

KANSAS ORNITHOLOGICAL SOCIETY

61st Annual Meeting



**Hutchinson, Kansas
Dillon Nature Center
Hutchinson Community College**

2 - 4 October 2009

61st Meeting of the Kansas Ornithological Society Hutchinson, Kansas

Schedule

Friday

7:00 - 9:00 p.m. Social Hour, Dillon Nature Center, 3002 East 30th Street Hutchinson.
Registration, Refreshments and Snacks

Saturday

7:45 Registration - Shears Technology Center, Hutchinson Community College, one block east of 14th Ave and Plum. Park in the Parking lot east of the building.

8:20 Welcome and announcements

8:30 Paper Session I

10:05 Break - Silent Auction

10:25 Paper Session II

11:50 Lunch (on your own)

1:15 Birdwatchers Hour

2:15 Paper Session III

3:05 Break - Silent Auction

3:30 Paper Session IV

4:30 KOS Business Meeting

6:00 Gather for Banquet - Grand Prairie Convention Center, 1400 North Lorraine Street.

6:30-9:00 Banquet - Speaker, Brad Jacobs, Missouri Department of Conservation, Avian Conservation Alliance of the Americas (ACAA) - Preserving neotropic habitat for our breeding birds.

Sunday

6:30-12:00 p.m. Field Trips - Meet at Dillon Nature Center Parking Lot
Cheney Lake Area - Pete Janzen (if you drive your car needs a state park permit or be prepared to by a day use pass.)
McPherson Valley Wetlands - Gregg Friesen
Quivira N.W.R - Mike Rader

7:15-12:00 p.m. Field Trip - Meet at Dillon Nature Center Parking Lot
Sandhills State Park & Dillon Nature Center

12:00 p.m. Lunch and compilation at Dillon Nature Center

Details for Saturday

- 7:45 Registration – Shears Technology Center, Hutchinson Community College. One block east of 14th Avenue and Plum. Park in the parking lot west of the building.
- 8:20 Welcome and Announcements
Nancy Leo, President, Kansas Ornithological Society
Jim Smith, Dillon Nature Center
- 8:30 **Establishment of Bluebirds on Butler Community College Campus.** Sean Jahansooz* and Dr. Bill Langley Biology Department, Butler Community College
- 8:45 **Effects of prescribed burning on nest success and brood parasitism of Lark Sparrow nests in southern Great Plains shortgrass prairie.** Ashley M. Long*, Department of Biological Sciences, Emporia State University; W. E. Jensen, Department of Biological Sciences, Emporia State University; R. S. Matlack, Department of Life, Earth, and Environmental Sciences, West Texas A&M University.
- 9:05 **Influence of Vegetation on Avian Communities in Small Prairie Pothole Wetlands in Minnesota.** Alexander L. Galt*, Minnesota Private Lands Office, United States Fish and Wildlife Service, 434 Great Oak Drive, Waite Park, Minnesota 56387, and Elmer J. Finck, Department of Biological Sciences, Fort Hays State University, 600 Park Street, Hays, Kansas 67601
- 9:25 **The Effects of Prescribed Burning on Grassland Nesting Birds on Conservation Reserve Program Areas in Gove County Kansas.** Justin V. Hamilton*, Department of Biological Sciences, Fort Hays State University, 600 Park Street, Hays, Kansas 67601 Randy D. Rodgers, Kansas Department of Wildlife and Parks, Hays, Kansas 67601 and Elmer J. Finck, Department of Biological Sciences, Fort Hays State University, 600 Park Street, Hays, Kansas 67601
- 9:45 **Detection and trapping of Black Rails (*Laterallus jamaicensis*) at Quivira National Wildlife Refuge.** Stephanie A. Kane (*) and Greg H. Farley. Department of Biological Sciences, Fort Hays State University.
- 10:05–10:25 Break – Silent Auction Bidding
- 10:25 **Effects of environmental conditions and distance from the geographic range center on the abundance of avian species.** Elita M. Baldrige* and Dr. Rob Channell, Department of Biological Sciences, Fort Hays State University

