

Preliminary Flora of Trempealeau River Meadow, Buffalo County, Wisconsin (State Natural Area No. 346)

Report to the Wisconsin Department of Natural Resources
Bureau of Endangered Resources

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Summary

Eight members of the Botanical Club of Wisconsin inventoried vegetation at the Trempealeau River Meadow State Natural Area in Buffalo County, Wisconsin on July 14, 2007. Compiling information from sight records from four lists resulted in a total of 105 vascular plant taxa recorded. These numbers are not considered complete because time did not allow a thorough exploration of all parts of the state natural area, and because ephemeral, early- or later-blooming vascular plant taxa may have been missed. No rare vascular plants were observed.

Introduction

The Trempealeau River Meadow State Natural Area (SNA) covers 443 acres and consists of one contiguous unit (T20N, R10W, sections 19, 20, 29, 30) bounded on the west by Doelle Valley and River Rds.; on the north by the Trempealeau River and a geographic line; and on the east and south by hills. Established as a SNA in 2002, the property is primarily a wetland complex dominated by emergent aquatics on the west that could generally be described as sedge meadow with increasing wood vegetation further east. Trempealeau Meadows is located in the Driftless Area of Wisconsin. For further access, map, and site description, see <http://dnr.wi.gov/org/land/er/sna/sna346.htm>.

In 2007 the Botanical Club of Wisconsin (BCW) initiated a project to conduct botany blitzes of state natural areas that were in need of plant inventories. After several months of screening State Natural Areas with the WI Department of Natural Resources SNA program, Trempealeau River Meadow State Natural Area was selected for a botany blitz. Current plans include up to three trips to selected SNAs to inventory plants flowering at different times of the year. This report is therefore considered preliminary until the surveys are completed.

Site description

Most of the Trempealeau River Meadow State Natural Area is wetland except for a planted prairie on the west side of the property. The central and western side of the property is mainly herbaceous, emergent plants with more woody vegetation on the eastern side. The eastern side of the property is bordered by the Trempealeau River. For further general plant and community descriptions, see <http://dnr.wi.gov/org/land/er/sna/sna346.htm> .

Methods

The checklists that follow, compiled by eight members of the Botanical Club of Wisconsin on July 14, 2007, are evidence of the level of floristic diversity present. Starting at 10:00 a.m., the eight members present divided into two equal teams. The Freckmann team consisted of Brad Church, Bob Freckmann, Abbie Meyer, and Laurie Yahr. The Gerber team consisted of Armund Bartz, Tom Eddy, Tim Gerber, and Brian Neil. Each team was given a map and description of the SNA, a WI Department of Natural Resources “Plant Community Species List” for sedge meadow, tall shrub, cattail marsh, and a Wisconsin State Herbarium species list for Buffalo Co. Four transects were established on site to best sample the western side of the property. In the morning, the Gerber team followed a transect line (#1) from the junction of Doelle Rd. and River Rd. Also in the morning, the Freckman team followed a transect line (#2) running due east from the River Rd. parking area along the west side of the property; this line was parallel to and south of the transect line #1. In the afternoon, the Gerber team followed a transect line (#3) running northeast from the wetland access point at the bottom of the slope from the planted prairie area. Also in the afternoon, the Freckman team followed a transect line (#4) southeast into an area with woody vegetation.

Frequency estimations (A-abundant, C-common, O-occasional, R-rare, based on the WI DNR Plant Species List Legend) were recorded for some transect lines. Nomenclature for the vascular plants is based on Wetter et al., 2001. Vascular plant listings are sight reports and some vouchered specimens were collected for the more difficult groups (e.g., *Carex*). Collected specimens will be housed in the University of Wisconsin-Stevens Point herbarium.

Results

Table 1. Vascular plants recorded from four transects located on the western side of Trempealeau State Natural Area.

Species	Transect 1 (Gerber gp)	Transect 2 (Freckmann gp)	Transect 3 (Gerber gp)	Transect 4 (Freckmann gp)
<i>Acer negundo</i>	X			R
<i>Agrostis gigantea</i>	X	X		R
<i>Ambrosia artemisiifolia</i>			X	R
<i>Ambrosia trifida</i>			X	
<i>Angelica atropurpurea</i>	X	R		U
<i>Apios americana</i>		R		U
<i>Asclepias incarnata</i>	X	R		U
<i>Asclepias syriaca</i>	X			U
<i>Aster firmus</i>		U		C
<i>Aster novae-angliae</i>	X			
<i>Aster puniceus</i>	X	R		R
<i>Aster lanceolatus</i>		R		U
<i>Barbarea vulgaris</i>			X	
<i>Bromus ciliatus</i>		R		U
<i>Calamagrostis canadensis</i>		R	X	U
<i>Caltha palustris</i>		R		U
<i>Campanula aparinoides</i>	X	R		U
<i>Carex bebbii</i>		R		U
<i>Carex hystericina</i>	X	R		
<i>Carex lacustris</i>		R		C
<i>Carex lasiocarpa</i>		R		R
<i>Carex stipata</i>		R		R
<i>Carex stricta</i>	X	C		A
<i>Carex trichocarpa</i>	X	U		C
<i>Carex vulpinoidea</i>	X	R		U
<i>Chelone glabra</i>	X			
<i>Cicuta bulbifera</i>				R
<i>Cirsium arvense</i>	X			U
<i>Cornus amomum</i>				U
<i>Cornus stolonifera</i>	X			U
<i>Dryopteris cristata</i>		R		R
<i>Dulichium arundinaceum</i>	X			
<i>Echinocystis lobata</i>	X			

