Middle Rock Conservation Partners

Photo-points and summary comments by Bill Kleiman

October 10, 2023

Hill Site photo-points before any brush work or fire, and after photos of June 15, 2021 and then November 26, 2022 and now October 10, 2023



June 15, 2021 pano view north of boundary pt 3 with neighbor on right and cleared MRCP land on left. The neighbor's thick brush is a good view of untreated brush that looked like the entire Hill Site before management.



November 27, 2022 panoramic view north of boundary pt 3 with neighbor on right and cleared MRCP land on left. The thick Canada rye is from planted seeds.

Hill Site from several years back before **MRCP** purchase



1939 Hill Site

- Before old world settlement the tract was likely frequently used by Native Americans, as it sits on high ground above a major river. Frequent fire was the norm.
- By 1939 the tract was likely a prairie and oak savanna with livestock grazing.
- Grazing stops, 80 years go by and the brush and trees fill in.
- To restore good oak savanna habitat with a diverse herbaceous and shrub layer would be an uncommon success. We started thinning brush and trees just after the MRCP purchase.



- This presentation shows photo retakes of 2019 vegetation before any brush clearing, before fire, or weed work or seed additions were made to the Hill Site. The "after" photos are from June 15, 2021 and November 26, 2022 and now October 10, 2023.
- Vegetation data was taken in 2019 that confirmed a heavily brush encroached oak savanna with an understory of invasive brush and ground layer of weedy plants. See website <a href=here for details of that survey.
- From Fall 2019 to now vigorous restoration work has been done by hand crews with chainsaws and basal bark herbicide, a large brush mower that MRCP purchased, and a local logging crew with their equipment. Native prairie seed was added to some of the oak savanna.

Photo and vegetation sampling was random with location points generated and numbered on a map



A closeup of some of the random points.

The data and photos correspond to these numbers.



In this summary just four photo locations of 50 are shown here. Photos were taken on June 15, 2021 and November 27, 2022 and then October 10, 2023

- The GPS function on the phone is what took me to the re-take position for photos. There are no permanent place markers. There is about a 20 feet accuracy in these GPS locations, so they don't always line up like a fixed photo point with say a tee post in the ground.
- In 2023 I used a slight panoramic photo to better see the area.

Point 4 photos looking north

August 5, 2019



June 15, 2021



Point 4 photos looking down

August 5, 2019









October 10, 2023 – this spot is currently a brush pile burn scar





Point 15 photos looking north

August 5, 2019





Point 15 photos looking down

August 5, 2019

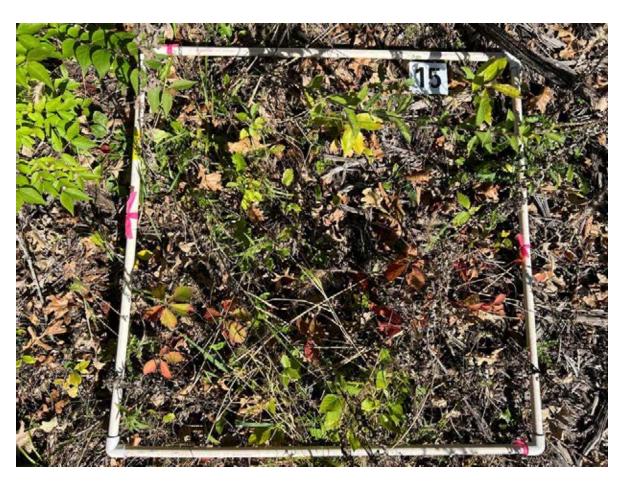


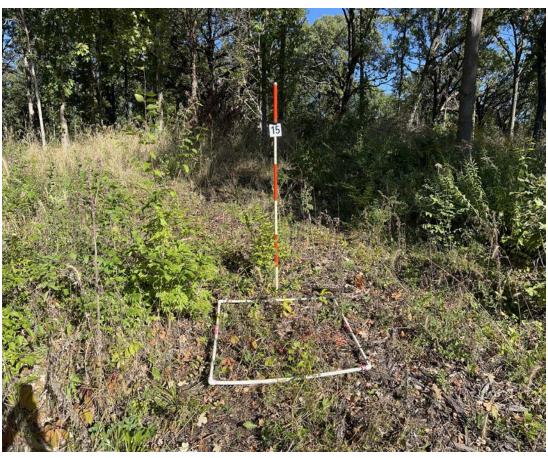






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Point 39 photos looking north