- 10:45 **The Kansas Wetlands Education Center at Cheyenne Bottoms—A Half-year in Review.** Curtis Wolf (*), Kansas Wetlands Education Center, Fort Hays State University
- 11:05 **Spatial Applications in Setting Kansas Bird Conservation Priorities.** Ken Brunson, Wildlife Diversity Coordinator Kansas Department of Wildlife and Parks
- 11:25 **White-faced Ibis Flock Killed in a Kearny County, Kansas Hailstorm.** Thomas G. Shane, Garden City, KS.
- 11:45 Presentation of Nominating Committee Report – Mark Land
- 11:50-1:15 Lunch
- 1:15-2:15 Birdwatchers Hour
- 2:15 **A Preliminary look at North American Migration County Data for Harvey County, Kansas.** Gregg Friesen, Newton, KS
- 2:35 **Meade State Lake Banding Station 1985-2009.** Thomas L. Flowers, Meade, KS
- 3:05-3:30 Break – Silent Auction Bidding
- 3:30 **Avian responses to restoration of Cross Timbers savanna.** William E. Jensen , Department of Biological Sciences, Emporia State University.
- 3:50 **Nesting patterns of Red-tailed Hawks and Great Horned Owls in south-central Kansas.** William Langley, Butler Community College.
- 4:10 **Ecological characterization of the Eastern Phoebe (*Sayornis phoebe*): extralimital nest-sites and hybridization with the Black Phoebe (*S. nigricans*).** Schukman, J. M*., 14207 Robin Road, Leavenworth, KS, 66048 USA, Lira-Noriega, A. ., University of Kansas, Lawrence, USA, and Peterson, A. T., University of Kansas, Lawrence , USA.
- 4:30-5:00 KOS Business Meeting – end of silent auction
- 6:00 Gather for Banquet at Grand Prairie Hotel and Convention Center, 1400 North Lorraine St.
- 6:30-9:00 Banquet - Speaker, Brad Jacobs, Missouri Department of Conservation, Avian Conservation Alliance of the Americas - Preserving Neotropical habitat for our breeding birds.

Abstracts

Establishment of Bluebirds on Butler Community College Campus. *Sean Jahansooz* and Dr. Bill Langley Biology Department, Butler Community College*

Bluebirds are now a familiar site at Butler Community College of El-Dorado, KS. Before the summer of 2004 this was hardly the case. At that time the college campus was filled with sparrows and starlings with no bluebird sightings to note. However, after introducing the low cost, eco-friendly bluebird initiative to Butler CC, those observations soon changed. We began the project by reducing the number of nesting sites for sparrows and starlings. This included plugging holes on classroom and office buildings around campus. After two years, we noticed a sharp reduction in sparrow and starling populations. Concurrently, we placed bluebird boxes around the perimeter of the campus. We had success attracting bluebird pairs, however, initially (2004), the bluebirds competed with sparrow pairs. This competition soon ended with the drastic decline in sparrow and starling populations. Thus, as the sparrow and starling populations decreased, the bluebird population increased due to suitable nesting quarters and little competition.

Effects of prescribed burning on nest success and brood parasitism of Lark Sparrow nests in southern Great Plains shortgrass prairie. *Ashley M. Long*, Department of Biological Sciences, Emporia State University; W. E. Jensen, Department of Biological Sciences, Emporia State University; R. S. Matlack, Department of Life, Earth, and Environmental Sciences, West Texas A&M University.*

