THE COMMUNICATOR

NEWS FROM THE NEBRASKA COOPERATIVE FISH & WILDLIFE RESEARCH UNIT

Volume 1, Issue 1 April 2005

Getting to Know Us

Mission and Staff

–Valerie Egger

Our Mission

The mission of the Nebraska Cooperative Fish and Wildlife Research Unit (NE Coop Unit) is to:

- 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

Staff

The Nebraska Cooperative Fish and Wildlife Research Unit became the newest member of the national Cooperative Research Unit program in 2003 with the signing of a cooperative agreement between the Department of the Interior's U. S. Geological Survey, the University of Nebraska-

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Pine Ridge Area, Nebraska

Current Research

-Craig R. Allen

Initial research projects are focused in the Nebraska Landowner Incentives Program, the Nebraska Rainwater Basin project, resilience in ecosystems, and amphibian occupancy of wetlands.

Landowner Incentives Program (LIP)

GOALS: This research will focus on assessing one aspect of the Nebraska Game and Park's Landowner Incentive Program: the removal of invasive trees. The LIP program assists landowners with invasive tree removal. Landowners receive benefits in terms of increased forage on pasturelands while restoring prairie plants and wildlife, and implementing management practices to sustain prairie communities. We will focus on the impact on the avian community of grasslands, but also investigate the response of herpetofauna and vegetation.

CURRENT STATUS: Currently we are selecting study sites in Southeastern Nebraska. Initial field sampling will begin in May 2005.

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Lincoln, the Nebraska Game and Parks Commission, the U.S. Fish and Wildlife Service and the Wildlife Management Institute. The office was officially established with the arrival of unit leader Dr. Craig R. Allen in July 2004.

Prior to coming to UNL, Dr. Allen was unit leader (2002-2004) and assistant unit leader (1998-2001) of the South Carolina Cooperative Fish and Wildlife Research Unit at Clemson University. He received a B.S. in Biology from the University of Wisconsin-Green Bay in 1989, a M.S. in Wildlife Science in 1993 from Texas Tech University and a Ph.D. in Wildlife Ecology from the University of Florida in 1997. His research focuses upon the interactions among species and landscapes, and includes biological invasions, spatial ecology, and biological resilience.

Soon after his arrival, Valerie Egger became the Unit's administrative assistant. Ms. Egger has over seventeen years of experience with the University of Nebraska-Lincoln. She received a B.S. in Business Administration in 2001. •

NEW LOCATION

Please note that the Nebraska Coop Unit moved to new a new location on April 5, 2005. We are enjoying the extra space the new location has given us. Phone, fax and emails did not change. The new address is: 103 Miller Hall, Lincoln NE 68583-0711. Stop in and see us!

Graduate Students

We are pleased to announce the addition of three graduate students to the Unit's program. In August 2004, Donald Wardwell became the Unit's first graduate research assistant. In January 2005, he was joined by Elizabeth Forbus and Aaron Lotz.

Donald (Don) Wardwell

M.S. Graduate Research Assistant

Don earned his B.A. in Environmental Studies from Connecticut College in 2000. He grew up in Lewiston, Maine. Since then, he has lived in Connecticut, Massachusetts, New York, and most recently, Virginia. Research interests are avian ecology, endangered species, and conservation biology. His background includes work with anadromous fish and birds—three years working with Piping Plovers and Least Terns, which are listed as threatened or endangered species.

Elizabeth (Beth) Forbus

M.S. Graduate Research Assistant

Beth grew up in Cleveland, Ohio. In 2000, she earned a B.A. in Biology and Psychology from Mercyhurst College in Erie,

Pennsylvania. Before joining the Unit in January, Beth worked for the U.S. Geological Survey in Las Vegas, Nevada. Her research interests are vertebrate ecology and conservation.

Aaron Lotz

Ph.D. Graduate Research Assistant

Aaron moved from La Quinta, California, to join the Unit in January 2005. He earned both his B.S. (1998) and M.S. (2002) in Wildlife Biology from Humboldt State University in Arcata, California. Aaron grew up in Houston, Texas, and later lived in southern California. Aaron is particularly interested in herpetology, endangered species conservation, and ecosystem resilience. His background includes work with fifteen Southern California desert snake species. ❖

Welcome to the Nebraska Coop Unit newsletter! We plan to distribute our newsletter two or three times a year. Please share this newsletter with anyone you think may be interested. If you wish to be added to our distribution list, know of someone who should be included, or wish to be excluded from future mailings, please contact us at allencr@unl.edu or vegger1@unl.edu.

