http://www.k-state.edu/hr/vac.html>
 A recording of classified job opportunities is available 24 hours a day on the Employment Information Line, 532-6271.
 For additional information, call 532-6277 or visit the Division of Human Resources at 103 Edwards Hall. Applications are accepted 8 a.m. to 5 p.m. weekdays.

Unclassified

A listing of vacancies can be seen at <http://www.k-state.edu/affact/Opportunities/unclass.htm>
 For additional information, call the office of affirmative action at 532-6220 or visit 214 Anderson Hall.

Lookout for leadership, continued

ate workload is and how much a person is expected to do."

Such concrete issues affect all faculty members, and Fairchild encourages them to get interested and get active.

"Faculty senate is the one place on campus where one can see the bigger picture of the university," Fairchild said. "You see all of the different colleges and de-

partments come together and exchange thoughts and ideas. If you always stay in your own area you don't always see how the university works as a whole.

"By participating in faculty senate, one gets to have varied input on matters or initiatives, and one can get insight into what's going on with the university.

"And you meet new people." ■

Proving the potential of pellets, continued

borg, associate professor of agronomy and principal investigator; Leland McKinney, assistant professor and extension state leader in grain science and industry; Donghai Wang, associate professor of biological and agricultural engineering; and Praveen Vadlani, assistant professor of grain science and industry.

The logistics surrounding biomass is the one thing that might keep biomass conversion from ever being as big as hoped, Staggenborg said.

"The hay paradigm won't work; that is, thinking we'll grow crops and haul plant residue to a production facility and store it," he said.

On the other hand, pellets can be transported efficiently and they can be handled like grain with existing equipment.

In 2007, agronomists grew test plots to get an idea of how various sorghum species compare to corn.

After one season, the photoperiod-sensitive sorghum is showing biomass potential in the drier conditions of Kansas. Staggenborg said the plant is "unbelievable" in its vegetative or biomass production, and that it never puts on a head of grain. Sweet sorghum also excelled in the 2007 trials, he said.

McKinney, a grain and feed scientist, will assess what it takes to make good pellets using off-the-shelf technology.

Wang, the project's agricultural engineer, will determine the preprocessing methods best suited for treating biomass pellets.

Vadlani, a fermentation specialist with K-State's Bioprocessing and Industrial Value-Added Program, will convert pellets to cellulosic ethanol. He thinks the ethanol production should be efficient and yield higher overall cost benefits. ■

On the lookout for leadership

Fred Fairchild brings habit of involvement to faculty senate presidency



Fred Fairchild takes the controls at the grain sciences flour mill on the north side of campus. He's been involved with the milling industry since he was a junior in college.

It falls to Fred Fairchild, president of K-State's faculty senate for 2008-09, to help lead the university to a new leader.

"One of the biggest challenges we'll face this year has to do with a change in leadership," said Fairchild, a professor of grain science and industry. "The faculty senate will offer strong input on the selection of a new president. Dr. Wefald did a wonderful job with this university, and it's going to be challenging and rewarding to find someone to take K-State to new heights."

As the face of education is changing, Fairchild said, several university programs will be seeking new leadership. Continuing education, information technology and the office of international programs are all under interim guidance, and Fairchild looks forward to finding permanent leadership for each.

If anyone is in a position to make decisions based on understanding of the K-State community, it's Fairchild. While studying at K-State for his undergraduate degree in architectural engineering, Fairchild took a job one summer that would pave a path to his career and eventually lead back to the university.

"I got a summer job at a flour mill in Arkansas City after my junior year of college," he said. "I got really interested in the grain process, so I went to people at K-State and asked them if there was a need for engineers in the milling field.

"They were able to get me a grant for research in flour mill design, and this became my master's thesis."

After receiving his master's degree in milling technology, Fairchild spent 30 years in the milling industries of California, Kansas, Nebraska and Iowa before returning to K-State as a professor.

