

Welcome to the Konza Prairie Nature Trail!

This brochure is for a self-guided hike of the first Nature Trail loop of 2.6 miles (map on the back).

This hike will have 24 numbered stops.

This is a research site with numerous experiments in progress - stay on the trail at all times.

Konza Prairie Biological Station is an 8,600 acre tract of native tallgrass prairie. Konza Prairie is a preserve of The Nature Conservancy, managed by the Division of Biology, Kansas State University.

Follow the trail going clockwise

#1. Konza Prairie was previously a working cattle ranch. It was



purchased by The Nature Conservancy in 1977.

The fields to the north, south, and west are plowed fields and planted to crops. This land is used by the Department of Agronomy at KSU for research.

Before you leave this spot - check out the fields (especially the one to the south) – wild turkeys and white-tailed deer are frequent visitors.

#2. Kings Creek is one of two major streams on Konza Prairie. Trees lining a creek in a prairie are called a "gallery forest". The entire area of trees and creek

are called a "riparian area". The dominant trees here are bur oak and chinquapin oak, elm, hackberry, walnut, and hickory. About 7% of Konza Prairie is forested.

- **#3.** This stream is spring-fed, with cool, clear water filtered by the prairie sod and limestone layers. The U.S. Geological Survey studies the pristine condition of Kings Creek as a comparison for other more humanimpacted prairie streams in the region. For more information:
- **#4.** This open field was once forest but was cleared in the 1970's and planted to brome grass, a non-native species used for hay. This field is now burned and is returning to natural grasses.
- **#5.** Dead trees and downed wood are important since many animals use them for shelter and feed on insects within. Look for woodpecker holes in dead trees at the edge of the field.

Fork in the road - take the left path.

If you go right, you'll have a .5 mile walk through the gallery forest that leads to the Hokanson homestead, and the <u>public restroom</u>.

#6. Konza Prairie soils are shallow and

rocky, yet some woody plants do well under these conditions. Can you identify the

Dogwood has reddish stems and opposite leaves.

honey locust, redbud, sumac and dogwood growing here? For more information on shrubs and trees:



#7. The white rock is limestone and forms the distinctive terraces of the Flint Hills. Water

seeps through cracks in the limestone and forms springs just beneath the rock layers. Bands of shrubs form on the hillsides at the springs.

#8. This is a great place to see the tallgrasses of the tallgrass prairie. The dominant tallgrass species are: big bluestem, Indian grass, little bluestem and switchgrass. The grasses will be tallest in the autumn (Sept. and Oct.) especially if the spring and summer got plenty of rain.

For more information on grasses:

In the fall of a good year, big bluestem may grow 10 feet tall, while its root system can reach 12 feet into the soil.

- **#9.** Along this rock outcrop the soil is shallow and dry. Plants characteristic of the shortgrass prairie of the High Plains grow here, like blue and hairy grama grasses.
- #10. This is a great spot to see wildflowers. The spring bloom is often spectacular in June. In fall asters, goldenrods and sunflowers are abundant. There are about 600 species of plants on Konza. For more information on the wildflowers of Konza:
- #11. Take a moment to look all around you (and catch your breath!). This is the best place for a good look at Konza Prairie. Feel the wind? See the scalloped terraces of the hills?



You might see some of the Konza bison herd if you look to the south.

- **#12.** This radio tower is used by Konza staff and researchers to allow communication on the site and to send data back to the KSU campus.
- **#13.** If you look to the north (left side) you'll easily see the Kansas River valley and Manhattan. Now, turn around and look to the south. This is what Kansas looked like 200 years ago.
- #14. On this ridge, you can see why most of Konza Prairie remained untouched by the plow. Much of the Flint Hills has thin, rocky soil that is very difficult to cultivate! Look for the smooth, gray rock with sharp edges that's flint (also known as chert). For more information on the geology of the Flint Hills:

Fork in the road – go right if you want to stay on the 2.6 mile (shortest) loop. Go straight, up the hill if you wish for a longer walk.

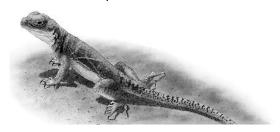
- **#15.** You're finally headed down hill! Look to your left (east) and see great examples of limestone layers. Look under your feet for examples of flint. Wildflowers and grasshoppers are abundant here.
- **#16.** Fire is important to the management of a prairie it keeps trees and shrubs from taking over and creates an environment that favors the growth of grasses.

You are now walking along one of the many "fireguards" that crisscross Konza Prairie. Fireguards are roads or mowed grass that separate areas that have different burning treatments.

Trail

Turn right at the next sign! If you go straight expect to go down a steep hill.

#17. This rock ledge is formed by an outcropping of the "Cottonwood limestone", which provided the traditional building material in this part of the Flint Hills.



Along this section of the trail it's common to find collared lizards. You'll need to be quiet and stealthy! Look for them basking on a sunny rock.

- **#18.** Look in the brushy areas for woodrat nests ("middens"). These large collections of sticks and leaves can be quite impressive. The solitary woodrat may have more than one home under rock ledges or on the ground in shrubby areas.
- **#19. Public Restroom**. In front of you is the composting toilet, built in 2001 for your convenience. Please observe the rules for use inside. The trail turns to the right here.
- **#20.** Down the hill to your left is what remains of the original **Hokanson Homestead** built by Swedish settlers in 1878.

The trees on your right are American elm and hackberry. The strong winds have bent and broken these trees and summer heat and drought have slowed their growth.

- **#21.** The trees here are chinquapin oaks, one of two species of oak that occur in the gallery forest. Note the shape of the leaves and the smooth acorn caps.
- **#22**. The large tree seen here was a bur oak. A fungal infection recently killed this stately specimen. It now has a second life as a home for many insects and worms that help to decompose this tree. Expect to see some woodpeckers here.
- **#23**. Cottonwoods and willows indicate the presence of water. A perennial spring issues from the rock outcrop above these trees. Early settlers knew that where cottonwoods grew, water could be found. Perhaps this is the reason that the cottonwood was chosen as the Kansas state tree.
- **#24.** You are at the end of the Nature Trail loop. Continue left to the parking lot.



Funded in part by a grant from the Geary County Convention & Visitors Bureau.



Please take only photos and leave only footprints. No pets allowed!



Please recycle this guide – leave it at the kiosk for others to use.

\$2.00 Trail fee – pays for trail maintenance and upkeep.

More information:

Konza Environmental Education Program

http://keep.konza.ksu.edu





Friends of Konza Prairie http://keep.konza.ksu.edu/friends/





Konza Prairie Docent (Volunteers)
Program
http://keep.konza.ksu.edu/docents/





Konza Prairie Management http://kpbs.konza.ksu.edu/mission.html





Research on Konza Prairie

http://kpbs.konza.ksu.edu/currentresearch.html





Creek Loop (4.7 other trails available: DO **Godwin Hill** Kings (Guided Self-(

Konza Prairie Nature