CULLEN NATURE PRESERVE HISTORY

In 1929, when Ann Wilder Jewett married William Westphal Cullen, she couldn't have imagined the long life and adventures ahead. And she might have been amazed to learn that the property where she and William raised their children would someday become the crown jewel of Minnetonka's open space preservation program.

The Cullen Nature Preserve, a 30-acre parcel located between Meadow Park and Interstate 494, was acquired by the City of Minnetonka upon Ann's death in 2015. It is one of the largest, single unspoiled parcels of land in Minnetonka, with rolling upland, wetland, multiple knolls and majestic old oaks.

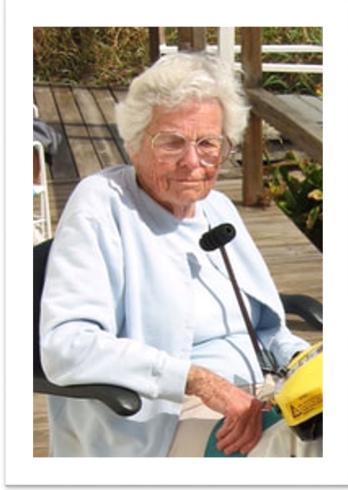
The preserve is not yet open to the public but will eventually be used for passive activities including bird watching, hiking and nature observation.



Meet Ann

Ann lived a vibrant life, traveling the world and staying active in community organizations and politics. But she was always delighted to be at home, where she and her family raised vegetables, kept chickens and followed the annual rhythms of nature.

After William's death in 1970, Ann remained on their beloved property. In 1978 she married G. Kendall Smith. Ann passed away at the remarkable age of 106.



A Changing Landscape

The City of Minnetonka established its Open Space Preservation Task Force in the 1990s, and in 2001 passed a referendum that prioritized preservation of high-value landscapes in the city. By this time, houses had been built on all sides of Ann's property and many developers called her with purchase offers. She refused them all.

Instead, Ann approached the City with a proposal. She would sell her land to the City below market value, with two conditions:

- . The land would be transferred upon her passing
- The Minnesota Land Trust would hold a permanent conservation easement and work with the City to ensure that the Cullen property remained in its natural state in perpetuity.



Historical view of the Cullen home

What is a conservation easement?

Conservation easements are individually tailored agreements through which landowners voluntarily limit the use and development of their property to permanently preserve its natural or scenic features. These features, called conservation values, include significant wildlife and plant habitat, wetlands, lake or river shoreline, and other important landscapes that benefit the public.





Natural Resources

CULLEN NATURE PRESERVE CHALLENGES & SOLUTIONS

Vegetation and tree surveys conducted in the mid-1800s, prior to settlement, reveal that the land within and around Cullen Nature Preserve was primarily oak woodland, oak openings and barrens dominated by white oak and red oak. This served as a transition zone between wildfire-prone prairies and adjacent deciduous forests vulnerable to fire.

As in many parts of Minnesota, more than 80 years of **fire suppression** allowed Ann Cullen Smith's property to become more heavily wooded. The understory has filled in with a mix of native trees (including green ash, boxelder, elm and ironwood) with a dense understory of buckthorn and other **invasive species** that choke out native understory plants. Over that same period, loss of top predators allowed the deer population to expand—and **deer browsing** has caused the decline of most wildflowers.



Aerial photo from 1940, showing large oak trees with gaps that supported diverse shrubs, wildflowers and other native plants...



...compared to this 2021 view of the overgrown parcel, degraded woodland and expanding wetland.



This large white oak at Cullen Nature Preserve is surrounded by mature buckthorn. Restoration—including the removal of buckthorn and some pioneer trees, prescribed burns to open the understory, and seeding of native plants—will increase plant diversity, which in turn will support more insects and wildlife.

Cullen Nature Preserve's conservation easement includes the protection of the property with a goal of preserving its **key conservation values**:

- . Protect the open and natural features, wetlands and mature forest of the property providing habitat for a variety of plants and animals
- . Provide future opportunity for public education and passive use such as nature observation, study, and reflection.



CULLEN NATURE PRESERVE RESTORATION

Restoration takes planning and time. And it can look messy for a while—but that's part of the process. The end result will be a more diverse, ecologically functional and healthy environment for future generations and wildlife.

RESTORATION GOALS

- Remove invasive plant species in the restoration units (marked on the map at right)
- . Establish a diverse native grass, sedge, and forb ground layer
- . Promote regeneration of oaks
- . Enhance wildlife habitat—particularly for birds
- . Reduce erosion and sedimentation
- . Improve soil health for the existing wetlands and ravines or drainage areas on the property.

TIMELINE:

2017-2021:

- . Identified high-priority management areas
- . Staff, contractors and volunteers worked to control garlic mustard
- . Goats were employed as one of many restoration tools in upland areas
- . Working on a long-term management plan
- . Cut buckthorn from Oakland Road to areas around the former home site
- Protected native plantings with fencing
- . Released biological control beetles to control purple loosestrife in wetlands

Winter 2022

Large-scale buckthorn removal and selective tree removals to dramatically increase the light and views across the landscape, with ongoing invasive species control