Fairchild, a licensed professional engineer, is the type of person who's always engaged in his profession as well as his community. He belongs to the Kiwanis Club. He spent 40 years working with Boy Scouts of

America. As a miller, he served on committees for the American Feed Industry Association. He's a member of Gamma Sigma Delta, the agriculture honorary, and he recently received the Phi Kappa Phi award for service to the university. His teaching prowess has been honored by the North American Colleges and Teachers

"We need to define what an appropriate workload is and how much a person is expected to do."

Fred Fairchild

of Agriculture.

"I get involved wherever I am." When asked how he likes to spend his free time, Fairchild answers, "What free time?" before admitting an interest in collecting model trains and studying railroad history. He considers his eight grandchildren his real "hobbies."

In his role as faculty senate president, Fairchild has several goals for what he'd like to accomplish during his tenure.

"We have some great faculty on this campus," he said. "I want to work on trying to improve faculty salaries and workloads. We need to define what an appropriate

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Team is out to prove potential of pelletized forage for ethanol

To meet a goal of replacing one-third of the nation's petroleum consumption with biofuels by the year 2030, the U.S. departments of Agriculture and Energy estimate it will require 1 billion dry tons of biomass for conversion to biofuels.



Donghai Wang

But critical barriers exist. One roadblock is as old as agriculture: getting the crop to the market, or in this case, getting tons of biomass to the nearest storage and ethanol production facilities.

K-State researchers will address logistics hurdles with a \$690,000 grant from the Department of Agriculture's Rural Development Section in conjunction with the Department of Energy. The three-year proof-of-concept project is the first of its kind to test the notion of making biomass pellets near the field and assessing the effect of pelletizing through to ethanol conversion. Pelletizing reduces the enormous volume of plant material.

Researchers are Scott Staggen-

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Inside



Ben Champion is on the road to sustainability.
Up Close

points of pride

USDA lauds bioenergy efforts

K-State was one of 16 universities nationwide recognized for bioenergy initiatives by the U.S. Department of Agriculture at Bio Energy Awareness Days in Washington, D.C., in June.

K-State won a Grand Challenge award for a vision paper, "Food, Feed, Energy and Ecosystem Services: A Role for American Agriculture." Co-authors are agronomy professors Charles W. Rice and Scott Staggenborg, and Richard Nelson, associate professor and head of the Kansas Industrial Extension Service. The Grand Challenge is the major award made during the event.

oh, by the way

No more free parking for campus visitors

Visitors to campus no longer can obtain free parking passes. Instead, visitors must use parking meters or purchase a \$4 permit at the information booth south of the K-State Student Union.

The permits also are available from parking services, 108 Edwards Hall, and at the police dispatch office, also in Edwards Hall.

Workshops can help design accessible courses

The office of disability services is joining information technology services and the Division of Continuing Education to present course accessibility workshops.

"As more and more faculty are incorporating visual and interactive media into their classes, K-State needs to ensure that the content is available to all learners, including those with disabilities," said Sue Maes, interim dean of Continuing Education.

The workshops, 9:30-10:30 a.m. Aug. 14 and repeated at 2-3 p.m. Sept. 25, will take place in the Hemisphere Room of Hale Library.

The agenda will include a short demonstration of adaptive software and hardware, a review of the course accessibility standards policy, and the top ways to make course content accessible.

To register visit <http://www.k-state.edu/infotech/training/registration.html>

All information also will be made available at <http://www.k-state.edu/dss/k-access>

Symposium on zoonotic disease Aug. 25 in KC

Members of the medical, veterinary and public health communities are invited to "One Medicine, One Health," a free half-day symposium Aug. 25 that features several K-State experts on the links between animal and human health.

Part of the Central Veterinary Conference at the Kansas City Convention Center, the symposium and accompanying lunch are free but registration is required. Visit the Web site <http://www.klifesciences-day.org>.

Among the speakers are David G. Renter, assistant professor of diagnostic medicine and pathobiology, and Ludek Zurek, assistant professor of entomology.

Pink elephants spotted at Hale Library

Drink books, accompanied by swizzle sticks, tiki glasses, pink elephants and little paper umbrellas, are the subject of an exhibition on display through Sept. 10 at Hale Library.