Fire suppression and overgrazing in the southern Great Plains has led to increased shrub density in areas once dominated by shortgrass prairie. Such woody encroachment has been shown to facilitate bird nest predators in grasslands. In 2002, replicated, experimental plots of varying fire frequency (fire every 2, 4, and 10 years) were established at the Cross Bar Cooperative Management Area located in the Texas Panhandle to examine the effect of fire on mesquite (*Prosopis glandulosa*) density. We monitored 325 Lark Sparrow (*Chondestes grammacus*) nests in 2008 and 2009 to examine the effects of prescribed burning on nest success and brood parasitism by Brown-headed Cowbirds (*Molothrus ater*). Using a model selection procedure, we compared daily nest mortality (DMR) and brood parasitism rates to fire frequency and several covariates. Best-fit models indicated that DMR and brood parasitism rates were influenced by fire frequency, shrub density, and temporal covariates. Although shrub density did not differ among the burn treatments ($P = 0.084$), DMR was significantly higher ($P = 0.024$) in plots burned every 4 or 10 years than those burned every 2 years. Brood parasitism was significantly higher in 2008 (16% of nests parasitized) than 2009 (5% of nests parasitized) ($P = 0.005$); however, this was only marginally related to burn treatment ($P = 0.061$). Although it is unclear what role fire has in affecting nest success in shortgrass prairie, our results suggest that prescribed burning may increase the nesting success of the Lark Sparrow, and potentially other species in this region.

Influence of Vegetation on Avian Communities in Small Prairie Pothole Wetlands in Minnesota. *Alexander L. Galt**, Minnesota Private Lands Office, United States Fish and Wildlife Service, 434 Great Oak Drive, Waite Park, Minnesota 56387, and *Elmer J. Finck*, Department of Biological Sciences, Fort Hays State University, 600 Park Street, Hays, Kansas 67601

A “hemi-marsh” is a semi-permanent wetland with an emergent vegetation-open water ratio of 50:50. Research shows that the hemi-marsh condition has the most diverse avian communities. For this reason, the primary goal of many natural resource managers, throughout the Prairie Pothole Region (PPR), has been to manage existing wetlands and to restore drained wetlands in ways that support this condition. The literature does not address the influence of vegetation on semi-permanent wetlands that are less than 1 ha, yet there are thousands of these wetlands in PPR. We conducted avian surveys and a nest success analysis on 53 small (<0.5 ha), semi-permanent wetlands in the PPR of Minnesota to assess the influence of vegetation on avian communities. Our data showed a positive relationship between the proportion of emergent vegetation and avian diversity, as well as, between the proportion of emergent vegetation and nest success, which suggested that small, semi-permanent wetlands were functioning differently than larger wetlands of the same type. Small wetlands that were once referred to as “vegetation choked” and of low quality habitat are actually fully functional wetlands for avian communities. These results could have major management implications for resource managers in the PPR, because the monetary cost of managing and restoring wetlands, for the hemi-marsh condition, is often high.

The Effects of Prescribed Burning on Grassland Nesting Birds on Conservation Reserve Program Areas in Gove County Kansas. *Justin V. Hamilton**, Department of Biological Sciences, Fort Hays State University, 600 Park Street, Hays, Kansas 67601 *Randy D. Rodgers*, Kansas Department of Wildlife and Parks, Hays, Kansas 67601 and *Elmer J. Finck*, Department of Biological Sciences, Fort Hays State University, 600 Park Street, Hays, Kansas 67601

The Conservation Reserve Program (CRP) provides a substantial amount of habitat for grassland nesting birds. Prescribed burning is a management practice that can be used to manage CRP. In the spring of 2008 and 2009, we burned one-third of seven quarter section CRP plots in the mixed-grass prairie in Gove County, Kansas. Our objectives were to assess the effects of burning on areas selected for nesting and on nest success, and to assess if burning has an effect on predation and brown-headed cowbird (*Molothrus ater*) brood parasitism. A total of 189 nests from nine species was observed from mid-May through early August of the 2008 and 2009 field season. Overall, apparent nest success was 22% (42 nests). A Chi-square test showed significant difference in the number of nests found in each burn treatment ($\chi^2=39.28$, $df=2$, $P<0.05$), yet, no significant difference in the number of successful nests found in each burn treatment ($\chi^2=5.1965$, $df=2$, $P>0.05$). Brood parasitism occurred in only two of the 189 nests observed. This research will help us better understand how birds respond to prescribed burning in the mixed-grass prairie where little research has been conducted.

