



Spring Semester  
2011

Volume 9, Issue 2

# The Natural Enquirer

Department of Biological Sciences, Fort Hays State University, Hays, KS

## Biological Sciences Graduate Students Volunteer...

### For the Missouri River Pallid Sturgeon Broodstock Collection

~Jordan Hofmeier

Biology students Weston Fleming, Ryan Pinkall, Bryan Sowards, and Jordan Hofmeier volunteered for the Missouri River Pallid Sturgeon Broodstock Collection on 8-9 April, 2011 in Plattsmouth, NE. The pallid sturgeon is a large, bottom-dwelling fish that takes approximately 10 years to reach sexual maturity. It is native to the Mississippi and Missouri rivers. Due to impoundment and channelization of these rivers, pallid sturgeon populations have declined drastically. (see *Sturgeon*, page 10)



From left, clockwise, students holding non-reproductive female pallid sturgeon, pallid sturgeon on left, shovelnose sturgeon on right, and students pulling trotlines. Photos courtesy Jordan Hofmeier and Nebraska Game and Parks Commission

Right and below, *Mustela nigripes* (black-footed ferret). Photos taken by Trey Towers during the USFWS Black-footed Ferret Survey



### For the U. S. Fish and Wildlife Service Black-footed Ferret Survey

~Trey Towers

This March, I had the unique opportunity to volunteer in the spring black-footed ferret (*Mustela nigripes*) survey conducted by Dan Mulhern of the U. S. Fish and Wildlife Service. The black-footed ferret is one of North America's most endangered mammals. This small nocturnal carnivore feeds exclusively on prairie dogs (*Cynomys* spp.) and depends on their burrows for shelter. Due to intensive prairie dog poisoning and loss of habitat, the black-footed ferret was classified as endangered by the U. S. Fish and Wildlife Service in 1967. By 1974, it was thought to be extinct. In 1981, the black-footed ferret was accidentally

rediscovered near Meeteetse, Wyoming. Disease nearly wiped out this population, and in 1985, the remaining 18 ferrets were put into a captive breeding program. Since 1991, ferrets have been reintroduced to the wild from this program. In 2007, the black-footed ferret was reintroduced in Logan County, Kansas. The ferrets are surveyed for two weeks in the spring and two weeks in the fall. (see *Ferrets*, page 10)

Inside:

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# Kansas Wetlands Education Center Update

## ~ Curtis Wolf, Manager

### KWEC offering guided tours of Cheyenne Bottoms

To better educate visitors on the unique Cheyenne Bottoms history, management, wetlands and wildlife, the Kansas Wetlands Education Center of Fort Hays State University's Sternberg Museum of Natural History is now offering guided van tours. "People can drive through Cheyenne Bottoms any time they want for free," said Curtis Wolf, KWEC manager. "However, typically we hear people say, 'We saw a lot of water and a lot of birds, but we really didn't know what they were.'" With the tours, we hope to provide the visitors with a much fuller experience of Cheyenne Bottoms, so they get a better understanding and appreciation for this awesome resource of central Kansas."



The center offers two different tours. The "Getting to Know Cheyenne Bottoms Tour" is 30 minutes long and includes a stop at the Cheyenne Bottoms observation tower. It provides visitors with a brief history of Cheyenne Bottoms and a glimpse of the unique pool system of the wildlife area. Birds and wildlife will be pointed out throughout the tour. The "Cheyenne Bottoms Deluxe Tour" is 90 minutes in which visitors get a complete and interpretive view of the wildlife area and preserve as well as anecdotes about wildlife and the history of Cheyenne Bottoms. The tour focuses on bird and wildlife identification. It will also include a stop at the K-4 Highway Cheyenne Bottoms overlook, which is one of the best views of the Cheyenne Bottoms basin, Wolf said.

