THE COMMUNICATOR

NEWS FROM THE NEBRASKA COOPERATIVE FISH & WILDLIFE RESEARCH UNIT

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New and Changing Faces

We welcome **Michael Whitby** and **Dustin Martin** to the Coop Unit.

Michael is a Ph.D. student in wildlife who comes to us from New Jersey. Michael will work with Caroline Jezierski on the Bat Movements Across Transforming Landscapes project and is being advised by Craig Allen.



Dustin, who was a Ph.D. student with the Coop Unit and graduated from the University of Nebraska–Lincoln in 2013, has joined the Coop Unit as a postdoctoral researcher assisting the Nebraska Game and Parks



Commission with wildlife human dimensions research. His current focus is developing surveys of biologists and landowners about the benefits and issues associated with the Conservation Reserve Program, and potential improvements to this longstanding wildlife habitat program. �

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Research Highlight

Bat Movements Across Transforming Landscapes

Wind energy kills an estimated 600,000-800,000 bat a year across the United States. Most of the species killed are migratory, moving hundreds to thousands of kilometers between maternity and wintering grounds each year. It is during this period of movement, especially the fall, that the greatest mortality at wind farms has been observed. Unfortunately, knowledge about bat migratory movements is extremely lacking, and limits our ability to avoid or mitigate impacts to bat populations. With the current push for renewable energy in the United States, and world-wide, knowledge about bat migratory behavior is invaluable.

Through the deployment of ultrasonic acoustic detectors for four years, we plan to document phenology of bat activity and timing of bat migration in eastern Nebraska. Furthermore, we hope to be able to determine if bats are using landscape features such as rivers as navigation corridors or if a broad front migration is occurring. As the project develops, we anticipate using additional techniques to identify precise movements, residence time, and origin of bats migrating through Nebraska.

Installed wind power capacity in the United States has increased over 1000% between 1999 and 2011. Nebraska has the fourth highest wind energy potential in the United States and development will likely occur rapidly in the next



decade. The Nebraska Natural Legacy Project State Wildlife Action Plan identifies wind energy development as a potential threat to wildlife and their habitats. Identifying important habitats and migratory routes for bats is required to know when to curtail and where to place wind turbines to minimize bat mortalities.

Research Highlight continued on Page 2

A project website has recently been created (http://go.unl.edu/xjfz) as an outreach and publicity tool. The website consists of a project explanation, status, and brief, interesting findings as the project progresses. Informative signs directing people to the website will be featured at locations where field equipment is visible to the public.

GOALS: To document the phenology, habitat use, and movement patterns of migrating bats in eastern Nebraska.

CURRENT STATUS: Ultrasonic acoustic detectors have been deployed and are collecting bat calls at several locations along the Platte River in eastern Nebraska.

GRADUATE RESEARCH ASSISTANT: Michael Whitby

PROJECT COORDINATORS: Craig Allen and Caroline Jezierski

FUNDING: Nebraska Environmental Trust and Nebraska Game and Parks Commission ❖

Training

A Creel Survey Workshop was held March 26-28 in Lincoln, NE for the 2014 creel clerks. Beginning in April, the creel clerks will spend seven to eight months interviewing anglers at Nebraska reservoirs (Branched Oak, Calamus, Harlan, McConaughy, Merritt, Ogallala, Pawnee and Sherman) to help understand how participation patterns of anglers influence fish populations.

At the workshop, trainees completed required safety courses, and became familiar with university processes of collecting and transferring data.

The 2014 state-wide creel clerks are: Brian Bird, Don Bohnenkamp, Daniel Brundrett, Jacob Klooster, Gerald Ryschon, Amber Schiltz, and Jon Yates. •

Outreach Activities

Kent Fricke and Dan Uden continue to participate in the UNL chapter of Upward Bound Envionmentors program. They are serving as mentors for a high school student and assisting the student with conducting a science project. They also served as judges in the April 14th Environmentors Spring Showcase.

Caroline Jezierski had several booths in and around the Lincoln area to educate the public about Wind and Wildlife in Nebraska including: Rainwater Basin Joint Venture Informational seminar, in Grand Island, NE in February; Nebraska Wildlife Society meeting in Kearney, NE in February; Eureka, UNL Extension Educators Event, in Lincoln, NE in March; Weatherfest, University of Nebraska–Lincoln in April; and the Lincoln Earth Day celebration in Lincoln, NE in April. ❖

Honors and Awards

The Nebraska Chapter of The Wildlife Society presented its Professional of the Year award to **Kent Fricke**. The award is presented to an individual who has demonstrated outstanding achievement in the wildlife profession in Nebraska. Kent was also the recipient



of a \$4,000 Shikar-Safari Club Scholarship. Each year, a selected group of fisheries and wildlife faculty nominate one wildlife student from UNL for the scholarship. Each applicant is required to have a strong pro-hunting viewpoint on wildlife and land management, must be an active hunter, and show great leadership abilities.



