

#### **Scenic Vistas**

Please enjoy the wide open spaces and all that the Southwind Nature Trail has to offer!



#### For More Information

Tallgrass Prairie National Preserve is a public/private partnership between the National Park Service (the primary land manager) and The Nature Conservancy (the primary land owner).

To learn more, please contact the preserve at: Tallgrass Prairie National Preserve 2480B KS Hwy. 177 Strong City, KS 66869 Phone: 620-273-8494 Email: TAPR\_Interpretation@nps.gov Web: www.nps.gov/tapr



National Park Service U.S. Department of the Interior



Tallgrass Prairie National Preserve Strong City, Kansas

# Southwind Nature Trail -Hiking Guide and Map







# Welcome to the Southwind Nature Trail

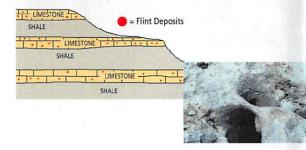
Let the Southwind Nature Trail be your pathway to discovering the wonders of the tallgrass prairie and the Flint Hills. As you cover its 1.75 mile length, you will be transported from the familiar to the unexpected to the spectacular and back again. By the time you are done, what was once unknown and strange will have become both comfortable and friendly, the tallgrass prairie expanding your horizons to match its own.

#### Introduction

One of largest and most diverse ecosystems in North America, the tallgrass prairies of the United States and Canada once covered approximately 170,000,000 acres. Today this area has been reduced to around 4% of its original size, making it one of the most endangered ecosystems in the world. Most of the remaining "native tallgrass prairie" can be found in the Flint Hills of Kansas. Much of the land in North America that was once covered by tallgrass prairie has been transformed into fields of corn, wheat, soybeans, and other crops, as well as grazing pastures, feedlots, homesteads, highways, cities, and towns.

#### Geology

The Flint Hills consist of layers of limestone and shale laid down by scientific estimates between 250 and 280 million years ago, when a warm, shallow ocean covered the area. Differential erosion causes the softer shale to erode much faster than the surrounding limestone, which is much harder, thus giving the Flint Hills their steepness and "stairstep" appearance. Erosion also exposes the fossilized remains of marine plants and animals within the limestone and shale and creates fascinating holes and shapes in some of the rocks.



#### Geology, continued

Chert, more commonly called flint, gives the Flint Hills their name. It is found concentrated within the limestone and is quite hard and erosion-resistant. This property made it a very valuable and useful toolmaking material for several tribes of American Indians, like the Osage and the Kansa, who lived and hunted in the Flint Hills region.

The limestone, shale, and chert occur very close to the surface, making Flint Hills land very difficult to plow for crops. However, since the land was so

difficult to plow, more of the tallgrass prairie's original character has been preserved.

#### Grasses and Wildflowers

The tallgrass prairie ecosystem is ideal for the growth of grasses, with over 70 different species of grasses identified. However, 4 species dominate:



Indiangrass Little Bluestem Switchgrass

Many tallgrass prairie grasses can reach 6 to 8 feet or more in height, with most reaching their full height, given the right growing conditions, in the late summer and fall, leading to the helpful phrase "tall in the fall." Deep roots also enable tallgrass prairie plants to survive harsh conditions, with over 75% of a plant's biomass located underground. This dense network of roots binds the soil together, like steel in concrete, and helps the plants absorb moisture and nutrients.



### Grasses and Wildflowers, continued

Tallgrass prairie is more than just tall grass. Over 400 different species of wildflowers can be found growing throughout the spring, summer, and fall, such as:



Butterfly

Milkweed



#### Cardinal Flower

#### Fire and Grazing

Blue Wild

Indigo

Both fire and grazing are fundamental parts of the tallgrass prairie ecosystem. Without them, the vast diversity of tallgrass prairie life would be greatly diminished. Fire burns away old growth and gives tallgrass prairie plants fuller access to sunshine and moisture, while also challenging and stimulating the plants to grow stronger. Grazing, whether done by native grazing animals, like bison, or by cattle, also stimulates the plants to grow stronger, as well as helps to maintain balance among the many different plant species in the ecosystem.



#### Trees, Streams, and Bottomlands

Trees were often planted around farms and ranches, like the Spring Hill Ranch. Trees can also be found near streams, springs, and other well-watered and protected areas, as well as in bottomland, like the Bottomland Trail area, two miles to the south. In order to survive on the tallgrass prairie, trees need consistent moisture, deep soils, and protection from fire, especially when young.



# Wildlife

Wildlife abounds on the tallgrass prairie, with the wide variety of habitats attracting hundreds of different animal and insect species. Over 40 different species of reptiles and amphibians have been identified in the Flint Hills alone, along with over 30 mammal species, more than 200 species of birds, 30 different fish species, hundreds of species of aquatic invertebrates, and literally thousands of insect species.



## Lower Fox Creek Schoolhouse

As settlement progressed, public education followed, with one-room schoolhouses becoming fixtures in tallgrass prairie life. Schools were constructed as soon as a handful of children could attend, mainly in the winter months between fall harvesting and spring planting seasons, before the children's labor was needed back at home. Operating from 1884 until 1930, this schoolhouse was constructed two years earlier in 1882, using land, building materials, and school supplies contributed by local families.