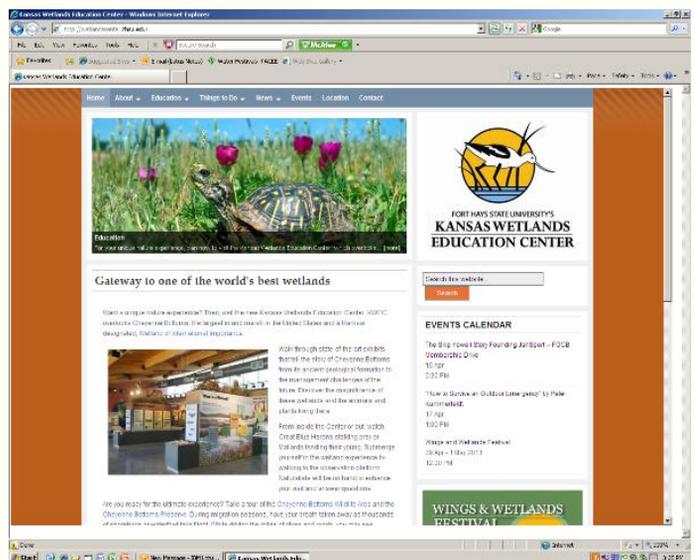
Four FHSU biology graduate students are the tour guides. They are Victoria Cikanek, New Castle, DE, Stephanie Kane, Dolores, Colo., Scott Schmidt, Marshall, Minn.; and Trey Towers, Corpus Christi, Texas. For reservations or for more information, call KWEC at 620-786-7456 or toll free at 1-877-243-9268.

### KWEC unveils new website

The Kansas Wetlands Education Center recently unveiled a new website – <http://wetlandscenter.fhsu.edu>. The previous website was the original website developed for the start of the KWEC 2 years ago. The first website did its job in getting the KWEC started; however, it was time to design a website that could offer visitors to the KWEC much more.

The new website provides information about the public and school programs that are offered at the KWEC, as well as specific information for hunters, bird watchers, and tourists that plan to visit the area.

Fortunately, the website was developed totally in-house; Scott Schmidt, one of the four graduate wetlands assistants from FHSU-Dept of Biological Sciences, did a wonderful job incorporating the desired features into the new site. Consequently, it will be much easier for KWEC staff to manage the site and update with useful, current information for visitors. Additional features, including blogs, photo galleries, and KWEC history will be developed and incorporated into the new site in the near future.



# Congratulations 2010-2011 Biology MS Graduates!

## Justin Hamilton

**Thesis title: Effects of Prescribed Burning on Grassland Nesting Birds on Conservation Reserve Program Areas in Gove County, Kansas**

## Kristen Polacik.

**Thesis title: Effects of Flooding on Photosynthesis and Root Respiration in Saltcedar (*Tamarix ramosissima*), an Invasive Riparian Shrub**



Kristen in the field

"I am originally from New Martinsville, WV. I earned a B.S degree in ecology and evolutionary biology from Marshall University in Huntington, WV. I decided to attend Fort Hays State University after the late Dr. Mary Etta Hight encouraged me to look into the Masters program. I had some interest in invasive plants as an undergraduate. Dr. Maricle had suggested that I look into researching the species *Tamarix ramosissima* (Salt cedar). The goal of my project was to examine how the species responded physiologically to flooding. I am currently back in WV working for the U.S Forest service for the summer. During the summer, I will be planting invasive plants in WV and OH for a project that will be examining how invasive species establish and initially affect the ecosystem."

## Shingo Ishihara

**Thesis title: Genetic Analysis of Vancomycin-Resistant Gram-Positive Cocci Isolated from Wild Songbirds**



Shingo with his advisor, Dr. Eric Gillock

## Stephanie Kane

**Thesis title: Breeding habitat structure and use by Kansas-occurring Black Rail**

"I graduated from Colorado State University in 2005 with a B.S. in Zoology. Although I have always had an interest in the natural world, it was really cemented when I volunteered in a lab studying Black-capped Chickadee behavior as an undergraduate. After working as a seasonal biological technician, I decided that earning a Master's degree would be a boon for my future goals. For my thesis research, I studied a little-known marsh bird, the Eastern Black Rail. My project was a combination of natural history (attempting to establish where summering populations were overwintering, and characterize breeding habitat), and ecology/management (studying the effects of vegetation management techniques on Black Rail presence). The research was challenging, but well worth the effort. After I graduate, I am heading to Jackson, WY to work as a Wildlife Expeditions Leader. After that, I hope to continue work as wildlife biologist or natural educator for the government or a non-governmental organization."



