

Upper Mississippi River Forestry Partnership Bottomland Hardwood Reference Site

State: Wisconsin

Name: Nelson-Trevino Bottoms

Ownership: U.S. Fish and Wildlife Service

Acres: 3740 acres

Designations:

Wisconsin State Natural Area #81

Wisconsin Scientific Area – 1970

Federal Research Area - 1972

NPS National Natural Landmark - 1973



Location: Pool 4 of the Upper Mississippi River National Wildlife Refuge, between river mile 760 and river mile 764, Buffalo County, WI. T22N-R13W, Section 6. T22N-R14W, Section 1-4, 10-14. T23N-R14W, Section 31-36.

Access Considerations: Multiple access points along Highway 25 between Nelson, WI and Wabasha, MN primarily for watercraft. There is a short trail located in the southwest corner. The Nelson-Trevino Bottoms is closed to all hunting and trapping from March 1 until the day after the close of the duck season except that wild turkeys may be hunted in the spring.

Other Access Considerations:

- Nelson-Trevino Bottoms is a Wisconsin State Natural Area.
- Most SNAs are open to the public year around unless otherwise noted in the SNA site descriptions or posted at the site.
- Do not collect plants (including fruits, nuts, or edible plant parts), animals, fungi, rocks, minerals, fossils, archaeological artifacts, soil, downed wood, or any other natural material, alive or dead. Collecting for scientific research requires a permit.
- Vehicles, including bicycles, ATVs, aircraft, and snowmobiles, are prohibited except on trails and roadways designated for their use. Access is only by foot, skis, snowshoes, and watercraft.

USGS Map: Wabasha North 7.5' 1:36000

[Detailed Map \(PDF, 225 KB\)](#)

County Highway 1 inch = 1 mile

[Line Map \(PDF, 19 KB\)](#)

Landscape Considerations

Nelson-Trevino Bottoms is located within the Mississippi National Wildlife Refuge near the southern end of Pool 4 just up stream of Lock and Dam 4. It is located on the floodplain delta just below the confluence of the Mississippi and Chippewa Rivers. It is part of the larger Western Coulee and Ridges Ecological Landscape. It is bordered to the north and west by Tiffany Bottoms State Wildlife Refuge, and to the east by marshes, sloughs and the Big Lake portion of Pool 4. The Chippewa River flows along the West side of the bottoms, and the Mississippi River forms the southern border. The towns of Nelson, WI and Wabasha, MN are located at the northeast and southeast corners of the bottoms, respectively.

Forest Type: Wet-mesic floodplain forest

*Observational Composition:

Overstory – The canopy is dominated by silver maple (*Acer saccharinum*), river birch (*Betula nigra*), American elm (*Ulmus americana*), and cottonwood (*Populus deltoides*), with lesser amounts of swamp white oak (*Quercus bicolor*), bur oak (*Quercus macrocarpa*), willow (*Salix* spp.), green ash (*Fraxinus pennsylvanica*), and white ash (*Fraxinus americana*).

Understory – The shrub layer contains scattered fringes and thickets of red osier dogwood (*Cornus stolonifera*) and partridgeberry (*Vaccinium vitis-idaea*). The herbaceous layer includes wood nettle (*Laportea canadensis*), Ontario aster (*Aster ontarionis*), swamp loosestrife (*Decodon verticillatus*), cut-leaved coneflower (*Rudbeckia laciniata*), and northern water-horehound (*Lycopus uniflorus*). Vines are abundant in the understory, common species include poison ivy (*Toxicodendron radicans*), common moonseed (*Menispermum canadense*), Virginia creeper (*Parthenocissus quinquefolia*), and bristly greenbriar (*Smilax tamnoides*). Open marshes and abandoned stream channels contain river bulrush (*Bolboschoenus fluviatilis*), prairie cordgrass (*Spartina pectinata*), blue-joint grass (*Calamagrostis canadensis*), and a variety of sedges (*Carex* spp.).

* US-FWS will be completing a detailed forest inventory of the area in 2008.

[Detailed Floodplain Forest Plant List](#)

Soils

Table 1: Soil Map units for Nelson Trevino Bottoms State Natural Area

Buffalo County, Wisconsin (W011)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Lv	Loamy alluvial land, poorly drained	52.5	1.3%
Lw	Loamy alluvial land	0.5	0.0%
Ma	Marsh	1,480.3	37.7%
Re	Riverwash	270.6	6.8%
Sa	Sandy alluvial land, poorly drained	1,454.6	36.7%
W	Water	682.9	17.3%



Figure 1: Location of mapped soil units within Nelson-Trevino Bottoms State Natural Area

Current Management:

- Nelson-Trevino Bottoms is currently managed as a pseudo-wilderness area. No active management currently takes place.
- FWS has spent the past 2 summers conducting a forest inventory of the area. The effort will be completed in 2008.

- Detailed information on the past management of Nelson-Trevino bottoms is available from the US Fish and Wildlife Service.

Management Challenges:

- The construction of Lock and Dam 4 affected the hydrology of the area.
- Chippewa River impacts.
- Fish and wildlife management
 - o Rare species conservation
 - o Migratory birds
 - The Upper Mississippi NWR has been designated a Globally Significant Important Bird Area
 - o Invasive species
- Recreational use/public access
 - o Upper Miss NWR is among the most visited NWR in the US with 3.7 million visits per year.
 - o Nelson-Trevino Closed Area designation ends in 2009 opening the area to waterfowl and deer hunting.
- Nelson-Trevino Bottoms contains a Research Natural Area
- Forest Management
 - o No active forest management currently takes place
 - o Forest inventory to be completed in 2008

Comments: Nelson-Trevino Bottoms features an extensive, undisturbed wilderness portion of the largest delta floodplain forest in the upper Midwest. Roadless except for a short trail at the southwest corner, the bottoms are a maze of forested floodplain and ever-changing oxbow meanders, marshes, sloughs, and ephemeral ponds. The remoteness combined with a highly productive delta system has allowed wildlife populations to flourish. The site is home to many rare or uncommon species such as great egret (*Ardea alba*), red-shouldered hawk (*Buteo lineatus*), northern harrier (*Circus cyaneus*), cerulean warbler (*Dendroica cerulea*), prothonotary warbler (*Protonotaria citrea*), pileated woodpecker, blue-gray gnatcatcher, and yellow-throated vireo. Other animals include wood duck, kingfisher, broad-winged hawk, bald eagle, mink, otter, and numerous reptiles and amphibians.

Sources of Information:

<http://dnr.wi.gov/org/land/er/sna/visit.htm>

<http://www.fws.gov/midwest/planning/uppermiss/CCP/CCP.pdf>

<http://www.mississippi-river.com/umrcc/index.html>

http://conserveonline.org/docs/2003/08/UMRB_report.pdf

http://dnr.wi.gov/org/land/er/wwap/plan/pdfs/Appendix_C_State_Natural_Areas_Reference_Sites_by_EcoLandscape.pdf

<http://websoilsurvey.nrcs.usda.gov/app/>

