

# Natural Community Surveys of Potential Biodiversity Stewardship Areas



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**For:  
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Cover photo: Dry-mesic northern forest, Hudson Creek Potential Biodiversity Stewardship Area (Photo by Joshua Cohen).

## VI.1

### Bald Mountain SRA

Surveys were conducted to evaluate wetlands in Chamberlain Lakes unit and Trout Lake unit. Documented two high-quality inundated shrub swamps.



Inundated shrub swamp, Bald Mountain SRA (Photo by Bradford Slaughter).



Rich conifer swamp, Flint River (Photo by Bradford Slaughter).

### Flint River

Surveys were conducted to evaluate wetlands associated with drainage of Horseshoe Lake. Documented high-quality rich conifer swamp.



Wet-mesic prairie, Holly SRA (Photo by Michael Kost).



Rich tamarack swamp, Island Lake SRA (Photo by Joshua Cohen).

### Holly SRA

Surveys were conducted to re-evaluate high-quality wetlands as part of a contract with PRD. During course of surveys, documented high-quality wet-mesic prairie.

### Island Lake SRA

Surveys were conducted to re-evaluate the rich tamarack swamp as part of a contract with PRD. Documented additional acreage of high-quality rich tamarack swamp to incorporate into existing element occurrence.



Dry sand prairie, Pinckney Waterloo (Photo by Joshua Cohen).



Poor fen, Pinckney Waterloo (Photo by Joshua Cohen).

**Pinckney Waterloo**

Surveys focused on wetlands and uplands in Waterloo and Pinckney Recreation Area. Documented two high-quality bogs, dry sand prairie, poor fen, prairie fen, and rich tamarack swamp.

**Proud Lake SRA**

Surveys were conducted to re-evaluate the southern wet meadow and wetlands associated with Proud Lake as part of a contract with PRD. Documented high-quality prairie fen within wetland complex.



Prairie fen, Proud Lake SRA (Photo by Joshua Cohen).



Bog, Pinckney Waterloo (Photo by Joshua Cohen).

**VI.3**

**Lake Mich - Poly 19**

Surveys focused on Lake Michigan shoreline. Documented high-quality clay seepage bluffs, a community type recognized in Wisconsin but yet to be classified in Michigan.

**Wau-Ke-Na**

Surveys focused on Lake Michigan shoreline. Documented high-quality clay seepage bluffs, a community type recognized in Wisconsin but yet to be classified in Michigan.



Clay seepage bluffs from Lake Mich - Poly 19 (above) and Wau-Ke-Na (Photos by Joshua Cohen).



## VII.1

### **Cedar Lake NFW**

Surveys focused on wetlands associated with Coppler Creek on State Forest land. Documented high-quality northern wet meadow and northern shrub thicket. In passing, noted high-quality poor conifer swamp.



Northern wet meadow, Cedar Lake NFW (Photo by Joshua Cohen).



Rich conifer swamp, Ogemaw Swamp (Photo by Joshua G. Cohen).

### **Ogemaw Swamp**

Surveys focused on wetlands associated with North Eddy Creek on State Forest land. Documented high-quality rich conifer swamp.



Rich conifer swamp, Deadstream Swamp (Photo by Joshua Cohen).



Degraded rich conifer swamp, Grayling Compartment 66 (Photo by Bradford Slaughter).

## VII.2

### **Deadstream Swamp**

Surveys focused on extensive swamp complex on State Forest land. Documented high-quality rich conifer swamp.

### **Grayling Compartment 66**

Surveys focused on wetlands on State Forest land. Survey found degraded rich conifer swamp, heavily browsed by deer.



Northern fen, Grayling Compartment 207 (Photo by Joshua Cohen).



Dry-mesic northern forest, Grayling Compartment 207 (Photo by Joshua Cohen).