Stephanie in the lab

## Zachary Schwenke

**Thesis title: Distribution and genetic structure of pocket gophers (genus *Geomys*) in Kansas**

B.S. Wildlife Science. New Mexico State University 2006. "I first became involved in Museum Studies in 2004 when I volunteered for my undergraduate department's vertebrate collection. I have conducted field work every year since 2003. Through work in museum collections I have had access to new research ideas, incredible data, and an opportunity to work with true professionals. Since graduating from FHSU I began working for the Research and Development Department at ConocoPhillips in Bartlesville, OK. Although, my current career is not specifically tied to my education I am continuing field work, research, and my involvement in museum collections. Mammals ROCK!!" (no photo available)

## Alexander Galt

**Thesis title: Effects of sediment removal techniques on avian communities and vegetational attributes in restored prairie pothole wetlands**

"I received my Bachelor of Science degree in Zoology from North Dakota State University in May 2008 and started my graduate career at Fort Hays State University with Dr. Elmer J. Finck in Fall 2008. Our research consisted of determining the effects of various sediment removal techniques on avian communities and vegetational attributes in small, restored prairie pothole wetlands in western Minnesota. We also assessed the effectiveness of applying the "hemi-marsh condition hypothesis" to small prairie wetlands. During my graduate career I worked for the United States Fish and Wildlife Service through their Student Career Experience Program at the Minnesota Private Lands Office in Waite Park, MN. After receiving my Master of Science degree in Biology in December 2010 I was transferred to Port Louisa National Wildlife Refuge, Wapello, Iowa. I work as a Wildlife Biologist and coordinate the Partners for Fish and Wildlife Program in 11 southeastern IA and 3 western Illinois counties."



Alex in the field

# Graduate Student News

## Oral Examinations

Congratulations to graduate students successfully passing their oral examinations this spring!

**Katie Talbott, Sarah Rages, Bryan Sowards, and Ryan Pinkall.**

## Awards

### **Caroline Curtis**

Biological Sciences Outstanding Graduate Teaching Assistant Award  
Graduate School Outstanding Graduate Assistant Award

### **Weston Fleming, Jordan Hofmeier, Ryan Pinkall, and Bryan Sowards**

Kansas Department of Wildlife and Parks Chickadee  
Checkoff program grant (\$3700)

### **Brian Tanis**

American Society of Mammalogists Grants-In-Aid  
Research Grant (\$599)  
KDWP Chickadee Checkoff  
program (\$4800)

### **Brandon Calderon**

Greeley County Pheasants  
Forever Grant (\$500)

### **Alexander Galt, Justin Hamilton, Kristen Polacik and Shingo Ishihara**

FHSU Graduate School  
Outstanding Thesis Award



Dr. Robert Channell and advisee, Caroline Curtis, Outstanding GTA Awardee (top), and Drs. Finck, Gillock and Maricle accepted Outstanding Thesis Awards for their graduate students.

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*The important  
thing in science is  
not so much to  
obtain new facts  
as to discover new  
ways of thinking  
about them.*

*~William  
Lawrence Bragg*

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**Congratulations to Stephanie Kane for successfully defending her  
thesis:**

***Breeding habitat structure and use by Kansas-occurring Black Rail***

# Undergraduate Student News

## Awards



Jenn Pfannenstiel accepts the CHLS Undergraduate Student Award from Dean, Dr. Jeff Briggs (above). At right, undergraduate poster contest winners Heath Owens, Keri Caudle and Karina Barrett pose with Dr. Briggs.