Caitlyn Gillespie received the American Ornithological Union Membership Award. The award is a one-year complimentary membership to the AOU for students interested in pursuing a career in ornithology.

Danielle Haak was selected to participate in the 2014 Young Scientists Summer Program, in Laxenburg, Vienna sponsored by the International Institute for Applied Systems Analysis (IIASA).



The program received 332 applicants from 23 countries, of which only 52 students were selected to participate in the program.

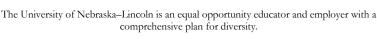
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Editor, Caryl A. Cashmere

Welcome to the Nebraska Coop Unit newsletter! The newsletter will be distributed two or three times a year.

Questions or newsletter ideas can be directed to ccashmere2@unl.edu, or

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Dustin Martin received the 2014
Outstanding Fishery Student
Award from the Nebraska
Chapter of the American Fisheries
Society. The award is given to
students of Nebraska that are
making outstanding contributions
to the science of fisheries and
aquatic resources.

Lindsey Messinger was the recipient of the 2014 Pheasants Forever Wildlife Scholarship. The scholarship is awarded to one graduate student per year by the Nebraska chapter of Pheasants Forever and Quail



Forever. It was developed in memory of William L. Baxter, a

long-time employee of Nebraska Game and Parks Commission and champion of early ring-necked pheasant research and farm bill conservation programs. Priority for the award is given to proposals related to upland game bird life ecology, habitats, genetics, management and the support of upland hunting.



In April, **Kelly Turek** received the UNL School of Natural Resources Meritorius Graduate Student Award. This award is given to a graduate student to recognize their academic achievements, research, teaching contributions, leadership accomplishments, and service and personal qualifications.

On April 17, the School of Natural Resources hosted a poster symposium in conjunction with an Elevator Speech contest where undergraduates and graduate students gave a three to four minute speech about their research project without props or special effects. The Coop Unit would like to congratulate the following Coop students for placing in the categories below.

- Victoria Simonsen, UCARE student, third place in the undergraduate category
- Emma Brinley Buckley, first place in the Master's category
- Hannah Birgé, first place in the Doctorate category
- Dan Uden, third place in the Doctorate category
- Lindsey Messinger, popular vote in the poster symposium

Announcements

Congratulations to Nate Gosch and his wife Kensey on the birth of their second child, Jacob Riley on January 24. Nate was our first fisheries student to



earn his M.S. and is now working for the U.S. Army Corps of Engineers. Jacob weighed 7 lbs. 4 oz. and was 19 inches long. Proud big sister is Ella.



Congratulations also to Coop Unit alum, Kody Unstad and his wife, Amanda on the birth of their daughter, Malena Louise on October 18. Malena weighed 6 lbs. 4 oz. and was 19 inches long.

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Emmett Russell was born to Coop graduate student, Luke Kowalewski, and his partner, Emily on January 29. Emmett weighed 7 lbs. 13 oz. and was 21 inches long. Congratulations Luke and Emily.





Congratulations to graduate student Bethany Teeters and her husband Matthew on the birth of their daughter, Olivia Augusta, born on April 10. Olivia weighed 6 lbs. 11 oz. and was 18.5 inches long.

Congratulations to graduate student, Kent Fricke who recently became engaged to Jamie Hayden a fifth grade teacher from Seward, Nebraska. ❖



Conferences/Meetings/Workshops

Joseph (TJ) Fontaine, Jessica (Jess) Laskowski, and Lindsey Messinger attended the Gordon Research Conference, Predator-Prey Interactions in Ventura, CA, January 5-10. Jess, Lindsey and TJ gave a presentation titled, "Fear and the phantoms of predators past." Lindsey and TJ gave a presentation titled, "Behavioral responses to variation in perceived predation risk."

"Wind energy & wildlife – Striving for co-existence in Nebraska" was the title of the presentation Caroline Jezierski gave at three meetings: the Wachiska Audubon meeting in Lincoln, NE, on January 9; the Nebraska wind siting symposium in North Platte, NE on February 12; and the USFS regional coordinating meeting in Wood River, NE on March 18.