"Happy Hour!: Top Shelf Selections from Special Collections" is on view from 8 a.m. to 6 p.m. weekdays in the library's gallery on the fifth floor.

The free exhibition is organized by Hale Library's Morse department of special collections, which is home to one of the largest and most comprehensive cookery collections in the United States.



Sue Maes

research



Brad Logan leads this summer's Kansas Archaeological Field School near a Kansas River tributary. "I've been back there every year since 2001, when a flood exposed the floor of a late prehistoric house," Logan said.

Group goes back in time, again

Brad Logan digs for prehistoric knowledge in Leavenworth County

Just as prehistoric peoples kept returning to a riverbank in Leavenworth County, so too do Brad Logan and his troop of anthropology students.

The Kansas Archaeological Field School takes place in even years. Through June 27, Logan and 10 students were back in the Stranger Creek watershed, this time along Nine Mile Creek.

"I've been back there every year since 2001, when a flood exposed the floor of a late prehistoric house," said Logan, a research associate professor in the department of sociology, anthropology and social work. The late prehistoric era ranged from AD 900 to 1500.

As a doctoral student Logan based his dissertation on the watershed's trove of tools, pottery

and other relics of diverse prehistoric populations, some as young as 800 years old, others stretching beyond 5000 B.C.

The work he and his students pursued this summer could result in a National Register of Historic Places listing exclusive to prehistoric sites in the Stranger Creek basin.

Logan attributes the area's enduring popularity among Stone Age peoples in part to readily available, high-quality chert and to a landform that was rarely flooded, even though it was along the tributaries of a major waterway.

"It's called Toronto chert, after the limestone in which it formed, and it attracted Stone Age people throughout the watershed and adjacent areas," Logan said. "A good flintknapper can shape it into any sort of tool.

"And the tributary valleys, during times of flood, have these nice terraces, or a 'second bottom,' that would generally remain flood free."

Stranger Creek is the last major watershed to empty into the Kansas River before it joins the Missouri River, and the area has always formed a natural boundary, Logan said. Centuries ago, it marked the transition between the wooded East and grassland West.

"It's kind of a frontier area," he said. "You can almost see people coming out of the woods and seeing the prairie and saying, 'I think this is about as far as I want to go.'

"Accounts by travelers across Stranger Creek, including Fran-

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noteworthy

Biology

Katsura Asano, Naoki Nemoto and students published "Int6/elf3e Promotes General Translation and Atf1 Abundance to Modulate Sty1 MAPK-dependent Stress Response in Fission Yeast," *Journal of Biological Chemistry*, Vol. 283, No. 32.

Clinical science

Mike Apley presented "Selecting and Understanding Antimicrobial Regimens in Cattle" and "Analgesic and Ancillary Infectious Therapy in Cattle: Is There Something Else we Should (Or Shouldn't) Be Doing?"

World Conference, July 29, Vancouver, British Columbia.

Family studies and human services

Ann Murray was recently featured in the online article "Meet the Professor," *National Universities Degree Consortium*.

Geography

John Harrington Jr. and Shawn Hutchinson presented "Across the Curriculum: The GIScience Development Strategy at K-State," 2008 ESRI International User Conference, Aug. 6, San Diego.

Libraries

Roger Adams reviewed "Reading Comics: How Graphic Novels Work and What They Mean" by Douglas Wolk for *Choice*, Vol. 45, No. 10, June 2008.

Multiple departments

Ming-Shun Chen, Yoonseong Park, Jeremy Marshall, John C. Reese, entomology; **Neal Dittmer and Gerald R. Reeck,** biochemistry; published "A Protein from the Salivary Glands of the Pea Aphid, *Acyrtosiphon pisum*, is Essential in Feeding on a Host Plant," *Plant Physiology*, Aug. 2008.

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Program delves into magic of children's literature

For Philip Nel, director of K-State's program in children's literature, kids and adults are not all that different when it comes to books.

"Children may know fewer words than adults," he said, "but literature for children is as rich and complex as literature for adults."

