

A tree-dwelling grasshopper discovered on the Konza Prairie !

By Dr. Ted Hopkins, Konza Docent

An unusual grasshopper that spends its life in trees instead of on grasses and forbs near the ground, as preferred by most grasshopper species, was recently found on the Konza Prairie. It is the Grizzly Spur-throat Grasshopper, *Melanoplus punctulatus* (Scudder), sometimes called the Grizzled Grasshopper. This also appears to be the first record of this grasshopper from the Flint Hills region of Kansas.

The first specimens collected were two large dark-colored grasshoppers that I found resting on the wall of the Headquarters building in the patio area in mid-October 2002. At the time I could not identify them as anything previously collected on the Konza Prairie, although they were in the spur-throat group of grasshoppers. After research with grasshopper identification literature, I was surprised to find them a rarely-collected, tree-dwelling grasshopper. Apparently these two females had come out of the nearby trees to sit on the stone wall of the building to bask in the sun. As the weather cooled in late fall, these grasshoppers were nearing the end of their life and were found soaking up some heat probably to finish maturing and depositing their eggs before they died. This year, Valerie collected a few male and female Grizzly Grasshoppers on the trunks of hackberry trees.

This grasshopper is hard to spot as it is very inactive and blends in with the lichen-covered bark of the trees. It is medium gray in color speckled with black dots, and some times with yellowish and whitish areas that match its background of tree bark. The females are relatively large measuring about 35 mm in body length, while the males are about 25 mm in length. The males also have unusually long antennae compared to other short-horned grasshoppers.

The life history and habits of the Grizzly Grasshopper have not been studied except for a few observations reported in early publications. They are found in low numbers in wooded areas of the Eastern half of the U.S. and as far west in the plains states where hardwood or pine trees grow. This



Grizzly Spur-throat Grasshopper

grasshopper has been found on a number of deciduous and coniferous trees. Their feeding habits are largely unknown but it is thought that they may feed on lichens as well as tree vegetation. The females lay their eggs in a pod that is deposited in cracks or holes in the bark of dead trees, rather than in soil like most other grasshoppers. Holes made by boring beetles seem to be a favorite place to deposit the egg mass that consists of 20-30 eggs embedded in a cement or glue-like material.

The Grizzly Grasshopper has evolved a very different life style than other grasshoppers by living most of its life in trees. It escapes the attention of predators by blending in with its background and being inactive. Its potential distribution on the Konza Prairie would be limited to the wooded areas along the creeks and trees around the Headquarters building and Hokansen Homestead. Much remains to be discovered about this unique member of the Konza insect fauna.

Prairie Patter

by Dr. Valerie Wright, Environmental Educator and Naturalist

Last October we had the First Annual Fall Docent Roundup and Hokanson Homestead Workday. Twenty-five people helped spread chips on the trail, organize shelves for the shed, put up the bird feeders for winter and much more. There was an unusual variety of food and drink. It was a day to meet and make friends as well. If you all enjoyed the exercise and fun, we'll do it again next year.



Jan Netlevski and Dr. Greg Zolnerowich



Docent Workday, Oct. 26, 2003

This January we met again to begin the year with another Docent Roundup. The guest speaker, Dr. Greg Zolnerowich, fascinated us with lore from the insect world and his studies on Konza. Ruth Palmer, TNC, brought stuff to give away and the diehard docents stayed late to show thumbs up or down on some of my photos destined to be printed on note cards and sold by FOKP. The proceeds will help fund KEEP.

Please bring any friends who might enjoy being a Konza Prairie Docent to the February 25th orientation night. Kay Garrett has given us lots of good publicity this year. I'm looking forward to the new class of 2004 docent trainees!

We've already had a couple of groups out, prairie chickens will be booming soon and spring is not far off. See you all soon.

Networking KONZA By Charlie Given

NADP? CASTNET? LTER(SLTER)? NOAA? NSF? NWS? ANSS? USGS? EPA? FEMA? NAPAP? NTN? HBN? PDQ? And where in the world is Sopchoppy River?

All good docents can identify all the letter groupings in the list above, right? If you can, you're a better man than I am, Gunga Din. Actually, except for the last one, they all refer to organizations or networks with which Konza is affiliated. And I've probably missed one or two. The number of networks Konza is a part of is really amazing:

LTER/SLTER (Long Term Ecological Research/Schoolyard LTER). We should all be familiar with these designations. The National Science Foundation (NSF) established the LTER program in 1980 to support research on long-term ecological phenomena in the United States. The mission of the Schoolyard LTER program is to use the uniqueness of the LTER program to promote learning about long-term ecological processes, targeting elementary and secondary school age youth. There are 24 LTER sites, of which 14 have SLTER programs. More on this at docent's training.

(Continued on next page.)

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SPOTLIGHT! on Hoogie Hoogheem By Annie Clark and Hoogy Hoogheem

Hoogy grew up in Fulton, Illinois, along the Mississippi River. He received his undergraduate degrees in Philosophy, Psychology and Pre-Med from Monmouth College in Monmouth, Illinois, and his Master s and CAS in Clinical/Counseling Psychology from Harvard in Cambridge, Massachusetts. For 39 years, Hoogy was employed by the Newton public school system, near Boston, which serves 15,000 students. He worked as a crisis intervention caseworker doing outreach programs with students in crisis-often in family homes, coordinating with the courts as well as individual counseling case work. He also conducted workshops for teachers in establishing drug abuse programs and general mental health programs in conjunction with health issues. Hoogy s main focus was to help the minds and emotional development of young people, to help them realize there are alternatives to drugs, abuse and neglect, including good nutrition and decision making.

