



### Introduction

**Area:** Tallgrass Prairie National Preserve is approximately 10,894 acres (4,445 ha), comprised mostly of upland Flint Hills tallgrass prairie. The preserve is currently managed using a varied fire and grazing regime, including patch-burn grazing. Most pastures are grazed with young steers during all or part of the growing season only.

The bison herd is located in Windmill Pasture (approximately 1,100 acres (445.2 ha)). The herd is centrally located on the west side of the preserve and is visible to preserve visitors via hiking trails or the tour bus. The preserve's bison herd is owned and managed cooperatively by the National Park Service and The Nature Conservancy. The herd will be managed as part of the larger Wind Cave National Park bison herd (satellite herd).

### Herd Statistics

**Initiation:** Thirteen plains bison (*Bison bison*) were introduced to the preserve in October 2009, representing the first time bison have been on the property for over 100 years. The bison came from Wind Cave National Park in South Dakota.

Table 1. Number, age, and sex of first bison introduced to Tallgrass Prairie National Preserve (fall 2009).

Number	Age	Sex
4	1.5	Female
5	1.5	Male
2	2.5	Female
2	2.5	Male

**Stocking rate:** Average population is set for ~75 head with a maximum carrying capacity of 100 animals.

**Building the herd:** Recruitment to the herd will occur through natural reproduction and future additions from Wind Cave National Park.

**Round-ups and culling:** No roundups or culling have taken place on the preserve to date. The new bison handling facility is scheduled to be constructed in the summer of 2012.

Height: 6-6.5 feet at the shoulder

Length: 10-12.5 feet

Weight: 900-2,000 pounds (males are larger)

**Current herd size:** 16. Bison calves born on site on May 11 and July 7, 2011.

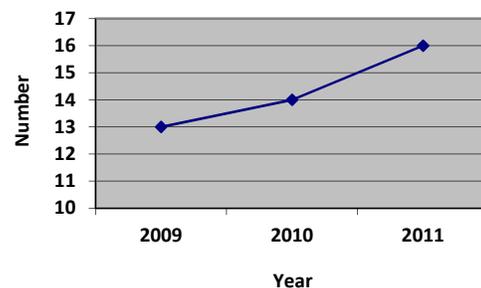


Figure 1. Bison population numbers at Tallgrass Prairie National Preserve (2009-2011).

**General herd characteristics:** Weight of animals introduced to Tallgrass Prairie National Preserve ranged from 410 – 760 pounds.

**Genetics:** All preserve bison were tested for cattle introgression (presence of cattle genes). None of the bison tested positive for mitochondrial cattle genes. Nuclear genetic testing has not been done on the TAPR herd.

# Tallgrass Prairie National Preserve Bison Update



## Age distribution:

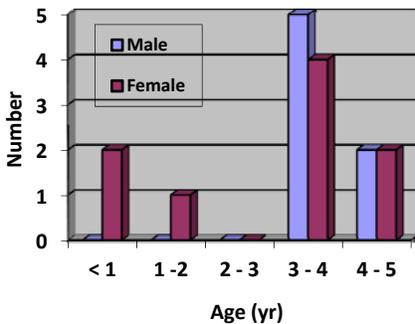


Figure 1. Age distribution of Tallgrass Prairie National Preserve bison herd (fall 2011).

## Reproduction

**Rut:** Female bison typically go into estrus once per year, usually in August at which time dominant bulls begin courting the females.

**Calving:** Females reach reproductive maturity at 2-3 years of age. Healthy females will typically have one calf per year. Peak calving age for females is 9 years of age. Calves are usually born in April-May.

## Behavior

**Wallows:** Bison create wallows up to 5m in diameter and 30 cm deep. Bison frequently urinate in the wallow which disperses clay and creates an impermeable surface. As such, some bison wallows hold water and serve as both sources of drinking water and habitat for wetland plants and animals. Wallows are used to reduce insects and soothe irritated skin during shedding

Lifespan: 18-22 years in the wild, up to 30 years in captivity

## Diet

**Vegetation:** Bison preferentially eat grasses. Their diet may consist of up to 90% grasses, unlike cattle diets that may consist of up to 70% grasses. Their grazing increases the proportion of forbs in the grassland and increases the local plant diversity. Bison preferentially graze in recently-burned areas during the growing season, but preferentially graze in unburned areas during the winter.

**Weight loss over winter:** Bison lose approximately 10% of their body mass over the winter, except for calves which gain ~3%.



Speed: Despite their size, bison are accomplished athletes, able to run at speeds of up to 35 mph