Detection and trapping of Black Rails (*Laterallus jamaicensis*) at Quivira National Wildlife Refuge. *Stephanie A. Kane (*)* and *Greg H. Farley*. Department of Biological Sciences, Fort Hays State University.

The Black Rail (*Laterallus jamaicensis*) is a small marsh bird notorious for its elusive behavior. This behavior, combined with the dense vegetation where the species is found, makes studying

this bird difficult. Of the two subspecies found in the United States, the Eastern Black Rail (*L. j. jamaicensis*) is the least studied, and limited research has been conducted on these populations. Eastern Black Rails are known to breed at several locations in Kansas, and are most often observed at Quivira National Wildlife Refuge (QNWR). We conducted call-playback surveys in accordance with the National Marsh Bird Survey Program's protocol for four rail species at QNWR between 14 June and 13 August 2009. In areas where Black Rails were detected, drift fences and traps were set, and in an effort to draw rails to the trap lines, we played two types of calls at set intervals. Preliminary data indicate that at QNWR Black Rails respond most to call playback within two hours of sunrise and two hours of sunset. Birds were detected most often in wet meadow habitat dominated by sedge species. One Black Rail was captured and banded, and data on age, sex, fat deposits, and molt were recorded. Future research efforts will include: surveying earlier in the year, and improving trap methods to potentially increase the number of birds captured. Additionally, stable isotope analysis will be run on feathers plucked from individuals to help assess where individual Black Rails are wintering.

Effects of environmental conditions and distance from the geographic range center on the abundance of avian species. *Elita M. Baldrige* and Dr. Rob Channell, Department of Biological Sciences, Fort Hays State University*

A species should have higher abundances where the environmental conditions are the most favorable for that species. A common assumption in ecology is that the center of the geographic range has the most favorable conditions for a species. The niche of a species consists of all the environmental conditions under which a species can survive and reproduce, so that the most favorable conditions for the species occur in the center of the niche. However, the center of the geographic range might not overlap with the center of the niche of a species. I will test the abundant center hypothesis using data downloaded from NatureServe, the Breeding Bird Survey (BBS), and the Global Biodiversity Information Facility (GBIF). Using NatureServe maps, I calculated the center of the range for twenty-one bird species, and modelled the realized niche with GBIF records in MaxEnt. With the distances to the geographic range center and modelled distributions, I tested to see if the species was found at more sites and at higher abundances in the center of the geographic range and niche than expected by chance. I also compared the geographic range and the niche to see if the center of the geographic range also contained the predicted optimal environmental conditions. A more thorough understanding of this problem will allow biologists to make more accurate management and conservation predictions which are based on a better understanding of how the range and niche are related to the abundance of a species.

The Kansas Wetlands Education Center at Cheyenne Bottoms—A Half-year in Review.

Curtis Wolf (), Kansas Wetlands Education Center, Fort Hays State University*

The Kansas Wetlands Education Center (KWEC) opened in April 2009. The mission of the KWEC is to educate the public about wetland communities, wetland management, and wetland conservation. After the grand opening, the KWEC has continued to see steady attendance, which has included many birders during the fall migration. Because thousands of birders “flock” to Cheyenne Bottoms and nearby Quivira National Wildlife Refuge (QNWR) annually, birders are an obvious population we hope to attract to the KWEC. And, the KWEC offers several interesting birding exhibits to assist birders during their Cheyenne Bottoms and QNWR birding

outing. This presentation is meant to update the KOS about what has been done since the doors opened, what is being done, and what we are planning on doing at the KWEC.