### ***Jenn Pfannenstiel***

College of Health and Life Sciences  
Undergraduate Student Award  
Fort Hays State University Torch  
Award Finalist

### ***Keri Caudle***

2011 Botanical Society of America  
Undergraduate Research Award  
2011 Weed Science Society of  
America Undergraduate Research Award  
First Place Research and Creative  
Activities URE Poster contest

### ***Heath Owens***

Second Place Research and  
Creative Activities URE Poster contest

### ***Karina Barrett***

Third Place Research and Creative  
Activities Undergraduate Poster contest

## Biology Club ~Brian Serpan, Biology Club President

The Biology Club started a new tradition this semester with the first annual BIOLOGY CAREER DAY! Students from all over campus were invited to converse with and watch demonstrations by local professionals in biology. The roster included representatives from the fields of rangeland, wildlife and fisheries management, physical and occupational therapy and consultants.

The Biology Club will have their first meeting for the 2011-2012 academic year early in the fall semester.

Watch for signs around Albertson Hall or check out our Facebook page to join the fun!



# Undergraduate Student Feature:

## Keri Caudle

Home town: Burkburnett, Texas

Fields of Interest: Plant conservation biology, plant physiology and ecology

*What first made you realize that you wanted to study botany?*

"I was raised in the country and knew I wanted to earn a degree that would place me in the outdoors. After taking an 8<sup>th</sup> grade science class with an outstanding teacher, a passion sparked within me to study the planet and conservation. I jumped from archeology and geology to agriculture and astronomy trying to find where I would excel. I never actually thought about working with plants until one boring summer day when I was assigned an unwanted gardening chore involving *Kalanchoë blossfeldiana*. From there it was a long chain of unplanned events that amazingly lead to me FHSU."

*What has been the best part of your first year at Fort Hays State University?*

"Without a doubt, the biology faculty have been a fantastic support system. Being able to work on research projects with my mentor Dr. Maricle has been a great learning opportunity, and has been by far the best thing that has happened to me since moving to Kansas. Dr. Maricle has taken the time to teach me, and has given me the chance to apply techniques outside of the classroom. I have never had the pleasure of meeting such wonderful teachers that are truly dedicated to their students and to their work."

*What have you been studying in your undergraduate research?*

"This past Fall, we were able to set up greenhouse experiments studying effects of crude oil on respiration and photosynthesis in three coastal wetland grasses. This relates to the Deepwater Horizon oil spill in April 2010. I had the privilege to present the results at the Kansas Academy of Science meeting, and will be able to present again at the Botanical Society of America conference in St. Louis this summer. Currently, I have been working on another project comparing nitrogen assimilation (and its effects on other processes like photosynthesis) between introduced and native grasses under different concentrations of  $\text{NO}_3^-$ . We hypothesize different nitrogen regimes will favor establishment and performance of introduced species compared to natives. Additionally, Dr.



Keri Caudle conducting research in the FHSU Greenhouse

Maricle and I have applied for several grants and have most recently received funding from the Weed Science Society of America to support these projects."

*What are your future plans?*

"I hope to finish my bachelors degree and continue into a masters program at FHSU. After this, I would like to pursue a doctorate degree in botany. Hopefully, I would like either to work at a research institution as a plant conservation biologist or as a university instructor, following in the footsteps of several inspirational teachers that have made a major impact on my life. In the meantime, I hope to continue working on undergraduate research with my advisor so I can learn as much as I possibly can about botany."

*Do you have any advice for other undergraduate students at FHSU?*

"You will never know what you are truly great at unless you try new things. I had to resort to testing out dozens of areas, but it ultimately led me to find what I love most. Getting involved in research is the best possible way to find what interests you. Use your available resources to your advantage. There are willing professors who specialize in a range of biological disciplines that are there to help you make the most out of your education."

