

FREQUENTLY ASKED QUESTIONS ABOUT THE TALLGRASS PRAIRIE PRESERVE

How big was the Chapman-Barnard ranch? The ranch was more than 100,000 acres and had up to 40 cowboys in its "heyday." (Chapman - Barnard also had ranching operations in Texas, New Mexico and Colorado.)

When did The Nature Conservancy get involved with this project? The Nature Conservancy (TNC) became interested in the creation of a tallgrass prairie preserve in the late 1970s, and our active and direct involvement began in 1988. We bought the Barnard Ranch in 1989. Since then, we have been soliciting financial support to maintain the restoration effort.

Why this particular site? This was an ideal location for many reasons. Foremost among these are (1) its size, (2) the mix of natural community types found here, (3) the property is bisected by Sand Creek, and (4) it has never been plowed. The Barnards were wise stewards, and the land was in excellent condition.

This region has some of America's most productive grasslands with lots of topographic and soil diversity. We have documented more than 750 different plant species on the Conservancy's 39,653-acre preserve (38,171 acres TNC owned and 1,482 acres leased). The combination of weather, topography, and soil creates a landscape of extraordinary productivity, one that can effortlessly sustain a summer herd size of 2,800 bison. As you visit the Preserve throughout the year, observe the difference in plant growth from the Preserve's south entrance to the Headquarters.

How much bigger will the Preserve get? The Preserve is currently 39,653 acres, or approximately 61 square miles. Another 1,482 acres are leased and 5,950 deed restricted acres. When other properties become available, TNC will look at them within context of the overall conservation plan for the preserve.

Any government funding? No, all private funds.

Why is it important to save the tallgrass prairie ecosystem?

Tallgrass prairie was once one of the largest ecosystems in North America. Now it is the most altered. We want to preserve a viable sample so that it can continue to evolve.

Less than 10 percent of the original tallgrass prairie remains, much of that along railroad rights of way and in cemeteries. The last large examples are in northeastern Oklahoma and eastern Kansas. Because there were originally 142 million acres of tallgrass prairie, we can hardly say we are recreating the entire ecosystem. We are, however, putting an appropriately sized landscape back under the original forces of nature that created and maintained it. In essence, we are trying to protect a viable piece of the tallgrass prairie so plants and animals can continue to evolve under the original disturbance regime.

What are the roles of bison and fire on the tallgrass prairie?

This ecosystem is "disturbance dependent," and fire and grazing bison are the main sources of disturbance.

Grazing bison are essential to a fully functioning tallgrass ecosystem. Their wallowing habits and grazing influences the plant diversity of the prairie and alters composition of the natural communities.

The tallgrass needs fires. The dominant prairie plants are perennials that grow during the spring and summer and become dormant each autumn. Above ground, this cycle leaves vast quantities of dried plant matter -- perfect fuel for fires. Fires eliminate dead vegetation, control encroaching woody growth, and typically increase flowering and prairie productivity.

The grasses and plants of the prairie are highly fire-tolerant. They evolved to withstand the above-ground flames by placing their renewal capacities underground. When a fire hits, the temperature above ground can reach 400 degrees Fahrenheit. But just below the surface, the temperature is normal. After a prairie fire, the ground is charred, but in a few days, new growth is sprouting. Bison are attracted to such fresh vegetation.

How many plants and animals have been found? Over 750 plants, approximately 80 mammals and more than 20 species of fish have been discovered. The bird population, estimated at 300 species, is still being inventoried.

Who owns the oil wells in operation on the Preserve? The Osage Nation owns all of the mineral rights in the county, which includes this Preserve. Independent petroleum producers lease oil and gas drilling rights from the tribe. There are more than 100 producing wells on the Preserve.

What happened to the idea of protecting the tallgrass prairie as a national park? In 1987, Senators Boren and Nickles of Oklahoma and Bumpers of Arkansas introduced a bill to create a Tallgrass Prairie National Park in Osage County. The bill collapsed under the weight of some local opposition. A 1996 bill created the Tallgrass Prairie National Preserve in the Kansas Flint Hills, 11,000 acres at the site of the former Z-Bar Ranch. It will be interesting to see how this Preserve is developed and managed.

Who owns the cattle on the Preserve? TNC enters into contracts grazing of cattle on the Preserve from December through mid-July. A cattle "patch-burn" study was initiated with Oklahoma State University in 2001 on 7,300 acres, and was expanded to 11,400 acres in 2008. This study is testing the wildlife and plant community responses, and cattle gains, in patch-burn versus completely burned pastures. The objective is to achieve similar conservation benefits as those documented in the fire-bison unit by patch burning in cattle units to diversify the landscape.

Will the bison roam the entire Preserve? Not in the immediate future. The bison roam approximately 23,300 acres of the Preserve. In October 1993, 300 bison were released into a 5,000-acre enclosure. As the herd expanded, we enlarged the enclosure to its present size. Most of the remaining acres are currently used for research on cattle grazing. The areas around ranch headquarters and the trail system are kept unstocked.

What will you do with the animals you cull? The animals are sold through a sealed bid process.

Stocking rate? Approximately 10 acres/animal unit/year for bison (an animal unit is a 1,000-lb animal).

Bison predators? No major bison predators (wolves, grizzly bears) exist in Osage County.

Does fire kill animals? Invariably some species will die during a burn, just as they would in a natural fire. Invertebrates usually are killed, but small and large mammals rarely are. When planning a burn, we always allow an escape route for animals. This one reason is why we will never burn the entire prairie at one time.

How do you control the fires? Burns occur only under "prescribed" conditions. The staff ignites fires after measuring such variables of wind, temperature, humidity, and fuel levels (amount of vegetation). The staff calculates the rate a fire will spread and flame height by inserting these variables into an equation. The staff conducting prescribed burns are required by TNC to complete fire training, meet health/stamina requirements and wear approved fire resistant clothing. Detailed planning and staff training occurs prior to conducting prescribed burns.

How are naturally occurring wildfires handled? We will vigorously suppress all fires we do not set.

Who lives in the bunkhouse? No one lives in the Headquarters bunkhouse; it is used for Conservancy purposes. Five permanent staff are living on the Preserve at scattered locations.

When is the Headquarters bunkhouse open to the public? As part of their regular shift, docents provide brief tours of the headquarters when the Visitors Center is open. The tour is limited to the dining room only, and doesn't include the bedrooms. The Visitors Center is locked when a docent, working a shift alone, is providing a tour of the headquarters.

How the Tallgrass Prairie Preserve is different from other preserves ...The Tallgrass Prairie Preserve is an effort to protect an ecosystem at a "landscape level". It is the most aggressive attempt to recreate a functioning tallgrass prairie ecosystem and the largest in North America (more than four times the size of the TNC managed Konza Prairie in Kansas).