### **Grayling Compartment 207**

Surveys focused on dry-mesic uplands and associated wetlands on State Forest land. Documented high-quality rich conifer swamp, northern fen, dry-mesic northern forest, muskeg, and restorable dry-mesic northern forest.

Recommend modifying the boundaries of this potential Biodiversity Stewardship Area to capture nearby wetland complex with high-quality rich conifer swamp and northern fen and high-quality dry-mesic northern forest along the Au Sable River.

### **Grayling Compartment 227**

Conducted two days of surveys on State Forest land. First day of survey focused on wetlands associated with Beaver Creek and Mud Lake. Documented high-quality rich conifer swamp, poor conifer swamp, muskeg (possible inclusion), northern shrub thicket, and northern wet meadow. Second day of survey focused on open uplands. Documented high-quality pine barrens.



Northern wet meadow, Grayling Compartment 227 (Photo by Joshua Cohen).



Pine barrens, Grayling Compartment 227 (Photo by Joshua Cohen).

### **Hartwick Pines**

Surveys focused on wetland complex on State Park land. Documented high-quality rich conifer swamp, poor conifer swamp, poor fen, and northern shrub thicket. Recommend modifying the boundaries of this potential Biodiversity Stewardship Area to capture nearby wetland complex and high-quality natural communities.



Poor fen (above) and northern wet meadow (below), Hudson Creek (Photos by Joshua Cohen).







Poor fen, Hartwick Pines (Photo by Joshua Cohen).



Northern fen, Jordan River Valley and Chestonia Highlands (Photo by Joshua Cohen).

**Hudson Creek**

Conducted two days of surveys on State Forest land. First day of survey focused on wetland and upland systems associated with Hudson Creek. Documented high-quality rich conifer swamp, poor conifer swamp, muskeg, dry-mesic northern forest, northern shrub thicket, and northern wet meadow. Second day of survey focused on extensive peatland complex. Documented high-quality muskeg, poor fen, poor conifer swamp, dry-mesic northern forest island, and restorable mesic northern forest island.

**Jordan River Valley and Chestonia Highlands**

Conducted two days of surveys on State Forest land. Surveys focused on minerotrophic wetlands along Jordan River valley. Documented two high-quality rich conifer swamps, two northern fens, and a northern shrub thicket.



Northern wet meadow, Roscommon Compartment 98 (Photo by Joshua Cohen).



Hardwood-conifer swamp, Grass Lake (Photo by Joshua Cohen).

**Roscommon Compartment 98**

Surveys focused on wetlands on State Forest land. Documented high-quality northern wet meadow.

**VII.3**

**Grass Lake**

Surveys focused on wetland complex associated with Grass Lake on State Forest land. Documented high-quality hardwood-conifer swamp. Also documented extensive but degraded rich conifer swamp infested with glossy buckthorn.

## VII.6

### **Black Forest NNFW**

Surveys focused on peatland complex on State Forest land. Documented high-quality muskeg.

### **Black River NFW**

Surveys focused on wetlands associated with Black River floodplain on State Forest land. Documented high-quality floodplain forest.



Muskeg, Black Forest NNFW (Photo by Joshua Cohen).



Floodplain forest, Black River NFW (Photo by Joshua Cohen).

### **Chub Lake Swamp**

Surveys focused on wetlands associated with Turtle Creek on State Forest land. Documented high-quality poor fen and bog. In passing, noted high-quality poor conifer swamp.

### **Devil's Lake**

Conducted two days of surveys on State Forest lands. First day of surveys focused on wetlands and uplands associated with Mud Lake and second day of surveys focused on shoreline and near shore areas. Documented high-quality Great Lakes marsh, interdunal wetland, northern fen (two separate occurrences), intermittent wetland, and dry-mesic northern forest.



Poor fen, Chub Lake Swamp (Photo by Joshua Cohen).



Northern fen, Devil's Lake (Photo by Joshua Cohen).