# FHSU Undergraduate Range Management Exam and Extemporaneous Speaking Contest Teams Compete

Five ambitious students and their coach, Dr. Jodge LaFantasie, tackled the 1800 mile round trip to Billings, Montana for the Society for Range Management Annual International Meeting this February. Jessica Casey, Andrew Pettibone, Ryan Shofner, Kyle Cook and Stasya Berber honed their skills and understanding of rangeland ecology, economics, habitat manipulation, assessment, grazing management and multiple use throughout the Fall 2010 and early in the Spring 2011 semester. All this was done in preparation for the Undergraduate Range Management Exam (URME) competition. The URME is a very difficult



Ryan Shofner and Stasya Berber pose after giving their speeches

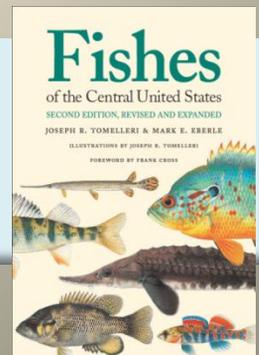
timed exam that assesses student's knowledge on all aspects of rangeland ecology and management. When asked about the URME, Jessica Casey stated, "You have never taken a test until you've taken the URME (laughs)." While they did not place within the top five teams (of 25 institutions), they scored within 15 points of placing fifth (out of 600 points) on the URME. Two students (Stasya Berber and Ryan Shofner) competed in the Extemporaneous Speaking Contest. For this contest, students grab three topics out of a hat, choose one, and 2.5 hours later, give a 5-7 minute presentation on that topic. Stasya drew "Grasslands of the World," and Ryan drew "Niche Concept." In addition to competing, they took advantage of such opportunities as the Rangeland Job Fair, technical presentations and poster sessions and interaction with professionals. "The trip was a great learning experience. You learn about all of the facets of range management."



Undergraduate Range Management Team immediately prior to the exam. From left, clockwise, Andrew Pettibone, Kyle Cook, Ryan Shofner, Jessica Casey and Stasya Berber.

## Faculty News

**Mr. Mark Eberle and FHSU Biology alumnus Mr. Joe Tomelleri**, University Press of Kansas in Lawrence. The book's projected release date is September 2011.



## Publications

- Welsch, T. and E.T. Gillock. 2011. Triclosan-resistant bacteria isolated from feedlot and residential soil. *Journal of Environmental Science and Health, Part A*. 46:436-440.
- Maricle, B.R., S.R. Zwenger, and R.W. Lee. 2011. Carbon, nitrogen, and hydrogen isotope ratios in creekside trees in western Kansas. *Environmental and Experimental Botany* 71:1-9
- Maricle, B.R. and R.W. Lee. 2010. Mechanisms of sulfide and anoxia tolerance in salt marsh grasses in relation to elevational zonation. pp 47-53 in: Ayres, D.R., D.W. Kerr, S.D. Ericson, and P.R. Olofson, Eds. *Proceedings of the Third International Conference on Invasive Spartina*, 2004 Nov. 8-10, San Francisco, CA, USA. San Francisco Estuary Invasive Spartina Project of the California State Coastal Conservancy, Oakland, CA
- Maricle, B.R., O. Kiarats, R.W. Lee, and G.E. Edwards. 2010. Effects of salinity on photosynthesis in C4 estuarine grasses. pp 55-58 in: Ayres, D.R., D.W. Kerr, S.D. Ericson, and P.R. Olofson, Eds. *Proceedings of the Third International Conference on Invasive Spartina*, 2004 Nov. 8-10, San Francisco, CA, USA. San Francisco Estuary Invasive Spartina Project of the California State Coastal Conservancy, Oakland, CA
- Packauskas, R. J. and R.M. Shofner. 2010. A new species of jumping bristletail from Kansas (Microcoryphia: Meinertellidae: Hypomachilodes *Silvestri*, 1911). *Journal of the Kansas Entomological Society*. 83(4): 340-346.
- J. E. Mcpherson, Richard J. Packauskas, Robert W. Sites, Steven J. Taylor, C. Scott Bundy, Jeffrey D. Bradshaw & Paula Levin Mitchell, 2011. Review of *Acanthocephala* (Hemiptera: Heteroptera: Coreidae) of America north of Mexico with a key to species. *Zootaxa* 2835: 30-40
- C. W. Thompson, R. S. Pfau, J.R. Choate, H. H. Genoways, and E. J. Finck. 2011. Identification and characterization of the contact zone between short-tailed shrews (*Blarina*) in Iowa and Missouri. *Canadian Journal of Zoology* 89:278-288.

