W.E. SMITH, WAU-KE-NA PRESERVE'S FIVE-YEAR PLAN

Imagine you're a migrating monarch butterfly, following the Lake Michigan coastline on unlikely papery wings, searching for places to rest and refuel. Your sensors tell you there are ample flowers in the prairie below, so you stop to check them out. You've found SWMLC's W.E. Smith Wau-Ke-Na Preserve, South Tract.

Nineteen years ago, a man named William Erby Smith did a wonderful thing: he donated 365 acres of prairie, wetlands, forests, farmland, and Lake Michigan shoreline to SWMLC. Divided into separate north and south tracts, he called them both Wau-Ke-Na (WKNA). With generous forethought, he set aside an endowment to protect, maintain, and enhance the land's special natural features and biodiverse habitats. With this endowment, SWMLC has turned farmland into prairie, removed invasive plants, maintained trails and infrastructure, and planted nearly 4,000 native trees. Looking ahead, we're eager to put a new set of initiatives into action that will continue this legacy of care.

Grasslands Initiative – Wau-Ke-Na South Tract

Imagine you're three inches tall and feathered. You search the grass for bugs to feed to your babies back at the nest. You belt out a song to warn others to keep out, this is your plot. Yours is a pretty good, open territory – except for the nearby tree line where hawks sometimes spy from the branches and lurking raccoons come in the night to look for food, including baby birds.

Recent studies show that grassland bird populations have dropped by a staggering 75% in the last 50 years, and desperately need help. Rare grassland species like bobolinks, Henslow's sparrows, savanna sparrows, eastern meadowlarks, sedge wrens, American kestrels, and Northern harriers need large, open spaces for successful nesting – and all these birds have been documented in

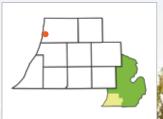
WKNA-South's restored prairies. But the preserve's potential is stunted by the planted conifers, invasive shrubs, and old brushy tree lines that break the large areas into small ones. A grassland bird that needs 40 open acres to nest successfully may see a 50-acre prairie with a brushy tree line through the middle as two separate 25 acre prairies - neither of them large enough for nesting.

We want to unite these smaller habitats into one great big one to enhance the preserve's appeal to grassland birds. The initiative will begin by heavily thinning the tree lines, using prescribed fire to kill the invasive shrubs, and removing the overgrown "Christmas trees" that block these grassland connections. Planted prairie vegetation will fill the gaps in the tree lines, using a custom mix of grasses, sedges, and wildflowers that are fine-tuned for grassland bird species. When all of these future improvements are finished, WKNA-South's grassland complex will be over 100 acres - beyond the critical threshold that many of these bird species need to thrive!

Forest Initiative - Wau-Ke-Na North Tract

Imagine you're a sapling tree, planted by humans far away from your parent. Safely nurtured inside a plastic tube that protects you from rabbits and deer, you reach for the sky and unfurl your leaves in a burst of enthusiastic foliage at the top.

While the South Tract is open to the sky, WKNA-North is forested. Some of this is native tree species but, many years ago, about 30 acres were planted with non-native Douglas firs to replace an old orchard. These trees don't offer good wildlife habitat and are so poorly suited to our climate that most are diseased or dead. So, in an effort to turn this area into a diverse future forest that traps carbon and can survive in the face of climate change, SWMLC staff and volunteers



Learn more about Wau-Ke Na North and South Tracts by visiting the Preserves page on our website: www.swmlc.org/ public-nature-preserves



Remove brush/ trees and burn and plant seed 23 acres 16 acres

planted nearly 3,000 individual trees and shrubs of 20 different

native species in a 10-acre area between 2020 and 2022 (see the story in *Protecting Nature*, Vol. 30, No. 2). Over the next five years, we will continue this initiative by planting native trees in another 10 acres of this degraded habitat and create study areas to monitor the existing forest. In the coming decades, these climate-adapted forests will stretch their canopies to touch one another, creating young forest habitat, and shading preserve visitors as they leisurely walk the trail to the lake.

Infrastructure Initiative – Updating Buildings and Trails

WKNA-South's web of wet trails is admittedly a confusing puzzle. We aim to solve this issue by tangle-taming the trail system, re-routing where needed, and providing better info to visitors with a trailhead kiosk. We also plan to pull down two of the old buildings that are in poor shape, while improving the one that is structurally-sound with upgraded electricity and a frost-free water spigot.

Outreach - Elevate recognition of the critical role these preserves play in both ecological and human

Imagine you're a human child scampering down the trail, excited to have a natural place to explore and look for colorful leaves, fancy fungi, and neat bugs.

We feel that Wau-Ke-Na and our other nature preserves are essential to the wellbeing of both people and wildlife - and want the community to understand the true value of these beautiful natural areas by using them, cherishing them, then translating that affection into support for all of SWMLC's important conservation work across the region.

One way to do this is by helping people understand the important role that a natural Lake Michigan coastline plays for migrating animals. Working with Kalamazoo Valley Bird Observatory, we plan to install a Motus radio telemetry tower, a device that tracks the flight of migrating birds, bats, and insects, then uploads the data to a an online public hub. Similar towers have been placed at many locations around the region to create an overlapping network that detects migrating animals as they fly by. A Motus tower at WKNA-South will collect critical information that fills a hole in that network, while also exciting and informing the public. Stay tuned for more about this in the future!

We're also very grateful for the vigorous efforts being made by SWMLC friend Mo Lewandowski to have WKNA officially recognized as a Dark Sky Park – an international designation that preserves dark night skies by identifying special locations with little to no light pollution. With miles of dark lake to the west and little inland development, we hope that WKNA has a very good chance. And because light pollution is also bad for migrating birds (which often fly at night), this designation would pair nicely with the rich habitat being created for migrating birds. If achieved, this status would provide a great platform for future community connections. (See more about Mo's work in the Summer 2023 issue of Protecting Nature).

William Erby Smith provided the vison and means to see that the two properties that make up WKNA remain valuable and critically important to our community of people and wildlife. We look forward to carrying that legacy into the future!

W.E. Smith, Wau-Ke-Na Preserve, South Tract | Amelia Hansen