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

Dr. Greg Farley, Professor in Biology, Named 2010 President's Distinguished Scholar

Dr. Farley, originally from Long Island, New York, joined the Fort Hays State university faculty in 1995. He received his BS in Natural Resources from Cornell University, MS in Biology from Kansas State University and completed his PhD in Biology at the University of New Mexico in 1995. Dr. Farley teaches both general education and majors lab and lecture courses, including: Ornithology, Evolution, Behavioral Ecology, Introductory Zoology and Human Biology. His research and teaching are highly integrated, and over 100 students, most of whom were biology majors, have volunteered their time at the FHSU Bird Banding Station. The Bird Banding Station research, one of a kind in the North American Great Plains, was initiated by Dr. Charles Ely in 1966. After 25 years, Dr. Ely handed the reins to Dr. Farley, who has continued collecting data on migratory songbirds every fall since. Dr. Farley says about scientific data collected at the FHSU Bird Banding Station, "The most significant scientific value of this long-term data set, other than a unique opportunity to train students, is it represents the only continuous source of migratory songbird population data from the High Plains."

Dr. Farley has authored or co-authored over thirty publications, often with graduate and undergraduate students. He has advised undergraduate majors with coursework and employment opportunities, and has served on over 75 graduate student committees in biology, geosciences and fine arts. He is not stingy with his time serving both the university and scientific communities.

The President's Distinguished Scholar Award is the highest academic honor bestowed upon

faculty at Fort Hays State University. The award is given to faculty with outstanding records in research, teaching and service. The Honoree receives a cash award, a certificate, lapel pin and medallion and presents a lecture at Honors Convocation. To view Dr. Farley's scholarly presentation, please visit

<http://www.youtube.com/watch?v=gyeHX4oaUYI>

Dr. Farley is not new to the FHSU awards system having received the 2010 Navigator Award, Faculty Member of the Year Award in 2008 and the Pilot Award in 2007. To learn more about Dr. Farley and his accomplishments, please visit his webpage at:

<http://www.fhsu.edu/biology/gfarley/>.

Congratulations, Dr. Farley, and thank you for your contributions to the Department of Biological Sciences, FHSU and the scientific community!

Inside:

*Undergraduate Student Feature:
Holly Miller*

*Graduate Student Feature:
Stephanie Kane*

Much more!

Dr. Greg Farley and students in the tent at the Bird Banding Station (right), banding a bird (below) and on a class field trip (lower right).



Graduate Student Feature ~ Stephanie Kane



*"All of nature is
perverse, and
will not do as I
wish."*

*~ Charles
Darwin*

Home Town- Dolores, CO

Undergraduate Education-

Colorado State University- B.S.
Zoology

*How did you become interested in
biology?*

"One of my earliest memories was

when I got to feed a camel at the zoo, which I think sparked my curiosity. My interest in biology was really solidified during an undergraduate research experience when I volunteered in a lab that studied Black-capped Chickadee behavior. One day, we were out trapping and caught a Blue Jay. I got to listen to its heart, and I was sold."

So what are you working on now? "My thesis work is on a small marsh bird, the Black Rail. I'm studying the relationship between habitat management techniques and their effects on rail presence. It has been pretty interesting, and I'm excited to see the outcome."

What's next? "I really like to travel, so I'd like to go out and work a seasonal job or two. From there, I hope to work with either a federal or state agency as a biologist and/or educator."

Alumni News

Bradley Austin, (MS 2008) recently published his thesis research in the prestigious peer-reviewed journal *Hydrobiologia*.

Austin, B.J., and E.A. Strauss. 2011. Nitrification and denitrification response to varying periods of desiccation and inundation in a western Kansas stream. *Hydrobiologia*, 658:183-195.

Undergraduate Student Feature: Holly Miller

Holly Miller, raised in Hill City, Kansas stated that she has been “interested in science as long as I can remember.” Her specific interest in biomedical research stems from her concern for her mother who suffers from systemic mastocytosis. “I always knew that I wanted to be able to help my mom in whatever way I could,” she says, and goes on to add that she saw a story about a biotechnician in a magazine given her by her high school counselor, which settled her career choice in her mind. The rest is history.

Holly, a junior majoring in the cell and molecular biology option chose Fort Hays for its small class sizes and proximity to her mother. Since then she has excelled in her courses as well as research under the mentorship of Dr. Eric Gillock (Biology) and Dr. Tom Wiese (Chemistry). She has been involved in research since her freshman year, and her current research focuses on the PrP prion gene in walleye and catfish.

Holly greatly expanded her research experience through the Summer Undergraduate Research Fellowship Program (SURF) at the Mayo Clinic in Rochester, MN. From a pile over 1000 applications, Holly’s was chosen by Dr. David Katzmann of the Department of Biochemistry and Molecular Biology, to conduct research in his lab. Her research project, which culminated in a poster presentation at the end of the 10 week period at the facility, was entitled, “Development of an *S. cerevisiae* Viral Budding Model.” Holly describes her



Holly Miller explains her poster to a fellow Mayo SURF intern (above), and poses in front of the Guggenheim Building (upper right). A photo of her research presentation poster is at right.

changing,” and plans to reapply to the program for the summer of 2011. After her graduation in 2012, she plans to go to graduate school and hopes to be accepted at Mayo.

When this highly successful biology student was asked if she had any advice for new biology majors, she replied, “Be strong in your knowing of why you’re in college. Are you here to party? Are you here to further your intellect and your skills in whatever field you find interesting? You have to know who you are and you have to own that, or you won’t be as able to stick with your mindset. You have to apply your time, your mind, and your heart. It might not always be fun, but this is a temporary thing...it’s just another step on the path of where you actually want to be.”

Undergraduate Student News

Jessica Casey was awarded the Kansas Natural Resources Conference Scholarship to defer her registration costs when she presents her research at the KNRC meeting in January

Graduate Student News

Congratulations to Graduate Students Successfully Defending their Thesis!

—————
“Curiosity may
have killed the cat,
but it sure has
earned a lot of
people graduate
degrees.”
~Robyn Irving
—————

Oral Examinations

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

**Andree Brisson
and
Megan
Rohweder**

Alexander Galt:

Effects of Sediment Removal Techniques on Avian Communities and Vegetational Attributes in Restored Prairie Pothole Wetlands

Shingo Ishihara:

Genetic Analysis of Vancomycin-Resistant Gram-Positive Cocci Isolated from Wild Songbirds

Justin Hamilton:

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

Kristen Polacik:

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

Zachary Schwenke:

Distribution and Genetic Admixture of *Geomys* in Kansas

Awards

Weston Fleming: Duffy Student Travel Grant sponsored by the Kansas Chapter and North Central Division of the American Fisheries Society

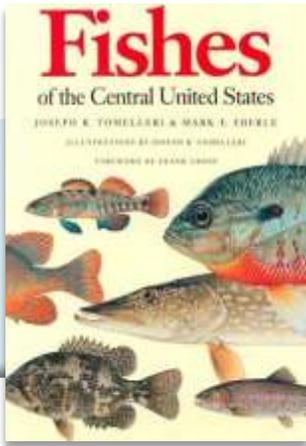
Stephanie Kane: Kansas Ornithological Society Student Research Grant and Kansas Department of Wildlife and Parks Chickadee Check-off Small Grant

Katie Talbott: George Toland Award for the best student paper given at the Kansas Herpetological Society 37th Annual Meeting

Elizabeth Waring: Honorable Mention for her oral presentation at the International Society for Wetland Scientists (June 2010)

Alex Galt: Janice Lee Fenske Memorial Award as the Outstanding Graduate Student at the 71st Midwest Fish and Wildlife Conference

Faculty News



Mr. Mark Eberle and FHSU Biology alumnus Mr. Joe Tomelleri are revising their 1990 book on the "Fishes of the Central United States" published by the University Press of Kansas in Lawrence. The text for the new edition has been updated substantially, and the number of color illustrations drawn by Joe will be increased from 163 to 250. The book is in the prepublication process this winter, and the projected release date is October 2011.

Congratulations to Dr. Richard Packauskas!

He was recently awarded the
FHSU Outstanding Researcher Award
for the Fall Semester, 2010!