Great Lakes marsh, Devil's Lake (above) and limestone cobble shore, Rockport (North Pointe\_Rockport) (below) (Photos by Joshua Cohen).



### **Misery Bay (North Pointe\_Rockport)**

Surveys focused on wetlands on State Forest land. Documented high-quality northern wet meadow and emergent marsh.



Emergent marsh, Misery Bay (North Pointe\_Rockport)  
(Photo by Joshua Cohen).



Submergent marsh, Pigeon River (Photo by Joshua Cohen).

### **Pigeon River**

Surveys focused on wetlands associated with Dog Lake on State Forest land. Documented high-quality bog, muskeg, poor fen, northern shrub thicket, and submergent marsh.



Muskeg, Pigeon River (Photo by Joshua Cohen).



Open dunes, Rockport (North Pointe\_Rockport) (Photo by Joshua Cohen).

### **Rockport**

Surveys focused on shoreline and near shore areas on State Forest land. Documented high-quality open dunes, interdunal wetland, and limestone cobble shore.

### **Smokey Hollow NFW**

Surveys focused on wetlands associated with West Branch River and Hubbard Lake on State Forest land. Documented high-quality northern fen and rich conifer swamp.



Rich conifer swamp, Smokey Hollow NFW (Photo by Joshua Cohen).



Sinkhole, The Sinkholes (Photo by Joshua Cohen).

**The Sinkholes (Sinkholes\_Tomahawk\_Barrens)**

Two days of surveys conducted on State Forest land. First day of surveys focused on peatland complex associated with Loon Lake. Documented high-quality bog, muskeg, and poor conifer swamp. Second day of survey conducted on karst features. Documented high-quality sinkholes and pine barrens associated with several of the sinkholes.

**Tomahawk NFW (Sinkholes\_Tomahawk\_Barrens)**

Surveys focused on wetlands associated with Lower Tomahawk Lake on State Forest land. Documented high-quality rich conifer swamp (possibly northern record of rich tamarack swamp), dry-mesic northern forest, northern wet meadow, muskeg, northern shrub thicket, and poor conifer swamp.



Dry-mesic northern forest, Tomahawk NFW (Photo by Joshua Cohen).



Northern wet meadow, Tomahawk NFW (Photo by Joshua Cohen)



Pine barrens in a sinkhole (above) and bog (below), The Sinkholes (Sinkholes\_Tomahawk\_Barrens)  
(Photos by Joshua Cohen).



### **Wolf Creek and Grass Lake**

Surveys focused on wetlands along Townline Creek on State Forest land. Documented high-quality rich conifer swamp and northern wet meadow.



Rich conifer swamp, Wolf Creek and Grass Lake  
(Photo by Joshua Cohen).



Northern wet meadow, Wolf Creek and Grass Lake  
(Photo by Joshua Cohen).



Open dunes blowout, Wilderness State Park\_Wycamp Complex (Photo by Joshua Cohen).

### **Wilderness State Park\_Wycamp Complex**

Surveys focused on near shore area on State Forest land. Documented high-quality mesic northern forest, interdunal wetland, and dry-mesic northern forest. Also documented high-quality open dunes that will be incorporated into existing open dunes element occurrence.



Dry-mesic northern forest, Wilderness State Park\_Wycamp Complex (Photo by Joshua Cohen).