## New Faculty:

### Dr. Yass Kobayashi Animal Physiologist



Dr. Kobayashi works with student Rachel Bond on fish dissection.



Dr. Bill Stark accepts the Outstanding Service Award from CHLS Dean Dr. Jeff Briggs (above), and Dr. Eric Gillock, FHSU Outstanding Researcher, in his office (right)



## Awards and Promotions

***Dr. Robert Channell ~  
Promotion to Full Professor***

***Dr. William Stark ~  
CHLS 2010-2011 Outstanding Service Award***

***Dr. Eric Gillock ~ FHSU Spring 2011 Outstanding Researcher Award  
Congratulations!***

# Department Outreach and Professional Presentations

## Kansas Natural Resource Conference, Wichita, KS, January 2011

- Pinkall, R. and W. Stark. **Distributional survey and habitat associations of crayfish in the Kansas, Missouri, and Republican River Basins in Kansas.** [Kansas Chapter of American Fisheries Society best poster presentation]
- Casey, J.L., R.J. Packauskas and J.J. LaFantasie. Does invasion by non-native Old World Bluestems reduce habitat for soil microfaunal groups?
- Sowards, B. and W. Stark. Conservation status of the delta hydrobe (Gastropoda: Hydrobiidae: *Probythinella emarginata*) in Kansas
- Fleming, W.L. Evaluation of aging structures and recruitment to gear for Walleye in Cedar Bluff Reservoir.

## Big Bluestem Consortium Annual Meeting, Manhattan, KS, February 2011

- Olsen, J.T., H.M. Tetreault, R.K. Goad, L.C. Johnson, S.G. Baer, M.L. Mendola, and B.R. Maricle. Effects of ecotype and precipitation on photosynthesis in big bluestem.

## Interior Highlands Mollusk Conservation Meeting, Neosho, MO, March 2011

- Sowards, B. The distribution and habitat association of the delta hydrobe (*Probythinella emarginata*) in Cedar Creek

## Wilson Ornithological Society/ Cooper Ornithological Society/ Association of Field Ornithologists Annual Joint Meeting, Kearney, NE, March 2011

- Channell, R. and G.H. Farley. The distribution and population of Lesser Prairie-Chicken: with reference to Kansas populations. Prairie Grouse Symposium.  
[An invited symposium paper presented by Dr. Channell, and a follow-up to his outstanding review for potential listing of this species in a report to the Kansas Dept of Wildlife and Parks in 2010.]
- Kane, S.A. and G.H. Farley. Effects of multiple habitat management practices on breeding habitat usage by Eastern Black Rail.
- Schmidt, S.W. and R. Blair. Bird distributions across a residential-hardwood forest edge.

## Kansas Academy of Science, Baldwin City, KS, April 2011

- Attended by Dr. Elmer Finck, Dr. Brian Maricle, Trey Towers, Amanda Cheeseman, Vikki Hunter, Jake Olsen, and Keri Caudle.
- Towers, L.W. and E.J. Finck. Alarm Calls of the Black-tailed Prairie Dog (*Cynomys ludovicianus*) in Kansas
- Caudle, K.L. and B.R. Maricle. **Effects of oil deposition on respiration and photosynthesis in coastal native and introduced wetland grasses.** [2nd place oral presentation by an undergraduate student]
- Olsen, J.T., H.M. Tetreault, R.K. Goad, M.L. Mendola, L.C. Johnson, S.G. Baer, and B.R. Maricle. Variation of photosynthesis in big bluestem and sand bluestem reciprocally planted across a precipitation gradient.

