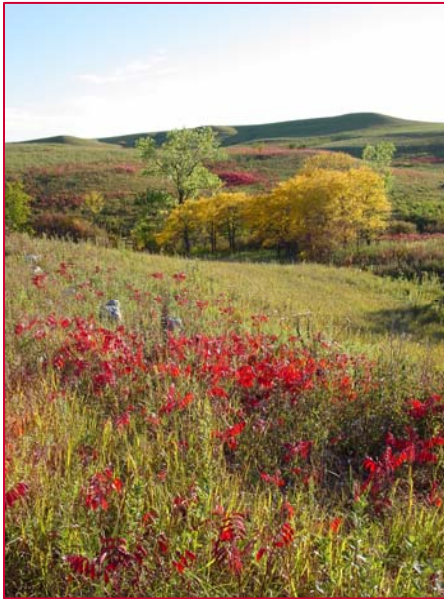


Schoolyard Long-term Ecological Research

Teaching Students Science Through Ecology

KONZA ENVIRONMENTAL EDUCATION PROGRAM

Konza Prairie Biological Station
Kansas State University



Connecting students to the
tallgrass prairie ecosystem
through long-term field study.



KONZA ENVIRONMENTAL EDUCATION PROGRAM

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Real-world Student Research Activities

◆ By sharing knowledge generated through long-term data collection at Konza Prairie, we give teachers tools for connecting students to their prairie ecosystem.

◆ The KEEP SLTER program directs ten science research activities, with correlation to National and Kansas State Science Education Standards.

◆ SLTER data collection and inventories are real world research experience for students. Konza Prairie researchers often interact with student groups by assisting during activities in the field and laboratory. KEEP staff emphasize the importance of following the scientific method and taking accurate measurements.

◆ Hands-on science investigations for students on Konza Prairie:

Grasshopper Inventory
Stream Macro-invertebrates
Stream Geomorphology
Effect of Fire on Plant Diversity
Goldenrod Gall Insect Populations
Fire Reversal Study
Plant Biomass
Plant Inventory
Phenology
Plant Identification & Collection

◆ Find activity descriptions, complete Science Standards correlation to each activity, and student-generated databases on our website.

Teachers' Workshop
June 16—25, 2008

Konza Environmental Education Program

Schoolyard LTER Program

- ◆ The Konza Environmental Education Program (KEEP) has the objective to teach students the process of science through hands-on ecological research.
- ◆ KEEP received a grant from the National Science Foundation (NSF) to begin Schoolyard Long-term Ecological Research (SLTER) science education in 1999. This program allows K-12 teachers and students access to LTER sites and/or personnel. LTER sites across the world encompass unique ecosystems and are outdoor laboratories where scientists study long-term ecological processes.
- ◆ SLTER data collection and inventories are real world research experience for students. SLTER activities allow students to participate in Konza Prairie research by generating data of value to tallgrass prairie studies.
- ◆ Students enter their data into long-term databases via the Internet. Data can be manipulated in the classroom to produce graphs and reports for a unique view of long-term data trends.
- ◆ Teachers bring their classes back each year and other teachers continue with the same projects, so the databases grow.
- ◆ KEEP SLTER offers ten long-term ecological research activities parallel and in addition to current scientific research on Konza Prairie. The program is host to over 900 students every year.

Teachers' Workshop

- ◆ Teachers are exposed to each of the ten Konza Prairie SLTER activities in a learning-by-doing atmosphere.
- ◆ Teachers choose a research project that fits their curriculum, and develop pre- and post-field trip units.
- ◆ The technology component includes instruction in classroom use of spreadsheets, graphing, and LTER and SLTER databases.
- ◆ Current SLTER teachers share their prairie experiences and classroom activities.
- ◆ A stipend is given for the workshop (full attendance), plus meals. Graduate credit from Kansas State University, College of Education, is available.
- ◆ Funds are available for busses to and from Konza Prairie. Some equipment needed for the projects will be supplied by KEEP.
- ◆ Teachers are expected to collect data annually with their students as a part of this long-term ecological program.
- ◆ Since 1999, there have been nine teachers' and seven technology workshops. sixty teachers have graduated from the program.
- ◆ Between 1999-2006, the Konza Prairie SLTER program hosted 222 science field trips, which impacted almost 6,000 students.
- ◆ Visit the KEEP website for curriculum ideas, prairie resources and workshop reports.



Researchers are on-hand to discuss basic prairie ecology and interpret data.

SLTER Teachers' Workshop Registration

Sign up for: June 16 - June 25, 2008
 June 2009

Name _____

Home Address _____

Home Address _____

Home Phone _____

Personal E-mail _____

School _____

School Address _____

School Address _____

School Phone _____

School E-mail _____

Grade/Subject _____

Participation is limited in 2007.

Please return with registration fee (\$25) by March 31, 2008.

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