Spatial Applications in Setting Kansas Bird Conservation Priorities. *Ken Brunson, Wildlife Diversity Coordinator Kansas Department of Wildlife and Parks*

The Kansas Comprehensive Wildlife Conservation Plan, “A Future for Kansas Wildlife,” was approved in October, 2005. As part of required elements for State Wildlife Grant funding eligibility, Species of Greatest Conservation Need were determined. One hundred bird species met criteria for this list and complemented prioritized habitats and issues in each of three major Bird Conservation Regions—the Shortgrass, Central Mixed Grass, and Eastern Tallgrass prairies. Efforts are underway to geographically refine priorities within these major ecosystems. This presentation explains a current approach for applying Geographic Information System (GIS) technology for defining priority watersheds at the HUC10 (Hydrological Unit Codes) level. Examples will be provided to justify the focus of conservation efforts in watersheds which harbor the top sensitive species for each of the three BCR regions. Other prioritization efforts and GIS layers will be solicited and applied in further refining this dynamic approach for application of conservation dollars and programs. This will be particularly applicable as “A Future for Kansas Wildlife” is updated with further provisions to deal with implications of climate change.

White-faced Ibis Flock Killed in a Kearny County, Kansas Hailstorm. *Thomas G. Shane, Garden City, KS.*

A major hailstorm built in northwest Kearny County, Kansas in the early morning hours of 12 June 2009 ultimately blocking roads and highways along with stripping the leaves from trees with pea to marble sized hail. There were reports of many dead birds at various farmsteads. Almost five days after the storm, 18 White-faced Ibis (*Plegadis chihi*) were found dead in a bare fallow field below the Lake McKinney dam. The birds were in a slight arc about 20 yards in length. The initial results appear to be a non-breeding flock composed of four immature ibis, 13 sub-adults and one adult. The status of the original roosting place of the evening and the reason the ibis ended up in a fallow field may remain a mystery.

A Preliminary look at North American Migration County Data for Harvey County, Kansas. *Gregg Friesen, Newton, KS*

The Harvey County North American Migration count began in 1994 with 7 birders in two parties canvassing a small part of the county over the course of a morning. The count has continued every year since with larger numbers of individuals and better coverage of the county. The count, conducted on the second Saturday of the month of May and meant to provide a “snapshot” of bird migration across the country, provides a good record of migrants in the county during this time frame. While multiple variables make a single count setting a poor indicator of overall populations of migrants, the count does provide an interesting window into summer and winter bird populations in the county and a guide to arrival and departure dates for some species. Additionally, the count gives a look at some resident populations of birds affected by disease or habitat change including chickadees, crows, jays, and others.

Meade State Lake Banding Station 1985-2009. *Thomas L. Flowers, Meade, KS*

A banding station was established at Meade State Lake, Meade County, Kansas in 1985 which has greatly expanded the knowledge of migratory birds in Meade County. A total of 4393 birds have been banded representing 114 species. West Nile Virus, wildfires and other environmental factors have greatly influenced the species composition and overall numbers of birds captured since 2003. Comparisons are made for major species showing annual banding results and breeding bird survey information since the onset of West Nile Virus. Several species are still in serious decline and at least one has been extirpated. Discussion will also include birds in the Meade County hybridization zone. The Meade State Lake banding station is also used for educational activities hosting over 500 students annually.

