

MN-REDWOOD2

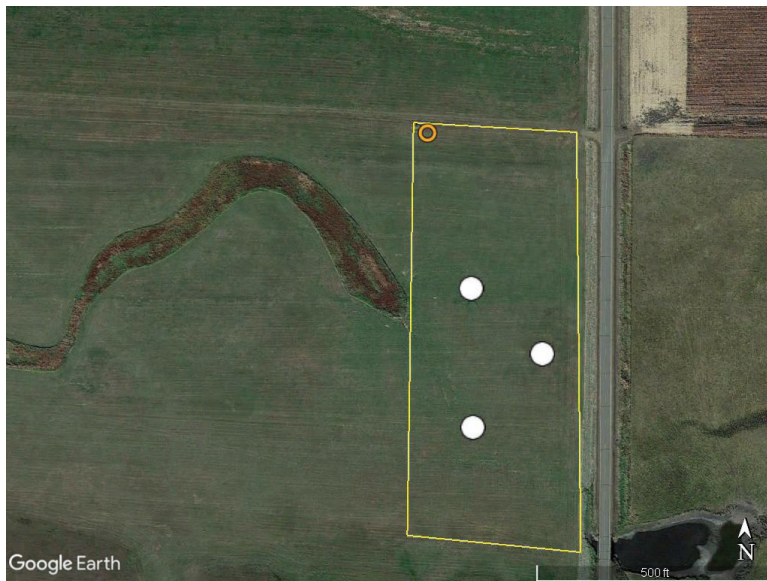
Non-drained

Jeff Strock



SITE SUMMARY

A portion of a field, (16-acres), was selected, based on historical information of management history and was known not to have been previously cultivated (ca. 1885), to represent land in an “undisturbed”, pre-cultivation condition. This field was composed of a mixture of native and non-native vegetation dominated by smooth brome grass (*Bromus inermis* Leyss.), Kentucky bluegrass (*Poa pratensis* L.), Canada goldenrod (*Solidago canadensis* L.), and common milkweed (*Asclepias syriaca* L.), among others, and was never cultivated for crop production. Although this was not a “pristine” prairie, the land had never been tilled, which made it an ideal candidate for this experiment as it offered an opportunity to directly measure soil properties and soil hydrology on an undrained, uncultivated area of land. Cattle grazed the land until 2000, and between 2000 to 2013, the field was harvested for forage in mid-summer. The field was mapped as a Havelock loam soil.



□ Non-drained plot ○ Soil Sampling Location ○ Soil Moisture Sensor

Figure 1. Plot map of research area at MN-Redwood2

Box 1. Site info

CHARACTERISTICS

- Soil: Havelock and Nishna clay loam
- Rotation: Perennial vegetation

WATER MANAGEMENT PRACTICES

- Non-drained

MEASUREMENTS IN DATABASE

SOIL

- Soil moisture (2016-2017)
- Soil texture, sand, silt, clay percentage, (2011)
- Bulk density, , water content, matric potential, pH, CEC, SOC, total N (2011, 2013, 2015)
- NO3 concentration (2013-2014)

DATA ACCESS

Data from this site are available through the USDA National Ag Library Ag Data Commons repository (<https://doi.org/10.15482/USDA.ADC/1521092>) or the interactive website at Iowa State University with visualization and querying capabilities (<https://drainagedata.org>).

ACKNOWLEDGEMENTS

TRANSFORMING DRAINAGE PROJECT

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