## Southwestern Association of Naturalists, Tyler, TX, April 2011

- Attended by: Dr. Robert Channell, Mr. Mark Eberle, Trey Towers, Stephanie Kane, Megan Rowheder, Katie Talbott, Amanda Cheeseman, Caroline Curtis, Jen Pfannenstiel, Brandon Calderon, Brian Tanis, and Brian Gaston.
- Talbott, K. and G.H. Farley. Factors influencing female choice in a Kansas population of Eastern collared lizards (*Crotaphytus collaris*)
- Kane, S.A. and G.H. Farley. Where do black rail nesting in Kansas molt and overwinter: A preliminary assessment using stable isotope analysis.
- Towers, L.W. and E.J. Finck. Alarm calls of the black-tailed prairie dog (*Cynomys ludovicianus*).
- Pfannenstiel, J. and R. Channell. Correlation between and within human disturbances and the conservation of declining species.
- Rohweder, M.R. and R. Channell. Spatial Conservation Prioritization of Kansas for Terrestrial Vertebrates

## Quantitative Analysis of Wildlife Population and Communities, University of Central Michigan, April 2011

- Attended by Brandon Calderon

## Kansas Entomological Society Annual Meeting, Lawrence, KS, April 2011

- Shofner, R. and R. Packauskas. **A new species of jumping bristletail from Kansas (Microcoryphia: Meinertellidae: Hypomachilodes Silvestri, 1911).** [First place presentation].

## Research and Creative Activities Week, FHSU, April, 2011

- L.W. Towers and E.J. Finck. Alarm calls of the black-tailed prairie dog (*Cynomys ludovicianus*) in Kansas
- Caudle, K.L. and B.R. Maricle. **Effects of oil deposition on respiration and photosynthesis in coastal native and introduced wetland grasses.** [1st place Undergraduate Research Experience Award]
- Owens, H. and J.J. LaFantasie. **Mycorrhization Rates of Two Grasses Following Alterations in Moisture Inputs in Southern Mixed Grass Prairie** [2nd place Undergraduate Research Experience Award]
- Casey, J.L., R.J. Packauskas and J.J. LaFantasie. Does invasion by non-native Old World Bluestems reduce habitat for soil microfaunal groups?
- Olsen, J.T., H.M. Tetreault, R.K. Goad, M.L. Mendola, L.C. Johnson, S.G. Baer, B.R. Maricle. Effects of precipitation and ecotype on photosynthesis in two grass species.

Students presenting their research (from left, Stephanie Kane, Weston Fleming, Jessica Casey, Ryan Pinkall, Bryan Sowards and Scott Schmidt)



## Dr. Greg Farley sacrifices comfort for Red Cross Disaster Relief

Dr. Farley volunteered his time and allowed himself to be targeted by students to raise funds to support the Red Cross Disaster Relief Effort in Japan (two photos below). Dr. Gillock and his students wait for their chance to dunk Farley outside the student union on a Wednesday in early May (at left). Dr. Gillock not only excused his students from class, but took them to the dunk tank and donated funds of his own to the effort.

(photos courtesy Andree Brisson)



## Alumni News



Scott Newland (far left), Dr. Farley (next right) and Biology students on a field trip to Galveston, TX to study migration

**Scott Newland (BS 1998, MS 2001, Fleharty Fellow and esteemed advisee of Dr. Greg Farley)** is employed by Sedgwick County Zoo. As the first Sedgwick County Zoo representative, Scott is working with the Marianas Archipelago Rescue and Survey research project in the eastern Pacific Ocean. This is a collaboration between the US Fish & Wildlife Service and several of the AZA (Assoc. of Zoos & Aquariums) institutions. The project uses mist nets to catch and relocate critically endangered and threatened species to other areas of the island that offer greater protection from predators.

### *Sturgeon, continued*

They were federally listed as endangered in 1990. This recovery effort started in 2007 to obtain mature adults for propagation efforts in hatcheries. Each crew set ten 40-hook trotlines baited with nightcrawlers to capture the pallid sturgeons. Over the course of the two days that the students volunteered, five pallid sturgeons were captured, two of which were sent to hatcheries for reproductive evaluation. Other fish captured include channel catfish, stonecat, and approximately 150 shovelnose sturgeons.

### *Ferrets, continued*

Of the many things I've learned while attending graduate school here, I've discovered that there are plenty of incredible opportunities in Kansas. You just need to keep alert to them and not be afraid to get involved when such opportunities present themselves. You will only regret it if you don't participate.