FOR MORE INFORMATION CONTACT:

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Craig R. Allen, Unit Leader 402-472-0229 allencr@unl.edu

Valerie Egger, Administrative Assistant 402-472-0449 vegger1@unl.edu

OUR COOPERATORS:

U.S. Geological Survey, Department of the Interior University of Nebraska-Lincoln Institute of Agriculture and Natural Resources School of Natural Resources Nebraska Game and Parks Commission The Wildlife Management Institute U. S. Fish and Wildlife Service

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Graduate Research Assistant: Beth Forbus

FUNDING: The United States Geological Survey, and the Nebraska Game and Parks Commission

Rainwater Basin Project

GOALS: We will establish a program to monitor populations of amphibians in Nebraska's Rainwater Basin wetland complex in order to detect changes in presence in this region over time. The acquired data will also provide inferential insight into the presence or absence of amphibian species and changes in individual species presence and community composition: 1) following ongoing restoration activities, 2) following ongoing anthropogenic landuse/landcover changes, 3) in relation to existing wetland-patch network characteristics, 4) in relation to

adjacent upland landuse/landcover and, 5) in relation to environmental contaminants originating as runoff from adjacent farm lands.

CURRENT STATUS: We are currently selecting study sites in the Rainwater Basin in Nebraska. Initial field sampling will begin in April 2005. Currently this is a pilot project, pending initial results and funding opportunities.

GRADUATE RESEARCH ASSISTANT: Aaron Lotz

FUNDING: The Nebraska Game and Parks Commission

Resilience in Ecosystems

GOALS: We will conduct experimental tests of the model of cross-scale resilience proposed in 1998. One prediction following from that model is that birds of different body size will respond differently to resources as they 'scale up' and aggregate in larger concentrations. An example of this occurs with pest outbreaks—when larger volumes of trees are infested with insects such as spruce budworm, larger bird species begin to exploit the pest, and are drawn from broader areas to do so. This provides a robust check on outbreaks over a broad range of spatial and temporal scales.

CURRENT STATUS: We are currently selecting study sites along the Missouri River in Southeastern Nebraska. Initial sampling will begin in the spring of 2005.

GRADUATE RESEARCH ASSISTANT: Don Wardwell

FUNDING: The James S. McDonnell Foundation–Studying Complex Systems

Cross-Scale Structure in Ecosystems

GOALS: We will conduct a series of empirical analyses to determine the distribution of functional groups within and across scales, the association of measures of biotic variability in vertebrates (e.g., invasions, extinctions, nomadism, migration) with discontinuities in body mass distributions, and cross-scale analyses of patterns in body mass distributions from local to hemispheric scales.

CURRENT STATUS: On-going investigations

GRADUATE RESEARCH ASSISTANT: Aaron Lotz

FUNDING: The James S. McDonnell Foundation—Studying Complex Systems, National Center for Ecological Analyses and Synthesis (NCEAS), Santa Fe Institute (SFI), and the Resilience Alliance ❖

Career Opportunity

A search is currently underway to fill the Unit's need for an Assistant Unit Leader/Research Fisheries Biologist position.

This position will maintain a productive research program, participate in the mission of graduate student education at the University of Nebraska-Lincoln as a non-tenured faculty member, and provide technical assistance to cooperating Federal and State agencies.

Expertise in fisheries population dynamics, fisheries ecology, sport fisheries management or fisheries-habitat relationships is desired. Emphasis is on the ecology and management of lentic aquatic communities with fluctuating or ephemeral water supplies as driven by agricultural water needs. Connectivity between reservoir and stream communities may also be a focus.

The position closed March 28 and applications are currently being reviewed. ❖

EVENTS

On November 1, 2004, the University of Nebraska-Lincoln hosted a Welcome Reception for the Unit. Participants included staff, faculty and administrators from UNL as well as staff, researchers and administrators from the various cooperating agencies including Nebraska Game and Parks Commission, USGS Lincoln office, Nebraska Forest Service, National Park Service, Great Plains Cooperative Ecostyems Study Unit and others. It was a great opportunity to meet and interact with future research and business partners.

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