Dr.
Packauskas
discusses
aquatic
biology on a
class field
trip

Sabbatical Presentation:

Splendid Isolation:
Disturbance and the Contraction of Geographic
Ranges

By

Dr. Rob Channell

Friday, August 27th, 2010

Professor Emeritus makes significant contribution to herbarium

~ Dr. Joseph Thomasson

Recently, Dr. Howard Reynolds generously donated \$5,000 for specimen cabinets to the Sternberg Museum. Dr. Reynolds was the plant taxonomist at FHSU and herbarium curator from 1959-1982. The cabinets will be used to store specimens that include Cretaceous flowers and other plant fossils he was instrumental in discovering in Kansas and Nebraska. In fact, a fossil genus,

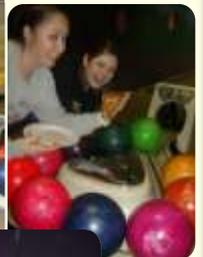
Reynoldsiophyllum was erected in 1990 in his honor. Thank you, Dr. Reynolds, for your continued contributions to the Biology Department and science!



Dr. Reynolds and Dr. Thomasson with a check donated by Reynolds for herbarium cabinets.

Biology Club ~Brian Serpan, Biology Club President

This semester, Biology Club made efforts to increase recruitment and participation. The beginning of the semester went well and enthusiasm was good. Over the course of the semester, members participated in volunteer opportunities such as Eco-Meet, community service projects, and the Hays Christmas parade. Oktoberfest was once again a successful, even though T-shirts were not sold. The semester ended with a Biology Club Bowling Extravaganza. Planned events for the next semester include a plant sale (pending), Biology Career Day, Spring Social, as well as many more volunteer opportunities.



Department Outreach and Professional Presentations

Society of Wetland Scientists Annual Meeting, Salt Lake City, UT, June 2010

Waring, E.F. and B.R. Maricle. Photosynthetic variation and carbon isotope discrimination in response to flooding in native and invasive grasses of central Kansas.
Honorable Mention in Graduate Student Paper Contest

Waring, E.F.[†] and B.R. Maricle. Effects of flooding on transpiration in *Sorghum halepense* (Johnsongrass) and *Phragmites australis* (Common Reed).

4th meeting of the International Heteropterist's Society, Tianjin, China, July, 2010

Packauskas, R.J. *Leptoglossus occidentalis*: Worldly Traveler

Central Plains Society of Mammologists, Iowa State University, October 2010

Towers III, L.W. and E.J. Finck. Responses of the black-tailed prairie dog (*Cynomys ludovicianus*) to predator alarm calls from other colonies

Anderson, J.D., F. Chavez-Ramirez and E.J. Finck. Influence of habitat heterogeneity on small mammals in the Central Platte River Valley, Nebraska, USA

Kansas Ornithological Meeting, Overland Park, KS, October, 2010

Kane, S.A. and G.H. Farley. Effects of habitat management practices on breeding habitat use of Eastern Black Rails in Kansas
Scored 0.5 points away from winning the Graduate Student Paper Contest

Freshwater Mollusk Conservation Society 2010 Workshop - Regional Fauna Identification and Sampling.

Attended by Bryan Sowards.

Kansas Herpetological Society Meeting, November, 2010

Talbott, K. Preliminary results on a study investigating female choice in *Crotaphytus collaris*
George Toland Award for best student presentation



Katie Talbott accepts the Toland Award at the 2010 Kansas Herpetological Society Meeting. Photo courtesy Ryan Shofner



L.W. (Trey) Towers (above) and Justin Anderson present their research at the Central Plains Society of Mammologists

Publications

LaFantasie, J.J. and S.F. Enloe. (2011) Competition between Black Henbane (*Hyoscyamus niger*) and Three Native Grasses. *Invasive Plant Science and Management*, 4(1).

Practical Applications

Graduate Student Bryan Sowards (advised by Dr. Bill Stark) attended a workshop in Regional Sampling and Identification of Mollusks. He returned with practical knowledge and these these photos depicting Higgin's eye (center) and (clockwise from upper left) butterfly, rabbitsfoot, Neosho mucket, and western fanshell mussels.

Photos courtesy B. Sowards



"If history and science have taught us anything, it is that passion and desire are not the same as truth."

~ E.O. Wilson

Biological Sciences Holiday and End-of-Semester Festivities