<i>Elytrigia sp</i>				U
<i>Equisetum fluviatile</i>	X	R		U
<i>Eupatorium maculatum</i>	X	C		C
<i>Eupatorium perfoliatum</i>	X	R		U
<i>Festuca pratensis</i>				U
<i>Galium asprellum</i>		R		U
<i>Galium boreale</i>		R		R
<i>Glyceria canadensis</i>				R
<i>Glyceria grandis</i>	X	R		U
<i>Helenium autumnale</i>	X			
<i>Helianthus grosseserratus</i>			X	R
<i>Helianthus tuberosus</i>		R		R
<i>Impatiens capensis</i>	X	R	X	U
<i>Iris sp.</i>			X	
<i>Juncus dudleyi</i>		X		R
<i>Juncus effusus</i>	X			
<i>Juncus sp.</i>		R	X	
<i>Lathyrus palustris</i>		R		R
<i>Leersia oryzoides</i>		R		U
<i>Lycopus americanus</i>	X	R		U
<i>Lycopus uniflorus</i>	X	R		U
<i>Lysimachia terrestris</i>		R		U
<i>Lysimachia thyrsoflora</i>		R		U
<i>Medicago lupulina</i>			X	
<i>Mentha arvensis</i>	X	R		R
<i>Menyanthes trifoliata</i>				R
<i>Myosotis scorpioides</i>			X	
<i>Onoclea sensibilis</i>		R		R
<i>Oxalis stricta (O. europaea) – R</i>			X	
<i>Parthenocissus vitacea</i>				R
<i>Phalaris arundinacea</i>	X	C		U
<i>Phleum pratense</i>		X	X	U
<i>Phragmites australis</i>		R		R
<i>Poa palustris</i>	X	R		C
<i>Poa pratensis</i>				U
<i>Polygonatum biflorum</i>				R
<i>Pycnanthemum virginianum</i>		R		R
<i>Rubus idaeus</i>				R
<i>Rubus occidentalis</i>				R

<i>Rumex crispus</i>				R
<i>Rumex orbiculatus</i>				X
<i>Salix discolor</i>	X			U
<i>Salix nigra</i>		X		X
<i>Salix petiolaris</i>		X		U
<i>Sagittaria latifolia</i>	X	R		U
<i>Schoenoplectus tabernaemontani</i>	X			R
<i>Scirpus atrovirens</i>	X	R		U
<i>Scutellaria galericulata</i>		R		U
<i>Silene nivea</i>	X			
<i>Solanum dulcamara</i>		R		R
<i>Solidago canadensis</i>				C
<i>Solidago gigantea</i>		U		U
<i>Stachys tenuifolia</i>				U
<i>Stachys palustris</i>		R		
<i>Stellaria aquatica</i>		X	X	U
<i>Teucrium canadense</i>	X	R		U
<i>Thalictrum dasycarpum</i>		R		R
<i>Thelypteris palustris</i>				U
<i>Typha latifolia</i>	X	R		U
<i>Ulmus americana</i>				R
<i>Urtica dioica</i>		R		R
<i>Verbena hastata</i>	X	R		U
<i>Vernonia fasciculata</i>	X	R		U
<i>Veronicastrum virginicum</i>			X	
<i>Viburnum lentago</i>	X			
<i>Viola sp</i>	X			
Total = 105	39	58	14	79

Vascular plant discussion

Trempealeau River Meadow State Natural Area can generally be characterized as a wetland complex. At 443 acres, there was no chance of our small groups to survey the entire SNA in one day. Therefore, we chose to use four transects (Table 1) to survey the western side (approximately one third of the entire SNA) of the property.

Transects 1 and 2 were chosen so that we could best survey the wetlands. There is a planted prairie on the western side of the SNA which is located at higher elevation just south of transects 1 and 2; however, we chose to stay out of the prairie and concentrate on the wetland. Transects 3 and 4 were selected to sample more of the woody vegetation that was found further east. No rare plants were noted in transects 1-4; however the threatened species *Silene nivea* was found on the road bank by transect 1 and on the west side of River Road.

Recommendations

This initial plant inventory is a starting point for what should be a continued plant assessment of the Trempealeau River Meadow State Natural Area. Future assessments should include plant inventories during different times of the growing season and for different areas of the SNA. Trempealeau River Meadow State Natural Area is large in size and this initial assessment covered the western side of the SNA. It will be important in future botany blitzes to include areas on the eastern side of the site and along the Trempealeau River. The SNA also need continued assessment and monitoring for invasive species. A portion of the SNA has been used for agriculture which is a likely disturbance area for invasives.

Literature cited

Wetter, M. A., et al. 2001. Checklist of the Vascular Plants of Wisconsin. Wisconsin Dept. Nat. Resources Techn. Bull. 192. 258 pp.