

Haying at Zylstra Preserve

Summer 2021 Report

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Goals



Our objectives for the first year of our short-term lease of the haylands at Zylstra Preserve were to get to know the land and current soil conditions, to practice with techniques and equipment that are new to us, and to put up both haylage and dry hay for use by a number of farms, ranging from full-time commercial operations to small homestead flocks.

We aimed to prioritize sustainable practices and respect for community in this mix-use public space and saw many opportunities for educational outreach about agriculture.



Haylage

We put up roughly 180 small round bales of haylage in late May/early June. Haylage is baled and wrapped within 24 hours of cutting to maintain maximum nutrition and to allow harvest without a 6-9 day dry weather window. Because it's cut earlier in the season, grasses can regrow before the period of summer dormancy arrives.

Dry Hay

In June we made about 1000 small square bales of dry hay on the upper field. The area marked in red represents the total area we hayed. Greg Black hayed the 14 acres shown in green. Roughly 300 bales were lost because of rain and mulched back into the pasture.

Rest

Roughly 40% of the leased acreage, west of the lake, was mown but not harvested, allowing the land to rest.

Hay School



Community Education

Opportunities to partner with other small farms arose organically during the harvest. Brien Sesby brought equipment and experience to the project and farmers from seven other farms helped with labor in exchange for part of the harvest. An informal community hay school was born as people learned to drive tractors, operate equipment, troubleshoot problems, and read the grass to determine readiness for baling. It was a terrific opportunity for beginning farmers who don't have the land or capital to invest in haying equipment themselves, but keep animals, need hay, and want to learn valuable skills. With contract haymakers on the island aging and retiring, there is urgent need to keep these skills alive in our community. Running a project like this on public land seems particularly meaningful and we hope to organize a similar effort for 2022.

Soil Testing & Research

To root our understanding of the health of the land in science, we took soil samples in the fall and established a test plot west of the outflow to study mechanical compaction remedies—chain harrow, aerator, both, and control—with researchers from the WSU extension office. This area is marked with flags.



Soil pH is low at 5.5%; this could be corrected with lime. Minerals are within the desirable range, apart from low potassium. Organic matter in the soil is low at 5.2%. Building organic matter takes a lot of time; managed grazing is one of the only ways to do it without a great deal of expense. We would be interested in bringing sheep into the ecosystem at Zylstra to help improve the pastures and soil.

Next Steps

In 2022 we plan to harvest the fields west of the lake and possibly a small part of the east field.

We had hoped to apply lime to the pastures in the fall of 2021, but unusually wet weather and ferry service breakdowns prevented this. We looking forward to working with the Land Bank to help steward this special preserve in 2022.

We will reach out to our small farms network this spring to organize the haying collaboration in advance, and we would like to structure a community education opportunity for the public to come view the work and ask questions.



2021 Details

Hayed: 48 acres (May–July)

- * roughly 1.15-1.5 tons hay/acre
- * roughly 15% haylage, 85% dry hay
- * Lost 5-6 acres to rain

8 participating farms:

- * 3 commercial operations
- * 3 homestead flocks
- * 1 horse boarding operation
- * 1 advisory

Mowed: 24 acres (August)

- * 20 hrs mowing; 1.75 setup & transport
- * 5-7" stubble height
- * 6' flail @ ~ 4.8mph

WSU Test Plot: Fall & Winter '21

- * Aeration & Compaction Study