August 5, 2019





Point 39 photos looking down

August 5, 2019









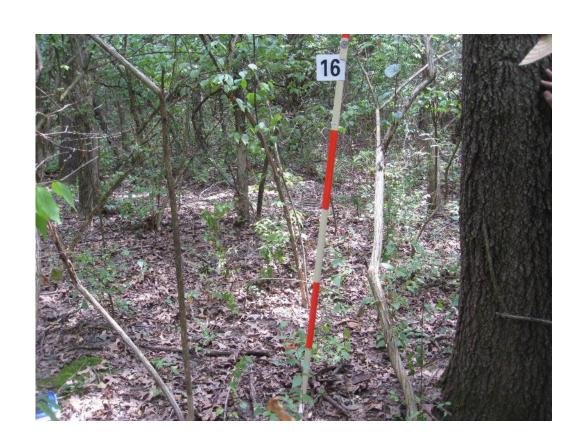
October 10, 2023



Point 16 photos looking north

August 5, 2019

June 15, 2021.





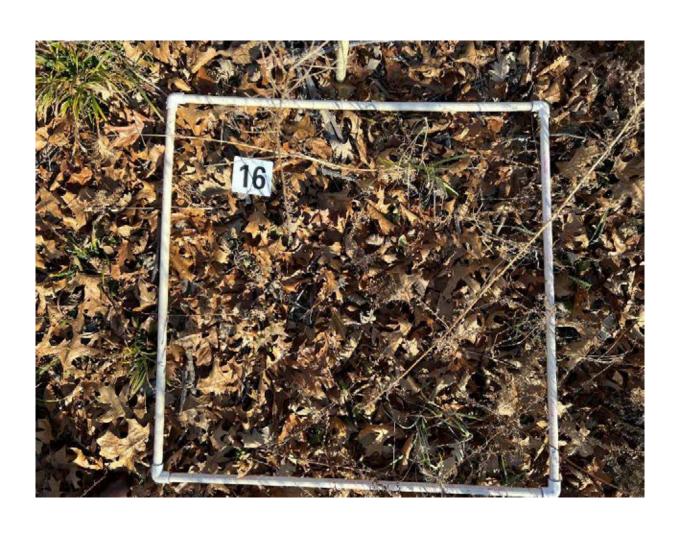
Point 16 photos looking down

August 5, 2019









October 10, 2023









My take on the vegetation at the Hill Site

Overall we are making great progress.

I am pleased with this photo monitoring that we did because we linked the photos to vegetation data that we collected. Before we did any work on the site we laid 1 meter pvc frames in random places which we GPS way-pointed to return to in subsequent years. On these 1 meter quadrats we recorded every species of plant. We then took a photo looking down at each of these plots and we took one photo looking north at the habitat. We have not re-sampled the vegetation yet. We will re-sample after five years.

What follows is my summary of the status of different habitats at the Hill Site.

Oak woods and oak savanna: With a lot of effort by various people, with Damian Considine with the most hours there, we are successfully thinning the brush and un-wanted weedy trees. This work gets us the structure of an oak woods/oak savanna so that those big old oaks can now have their acorns sprout, take hold, become saplings, young trees, and someday the next generation of majestic oaks. A diversity of wildlife will benefit, from tiny insects to various birds, white tail deer and turkey.

The original vegetation sampled confirmed that the native ground layer of flowers, sedges, rushes and grasses were just about gone. Instead, what survived the heavy shade of the brush were weedy plants and exposed soil. This data can be found at the MRCP site <a href="https://distriction.org/line-nativ

In the areas where we first cleared brush we spread a modest diversity of seeds and those plants established and are abundant now. For instance, the abundant Canada rye grass in the photos is from that seed mix. Other plants seen from this seed source are lead plant, white indigo, bee balm, wild quinine and others. There is a lot of other diversity we should seed in there over time. We have also seen a few plant species that survived the shade, including a scattering of shooting stars.

Many shrub re-sprouts need to be herbicide treated, preferably with basal bark applications to avoid the heavy off-target impacts of foliar applications. We also will need to mow again some light infestations of shrubs.

Continued...

<u>Wetlands:</u> We have two small wetlands there. We thinned much of the brush on them. I know the south wetland has a few species of native plants left, but also a lot of reed canary grass. We can work on the reed canary after we get rid of the downed brush and stumps.

<u>Ag field planted to prairie</u>: The Nachusa crew planted a rich prairie on the former soy corn field there. That planting seems to be establishing well. I am optimistic that in a few more years it will at least look like a remnant prairie. The planting report for that is here: <u>Planting 134 Report at Hill Site</u> The planting will need some attention for the next few years to keep out some common weeds.

MRCP needs and welcomes volunteers to help us with caring for this site. Don't be shy. Contact one of us and will get you a good mentor.

-bk

The work continues.

The MRCP service truck and brush mower



Tree thinning equipment

