



Lawn/Prairie Conversion



The area described in this site bulletin is the strip of land between the prairie and the sidewalk to the Presidential Grave site, and also the area enclosed by the driveway and the sidewalk. Originally, these areas were planted in a Kentucky bluegrass/exotic fescue blend, like much of the rest of the park. Weekly or more frequent mowing produced the manicured lawn look.

Background

The environment which confronted the first settlers in Iowa looked very different than the rolling corn and soybean fields we see today. Native tallgrass prairie was the dominant landscape, with areas of wetlands, meandering streams, and small areas of woods, mainly oak, walnut, hickory, and along the streams, willow. The West Branch area was a similar type of landscape. However, as soon as those pioneers arrived in the 1830s and 1840s, they began changing the landscape to one that resembled the places they had lived before: agricultural fields cleared

of trees and carefully fenced pastures. Woodlots were coveted sources of firewood and building material for the earliest settlers, in addition to being thought the most fertile soil. The prairie landscape changed very quickly, and by 1874, the year Herbert Hoover was born, only remnants of the vast sea of grass remained in the West Branch area. As a child, Hoover was sent to visit an uncle in northwest Iowa one summer. He remembered living in a sod house, and riding on one of the horses pulling a plow, opening the prairie sod for tilling.

The Current Prairie

The 80 acres of tallgrass prairie at the Herbert Hoover NHS was planted in 1971 as a restoration of that original landscape. The intent was to show visitors what the prairie looked like, and manage rainwater runoff. It also preserves prairie species and provides

a small amount of habitat for prairie animals. In the intervening years more prairie wildflowers (“forbs”) have been added and a regular program of burning replicates the wildfires that maintained the prairie’s health in the past.

The Plan

The Cultural Landscape Report of 1995 recommended that the park consider replacing the existing turf with a “Victorian mix“, a lawn more like those of the late 1800s. It would have a more textured colorful appearance, which could be cut less frequently and be allowed to grow higher than the existing groundcover.

The Prairie Management Plan (PMP) draft recommends development of transitional zones at the prairie edge to

control exotic invasion into the prairie. The PMP also acknowledges the aesthetic and educational benefits of presenting attractive and inviting access points along the edges of the tallgrass landscape. One transitional zone would be located in a high visibility area adjacent to Gravesite parking and walkway. This new planting would provide access for visitors with disabilities to experience a portion of the native landscape.

The Execution

The area enclosed by the sidewalk and the driveway was planted in the low-mow fescues as an experimental planting. The enclosed area was chosen in case the grass did not perform as expected and management chose to remove the grass from the park. Management will determine if this grass should be used to replace some of the high maintenance grasses that exist throughout the park.

A low growing fescue grass mix and a strip of native buffalo grass, another low-growing grass that forms a robust turf, was planted along the south edge of the sidewalk. This serves the same purpose as “Victorian mix.” This low grass will ensure that the sidewalk feels open and unobstructed by tall growing plants.

A mixture of mid-height prairie grasses and forbs further in provides the transition area into the taller grasses of the prairie. This area will take several years to become well established.

Along with the changed vegetation cover an attempt was made to improve the first 20 feet of tallgrass prairie contiguous with the transition prairie. This section was never planted to prairie species. The prairie plants slowly crept into the area of smooth brome and Kentucky bluegrass lawn. Over-planting was used to improve the mix and cover of prairie plants.

All of these areas were planted in 2005, however as the result of the drought we experienced in this part of Iowa none of them did well. Long-term forecasts had called for above-normal precipitation, but Mother Nature changed her mind, resulting in the most severe droughts of the decade. Some recovery has occurred this year (2006), and the park expects good results ultimately.

The Benefits

The benefits of this type of lawn conversion are several:

- First and most obviously, there is much less mowing involved, reducing the costs of gas and labor, and reducing emissions of pollution from the mowers.
- The trees in the converted area will be less exposed to mower damage.
- The fescue mixture will green up earlier and be less likely to go dormant in the hottest months of the summer, providing a more aesthetically appealing experience near the gravesite than brown, dormant bluegrass.
- The fescue mix is not invasive, so it will not compete with the prairie grasses.
- The prairie species are more deeply rooted than bluegrass and provide a better way for water to infiltrate the soil, thus helping to manage storm water runoff.
- The mid-height grasses and forbs smooth the transition into the tallgrass prairie, softening the harsh transition from manicured lawn to six-foot tall plants.
- Finally, bringing the prairie edge down toward the paved walkway provides opportunities for education and interpretation, and access to the prairie edge for everyone.