Several Coop students and staff attended the Midwest Fish and Wildlife Conference January 26-29 in Kansas City, MO. Caroline Jezierski's presentation was titled "Striving for Nebraskans views of wind energy development and wildlife: Results of the 2012 and 2013 Nebraska annual social indications survey." "Spatial distribution of invasive white perch estimated using N-mixture models" was the title of Nathan Stewart's presentation. Kelly Turek's presentation was titled "Influence of non-native rainbow trout on native longnose dace."

Lindsey Messinger attended the Nebraska State Habitat Meeting in Kearney, NE on February 7 and presented "Tall wheat stubble research, incentives, and benefits." February 8-13, Victoria Simonsen attended the Society for Range Management meeting in Orlando, FL, and presented, "Examining the influence of landscape context on nest survival."

February 11, Caitlyn Gillespie attended the Rainwater Basin Joint Venture Informational Seminar in Hastings, NE and gave the presentation titled, "Shorebird migration in Nebraska: Stopover habitat decisions in a vanishing landscape."

"Changing climates and changing landscapes: A migrants bird's dilemma" was the title of the presentation TJ Fontaine gave at two biology department seminars; February 12 at University of Nebraska Omaha and February 13 at Kansas State University in Manhattan, KS.

February 13, Dustin Martin attended a research seminar hosted by the Nebraska Game and Parks Commission in Lincoln, NE. Dustin's presentation was titled, "Temporal trends in hunting and angling participation in the United States."

"The phantoms of predators past: fear effects on pheasant reproductive ecology" was the title of Jessica Laskowski's presentation at Colorado State University in Fort Collins, January 24.

Dustin Martin attended the New York Chapter of the American Fisheries Society Annual Meeting in Geneva, NY February 18-20 and had a presentation titled, "Using the

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internet and traditional creel surveys for regional fishery management."

February 18-20, Dustin Martin, Nathan Stewart and Kelly Turek attended the Nebraska and Iowa Chapters of the American Fisheries Society Joint Annual meeting in Council Bluffs, IA. "Resilience of a regional fishery" was the title of Dustin's presentation. Nathan's presentation was titled, "Estimating population size of superabundant fish." Kelly's presentation was titled, "Influence of non-native rainbow trout on native longnose dace."

"Influence of non-native rainbow trout on native longnose dace" was the title of Kelly Turek's presentation at the Michigan Chapter of the American Fisheries Society Annual meeting, February 24-27 in Holland, MI.

TJ Fontaine, Kent Fricke, Caitlyn Gillespie, Lindsey Messinger, and Dan Uden attended the Nebraska Chapter of The Wildlife Society Meeting, February 27 in Kearney, NE. "Changing climates and changing landscapes: A migrant bird's dilemma" was the title of TJ's Keynote Address. Kent's presentation was titled "Implementing adaptive management: Demonstrating the difficulties." "Shorebird migration in Nebraska: Stopover habitat decisions in a vanishing landscape" was the title of Caitlyn's presentation. "Nebraskans views of wind energy development and wildlife: Results of the 2012 and 2013 Nebraska annual social indications survey" was the title of Caroline's presentation. "Public access in the southwest focus on pheasants area" was the title of Lindsey's presentation. Dan's poster presentation, which took third place in the poster competition, was titled "The role of reserves and anthropogenic habitats for the functional connectivity and resilience of ephemeral wetlands."

March 3-6, Dustin Martin attended the Second Fishery Depending Information Symposium in Rome, Italy. Dustin's presentation was titled, "Potential fish-community effects of recreational fishing in freshwater and marine systems."

"The phantoms of predators past" was the title of Jessica Laskowski's presentation, April 1 at the University of Florida, Gainesville.

April 3, Kent Fricke presented at the Great Plains Symposium in Lincoln, NE. "Effects of drought on biodiversity in the Great Plains" was the title of his presentation.

Victoria Simonsen and Sarah Spier attended the University of Nebraska Research Fair, April 16 in Lincoln, NE. Sarah's poster presentation was titled, "The effects of urbanization on fear in wildlife." Sarah's poster presentation was titled, "Examining the influence of landscape context on nest survival." Both students are supported by the Undergraduate Creative Activities Research Experiences program. •

Our Mission

Train graduate students for professional careers in natural resources research and management

Conduct research that will create new information useful for management of natural resources

Provide technical assistance to cooperators







INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES







