Cullen Nature Preserve Oak Savanna Restoration - Frequently Asked Questions

What is this property? Who owns it?

The Cullen Nature Preserve is a City-owned property protected in perpetuity under a Minnesota Land Trust Conservation Easement. Ann Cullen Smith and her husband William Cullen purchased the 30-acre property in 1935 and moved to the property in 1937. Ann continued to live in the home for 77 years until 2014. After working with the Minnesota Land Trust, Ann approached the City of Minnetonka and arranged to sell the property to the City for half its value. When she passed away in 2015 at the age of 105, the property was transferred to the City of Minnetonka.

Why are trees being removed?

Since European settlement, savannas (open landscapes with scattered oak trees), have become heavily treed (forested) and ultimately too shaded. The competition for light and nutrients from the non-oak trees impacts the health of the centuries old oak trees. In the excessive shade, the prairie-like ground layer vegetation disappears and oak seedlings fail to grow and thrive. Removing undesirable trees to save this ecosystem is part of an oak savanna restoration process.

What trees are being removed?

In addition to the ubiquitous European buckthorn, there are a number of non-oak trees that will be removed during this oak savanna restoration process. For example, all ash trees will be removed because they did not historically grow in savannas and they are very likely to die from Emerald Ash Borer infections in the near future. Other trees such as box elder and elm will be removed as these are 'new arrivals', invading the open conditions of the savanna in the last 100 years. Also, the trees selected for removal are not tolerant of fire. Historically and in restored oak savannas today, fire is an important management tool used to maintain the open understory and prairie-like vegetation. Oak trees that thrive in savannas have thick bark and are adapted to fire.

Can't you just let nature take its course and do nothing?

The Preserve is overrun with invasive plants such as European buckthorn. Also, it has become too forested. If nothing was done, eventually the majestic oaks would die and the Preserve would be filled with invasive plants. The site would essentially become a biological dead zone and host very little biodiversity.

How much of the Preserve will be savanna?

For this initial restoration phase, about one-third of the Preserve will be restored to oak savanna including the flat-topped knolls and adjoining slopes facing the wetland. The Preserve and the majority of land in Minnetonka was historically oak savanna. No living example remains so this will be the first present-day model of this historic landscape in Minnetonka. Other areas of the Preserve slated for future ecological restorations include a wetland, a southeast wooded knoll, an oak woodland, and hardwood swamp.

What are the advantages of an oak savanna?

Oak savannas are very climate-resilient. These landscapes are more resilient than forested landscapes to over-browsing by deer, invasive species, heat, drought, wind, and weather extremes such as wet or dry conditions. Restored oak savannas are more diverse than prairies and forests and are one of the rarest plant communities in the Midwest. Once restored, the prairie-like grasses and wildflowers will provide food and habitat for a multitude of wildlife, especially bird species.

What is the timeline of the restoration?

The current restoration phase will take two years and includes buckthorn and other woody plant removal, sowing seeds for the ground layer, and prescribed burns.

Why is the Preserve closed to the public?

There are many reasons this recently-acquired property is closed to the public. The primary reason is for safety; large equipment will be operating in the Preserve during the restoration. Also, there are no established trails and many hazards. One way to visit the Preserve is by volunteering. If you are interested in volunteering to help with this restoration, please email the Friends of Cullen Nature Preserve at CullenNature@gmail.com