And though their subjects and treatments may be far apart, "books for children and books for adults tackle some of the same basic themes," said Nel, an associate professor of English. "Love, loss, belonging, betrayal, adventure, identity and politics, to name a few."

That range of endeavor helps account for the growth in K-State's master's degree track for children's literature, which began with five English department graduate students in fall 2006. The following fall, 13 master's candidates chose the track, according to Karin Westman, department head.

"Students include current and former kindergarten-through-12th-grade teachers, as well as



Philip Nel (left) and Bill North, senior curator at the Beach Museum, worked with illustrator and author Stephen Johnson (right) on an exhibition and conference on children's literature in April.

graduate students who plan to pursue a master's in library science or a Ph.D. after completing their master of arts in English," Westman said.

The children's literature program is in keeping with Jon Weisfeld's directive that departments build on their strengths.

"K-State is the first Big 12 university, and the first in our region, to offer a graduate concentration in children's litera-

ture," Westman said. "We decided to create the track to meet this regional need and because we had a concentration of faculty expertise in the area."

The track also met student demand for additional graduate courses in children's literature.

Six other U.S. universities offer a master's in English with a concentration on children's

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up close

The green machine

Ben Champion maps the road ahead to a sustainable campus



A visitor is likely to find Ben Champion, Rhodes scholar, Eagle Scout, working in his office with the lights turned off.

As the new director of sustainability at K-State, he plans to lead by example. "We need to learn to sip energy instead of guzzling it," Champion said.

Although his title is director, "I really don't expect to direct," Champion said. "I'm more of a facilitator and a liaison. I have to be able to connect with the university community and the Manhattan community and help bring them together."

While this may be a daunting task, Champion, a 2002 K-State graduate, has a wealth of knowledge and experience from which to draw.

He earned bachelor's degrees in chemistry, natural resources and environmental sciences with minors in Spanish and political science. A 2003 Rhodes scholar, in January of this year he completed a doctoral degree in geography at Oxford University, where he researched sustainable food systems.

As an undergraduate, Champion was an intern for Rep. Dennis Moore in summer 2002. His achievements include a Udall scholarship in 2000. He also was a finalist in the 2002 Truman scholarship competition, a Kansas Honors scholar, a K-State Putnam scholar and a Howard Hughes undergraduate research scholar. His environmental activities included roles as environmental director on his residence hall floor and president of Students for Environmental Action.

His current mission is to be a voice for sustainability on

K-State's position as a land-grant institution "puts us in a unique position to create a model for sustainability," says Ben Champion, the university's new director of sustainability.

campus and off. When talking about the need for environmental action, that voice reveals the urgency of someone who recognizes the dire consequences of not taking action. To him, the concepts of sustainability and "going green" aren't fads or marketing trends.

"Sustainability is something we should have been doing all along," he said. "K-State is a land-grant institution that was established with the intent that it

would be a center for learning and understanding. This puts us in a unique position to create a model for sustainability."

Champion has a plethora of ideas, including a Web site and a fall sustainability conference.

"The Web site would serve as an interactive presence for the major sustainability efforts we've got going at K-State, with particular regard to student life, curriculum, op-

erations, research and engagement," he said.

The conference, which he's coordinating with Pat Bosco, vice president for student life and dean of students, would be the first of its kind at a university in Kansas.

"We need to learn to sip energy instead of guzzling it."

Ben Champion

Champion is interested in tackling energy consumption through conservation and renewable production. Given K-State's strengths in architecture and engineering, he would like to engage students and faculty in energy-efficient building ventures.

He also believes Research and Extension could combine with the engineering curriculum and research programs to build wind turbines and solar facilities on or near campus. Such efforts could educate people throughout Kansas.

Champion plans to encourage a campus that focuses less on the car and more on shuttles, as well as paths for bikes and walkers.

He realizes that ample work lies ahead of him, but Champion believes we all have a responsibility to act sustainably.

"Somewhere in the glut of energy and capital of the 20th century, we forgot that throughout human history, abundance has not been the norm," he said. "It's time to remember that and plan accordingly." ■