Avian responses to restoration of Cross Timbers savanna. *William E. Jensen, Department of Biological Sciences, Emporia State University.*

Much forest in the eastern United States has emerged from open oak (*Quercus*) savanna. Accordingly, savanna restoration projects are occurring throughout the Midwest. Recent research has demonstrated shifts in avian community structure as savannas are restored from closed-canopy forest, and increased nest success of many woodland-nesting bird species that remain in restored savanna. The Cross Timbers region of southeastern Kansas is characterized by stands of blackjack (*Quercus marilandica*) and post oak (*Q. stellata*). Restoration of historic, savanna-like habitat is underway in this ecoregion and I am investigating avian community and population responses to such restoration. Point count surveys were established in 2009 at a site in Elk County to examine variation in bird species richness, and species occurrence, in relation to (1) natural variation in tree canopy cover and density and (2) experimentally-thinned vs. untreated stands of oaks. No substantial variation in bird species richness was found in relation to tree canopy cover, density, or experimental thinning. Occurrence probabilities of Downy Woodpecker (*Picoides pubescens*), Blue Jay (*Cyanocitta cristata*), and Tufted Titmouse (*Baeolophus bicolor*) were positively related to either tree canopy cover or density, whereas Field Sparrow (*Spizella pusilla*) and Orchard Oriole (*Icterus spurius*) occurrences were negatively related to either tree canopy cover or density. Mourning Dove (*Zenaidura macroura*) and Summer Tanager (*Piranga rubra*) were encountered more frequently in un-thinned stands, whereas Orchard Oriole was more frequent in experimentally-thinned stands. Future research will continue investigation of avian community structure, abundance, and nest success in response to restoration of Cross Timbers savanna.

Nesting patterns of Red-tailed Hawks and Great Horned Owls in south-central Kansas.

William Langley, Butler Community College.

Several naturalists have commented on the interaction between great horned owls and other nesting raptors. A 40 square mile area of rural habitat served as the study area. Over 21 years, 225 red-tailed nests and 69 great horned nests were located. The distance between nests and the use of nest sites were compared. Overall, their populations remained fairly stable over this period of time with more than twice as many nesting red tailed hawks as great horned owls in the area. Their distribution in space and their utilization of nest sites over time indicates a complex relationship occurs between these two nesting raptors.

Ecological characterization of the Eastern Phoebe (*Sayornis phoebe*): extralimital nest-sites and hybridization with the Black Phoebe (*S. nigricans*). Schukman, J. M*, 14207 Robin Road, Leavenworth, KS, 66048 USA, Lira-Noriega, A. ., University of Kansas, Lawrence, USA, and Peterson, A. T., University of Kansas, Lawrence , USA.

The potential range expansion of species can be anticipated with the use of ecological niche models (ENM). We assessed ecological characteristics of the Eastern Phoebe (*Sayornis phoebe*) by developing ENMs and comparing model predictions with extralimital occurrences. A bioclimatic model showed a clearly defined limit for this species in the central plains; however, a model using vegetation indices showed scattered and isolated predictions throughout the western half of the United States. In the foothills of the Rocky Mountains (Colorado), geographically an extralimital location of the Eastern Phoebe, recent discovery of nest-sites and hybridization with the Black Phoebe (*S. nigricans*) coincide with model predictions.

Nominating Committee Report

President - Nancy Leo
Vice President - Chuck Otte
Secretary - Gregg Friesen
Treasurer - Terry Mannell
Membership Development - Patty Marlett
Board Member - Mike Andersen
Board Member - Mike Rader
Board Member - Henry Armknecht
Board Member - Bill Jensen
Business Manager - Lisa Weeks
Editor, *Bulletin* - Eugene Young
Editor, *Horned Lark* - Cheryl Miller

Thank you!!!!