Hoogy and Carol met in Massachusetts, and have been married for 23 years on Valentine s Day. Their first trip to Kansas was when son, Jeff, was stationed at Ft. Riley. Hoogy bought two books for the trip, Kansas: Off the Beaten Path and The Birds of Konza by John Zimmerman. One of their first stops in Manhattan was the Konza Prairie, where Hoogy met Tom Van Slyke at the Nature Trail kiosk and was very impressed by what Konza had to offer. Coupled with the connection to KSU and birding opportunities in the area, Hoogy and Carol moved to Ogden. They have lived here for nine years.

Hoogy and Carol became Konza docents right away because of their fascination with the prairie and John Zimmerman and Phoebe Samelson s urges to get involved. Hoogy s most favorite ages to work with, though it was hard for him to choose, are middle school students, grades six through eight. As a docent, Hoogy continues a lifelong commitment to improving others quality of life and encouraging people to grow through learning. He enjoys sharing his knowledge of birds, flowers, grasses and so on. Hoogy has been guiding prairie chicken programs on Konza for the last seven years.

Besides the Hoogheems involvement with Konza, they are also active in numerous other organizations. Hoogy is a trustee for Audubon of Kansas, served as president for the Northern Flint Hills Audubon Society for eight years, participates in bird counts for the Kansas Ornithological Society, Restoration Advisory Board for Fort Riley as well as has banded birds on Ft. Riley for the Monitoring Avian Productivity and Survivorship program, was an avid fly fisherman back East, and enjoys theater, plays and concerts.

Hats off to Hoogy Hoogheem! I encourage you to meet this extraordinary docent, in his element, by joining him weekdays in the wee hours of the morning to witness prairie chicken booming beginning March 15.

Networking KONZA continued

USGS/HBN (United States Geodetic Survey/Hydrologic Benchmark Network). The Hydrologic Benchmark Network was established in 1963 to provide long-term measurements of stream flow and water quality in areas that are minimally affected by human activities. Nationwide, there are 48 active sites (including Sopchoppy River in northern Florida) and information from 8 discontinued sites. For more complete information check *http://water.usgs/pubs/circ/circ1173/*

NADP/CASTNET (National Atmospheric Deposition Program/Clean Air Status and Trends Network). These two networks were developed to monitor dry (CASTNET) and wet (NADP) acid deposition. Since its beginning in 1978, NADP has expanded to include the National Trends Network (NTN) which measures several other chemical pollutants. The EPA is the parent organization for these networks. For information see *www.epa.gov/castnet/*

ANSS (Advanced National Seismic System). This is a nationwide network of at least 7000 shaking measurement systems that will make it possible to provide emergency response personnel with real-time earthquake information, provide engineers with information about structure specifications, and provide scientists with data to understand earthquake processes. For complete information go to *www.anss.org/*

USGS Real-time water data. This is a very large network of stations that provide real-time information on stream heights, discharge volume, recent precipitation amounts, and water temperatures. The Kings Creek station is located just upstream from the Hokanson Homestead. For more information go to *www.waterdata.usgs.gov/*

And, of course, there's our weather station and sun photometer. Konza is the only site common to all these networks!

Docent Book Review by Earl Allen

Two hundred years ago, the Corps of Discovery, led by Meriwether Lewis and William Clark, set out on its expedition. An important part of Lewis and Clarke s mission was to notice and record as much as they could about the world they explored.

A wonderful book, *Comm on to This Country: Botanical Discoveries of Lew is and Clark* by Susan H. Munger, tells us the story of their discovery, description, and collection of many plants that were previously unknown to science. The title of the book is adapted from Lewis s journal entries in which he commented on the abundance of certain plants discovered on their journey.

A forward by Verlyn Klinkenborg outlines the framework of what the expedition wished to accomplish. An introduction by the author tells us of the preparations for the journey. We learn that President Jefferson sent Lewis to Philadelphia to study botany, illustrating that scientific discovery was an important part of their mission. Professor Benjamin Smith Barton, a professor of botany at the University of Pennsylvania, was quite influential. He instructed Lewis in plant identification, collection, and preservation techniques. In fact, Lewis took a copy of Barton s botany text and other reference books with him on his journey.

The book selects twenty-five of the more than two-hundred plants that were collected on the trek and presents them in the order they were discovered. An accompanying map shows the route that was taken and the location where each plant s discovery occurred. There is a beautiful, botanically correct, full-page color illustration of each specimen by Charlotte Staub Thomas.

The presentation of each plant details the circumstances of its discovery. The author also gives us brief botanical information about each specimen, the role it had in the lives of the Indians and animals where it was found, and other relevant information.

Excerpts from Lewis s journal are also included and make for some of the most interesting reading. Some of his detailed descriptions and observations are striking, considering he was an amateur botanist, and he had so many other duties to perform on the journey. His enthusiasm for his task is evident from his entries.

Anyone who enjoys reading of great adventure and who appreciates plants in their natural setting will appreciate this book.



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