Summer - Fall 2022

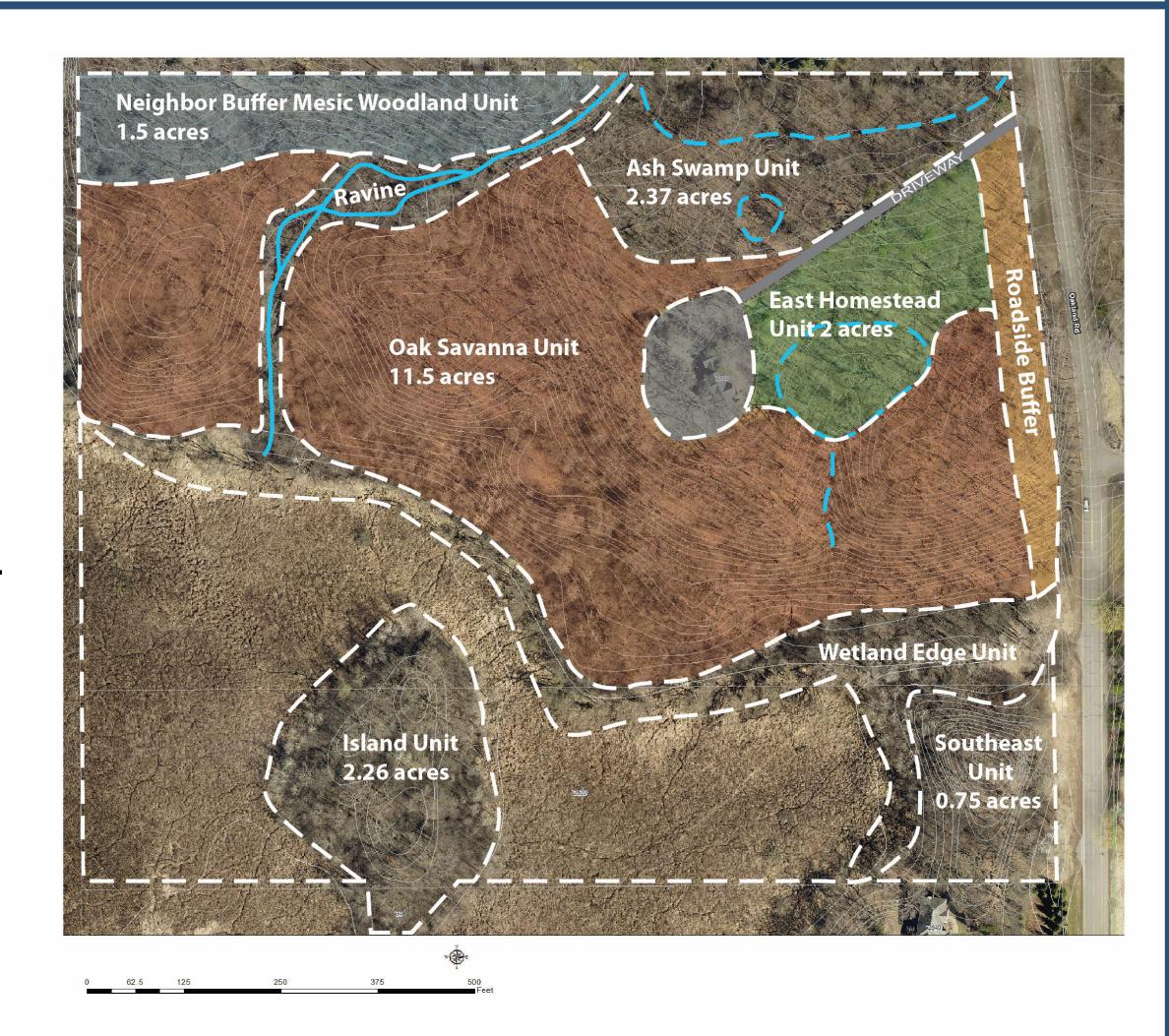
- . Seeding of prairie savanna and woodland native plants throughout the 15-acre grant project areas
- . Performing a prescribed burn when conditions are appropriate (2022 or 2023) to further control invasive species and mimic conditions native plants in this region have evolved with.

Winter 2022

. Continue buckthorn and invasive species removal as needed; seeding as needed.

FUNDING

The Friends of Cullen Nature Preserve and Bird Sanctuary have been instrumental in recruiting volunteers and securing two grants: a \$25,000 Hennepin County Good Steward Grant and a \$45,000 DNR Conservation Partners Legacy grant. Those dollars will be supplemented by \$20,000 in matching funds from the City and \$10,000 in-kind contributions from the Friends.





Natural Resources

CULLEN NATURE PRESERVE OUTCOMES

Why spend money and time to restore this landscape? Because the benefits will be priceless!

- Greater plant diversity at all levels—from the ground up to the tree canopy
- Restoration of the soil biome, which includes bacteria and fungi that exchange nutrients with living plants
- Thriving populations of insects and other organisms that decompose dead plant material and release nutrients for reuse
- Improved water quality, as healthy soils capture and store more stormwater and snowmelt
- Carbon storage in the soil and plant material
- Erosion mitigation
- Enhanced pollinator and wildlife habitat
- Possible return of species, such as the red-headed woodpecker, that were once common here
- A more climate-resilient community
- New opportunities for education and nature-based experiences







MISSION

Our mission is to honor the vision of Ann Cullen Smith while ensuring the preservation and restoration of the Preserve's native flora, water quality, and wildlife populations.

BRING BACK BIODIVERSTY

The Friends, along with the City, have been awarded county and state restoration grants. The Preserve will be transformed from a degraded state, choked with buckthorn, to a rich biodiverse habitat.

GET INVOLVED!

Bird and Plant Surveys
Invasive Plant Removal
Fundraising
Outreach
and more!



We envision a future preserve that will provide low-impact, passive-use opportunities, that will foster an understanding and enjoyment of the natural world!

www.CullenNature.org