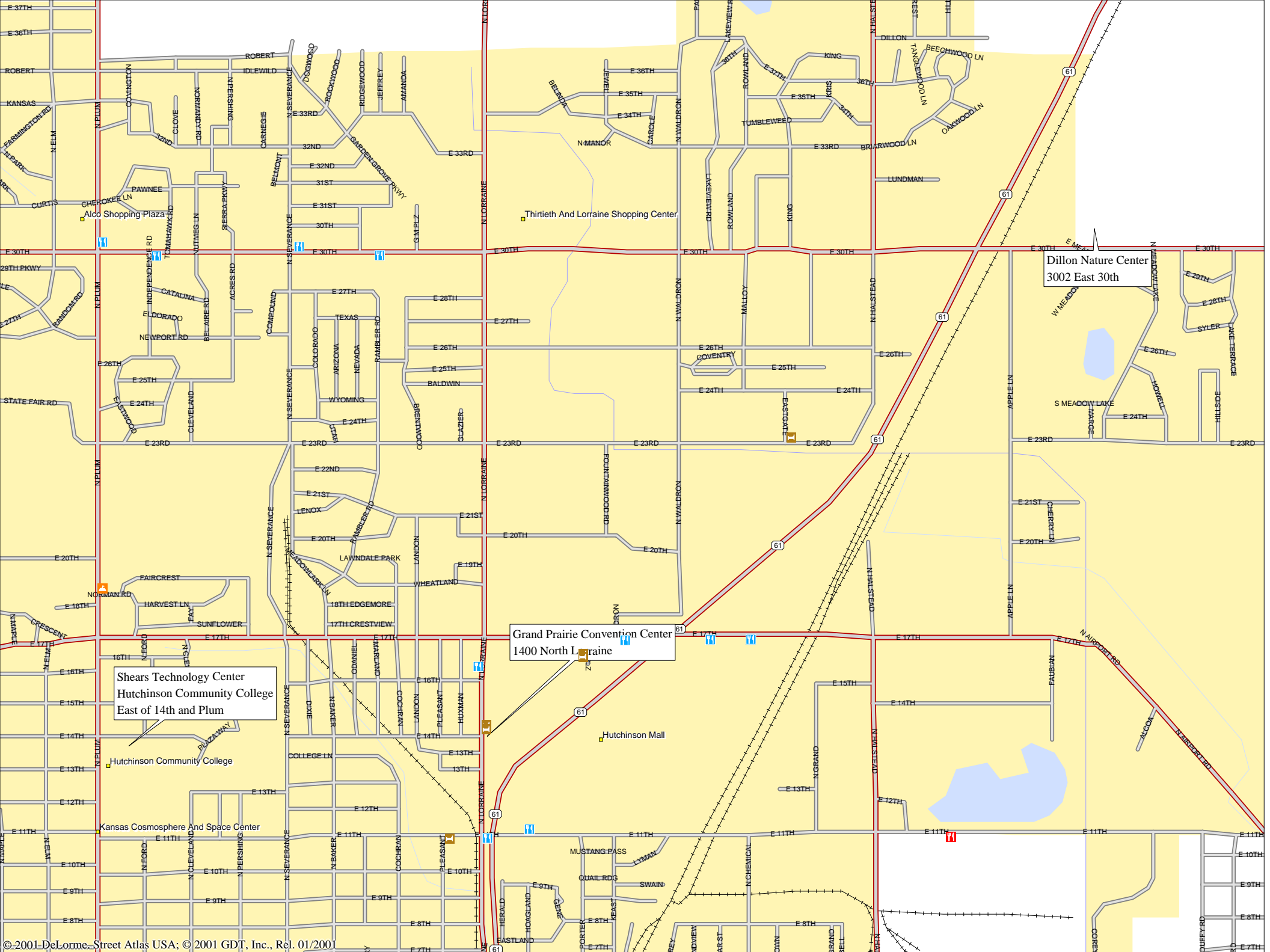
Dillon Nature Center
Jim Smith
Mary Clark

Danna Voegeli - Greater Hutchinson CVB

Field Trip Leaders

Gregg Friesen
Pete Janzen
Mike Rader

Spring Meeting 2010 - Tipton, KS, May 14 - 16, 2010
Fall Meeting 2010 - October 1 - 3, 2010??



Dillon Nature Center
3002 East 30th

Grand Prairie Convention Center
1400 North Lorraine

Shears Technology Center
Hutchinson Community College
East of 14th and Plum