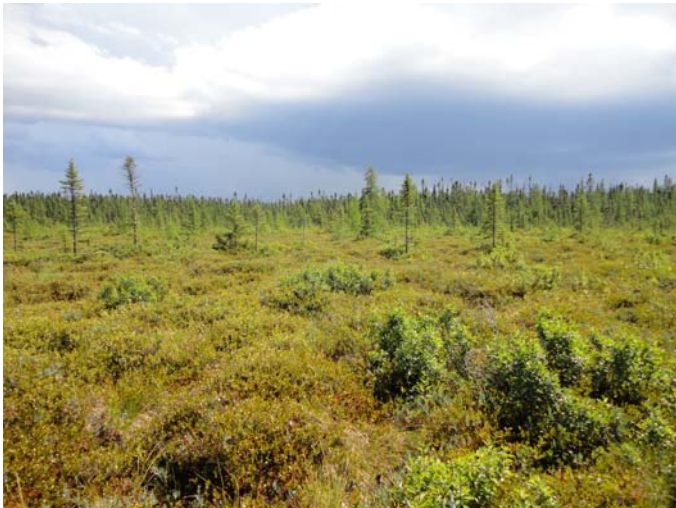


Open dunes blowout, Wilderness State Park\_Wycamp Complex (Photo by Joshua Cohen).

### **VIII.1**

### **Cranberry Bog Complex**

Conducted surveys focused on peatlands on State Forest land. Documented high-quality muskeg, poor conifer swamp, northern shrub thicket, and rich conifer swamp.



Muskeg, Cranberry Bog Complex (Photo by Joshua Cohen).



Poor conifer swamp, Cranberry Bog Complex (Photo by Joshua Cohen).

### **Seiner's Knob Complex**

Conducted surveys focused on near shore area on State Forest land. Documented high-quality wooded dune and swale complex.





Wooded dune and swale complex, Seiner's Knob Complex (Photo by Joshua Cohen).



Coastal fen, St. Ignace Complex (Photo by Bradford Slaughter).

### **St. Ignace Complex**

Conducted surveys focused on near shore area. Documented high-quality coastal fen and limestone bedrock glade.

### **Quarry Site**

Conducted surveys focused on peatlands. Documented high-quality northern fen.



Northern fen, Quarry Site (Photo by Bradford Slaughter).



Boreal forest, Wells State Park (Photo by Joshua Cohen).

### **Wells State Park**

Surveys were conducted to re-evaluate the mesic northern forest in Wells State Park as part of a contract with PRD. During the course of this survey, high-quality boreal forest and rich conifer swamp were documented.

## **VIII.2**

### **Lake Superior Beach #1**

Surveys focused on near shore area and Lake Superior shoreline. Documented high-quality sand and gravel beach and dry northern forest.



Sand and gravel beach, Lake Superior Beach #1 (Photo by Joshua Cohen).



Bog, Murphy Creek Peatland (Sleeper Wetlands) (Photo by Bradford Slaughter).

### **Murphy Creek Peatland (Sleeper Wetlands)**

Conducted surveys to evaluate peatlands. Documented high-quality muskeg, bog, poor fen, and northern shrub thicket.



Bog, Newberry Compartment 35 (Photo by Joshua Cohen).



Restorable dry-mesic northern forest, Newberry Compartment 35 (Photo by Joshua Cohen).

### **Newberry Compartment 35**

Conducted surveys to evaluate wetlands and uplands associated with the East Branch of the Two-Hearted River. Documented high-quality poor conifer swamp, rich conifer swamp, and bog. Also documented restorable dry-mesic northern forest along the East Branch of the Two-Hearted River.

### **Noble Lake Forested Wetland Complex**

Conducted surveys to evaluate wetlands associated with Noble Lake. Documented high-quality rich conifer swamp and mesic northern forest. Also documented additional acreage of high-quality rich conifer swamp to incorporate into existing element occurrence.



Rich conifer swamp, Noble Lake Forested Wetland Complex (Photo by Joshua Cohen).



Poor fen, Tahquamenon Falls State Park (Photo by Joshua Cohen).

### **Tahquamenon Falls State Park**

Conducted surveys to evaluate peatlands on State Forest land. Documented high-quality poor fen. Recommend expanding the current Biodiversity Stewardship Area boundaries to incorporate this wetland complex.



Patterned fen, Upper East Branch Fox River (Photo by Bradford Slaughter).



Northern shrub thicket, Duke-Rock-Fish Complex (Photo by Joshua Cohen).

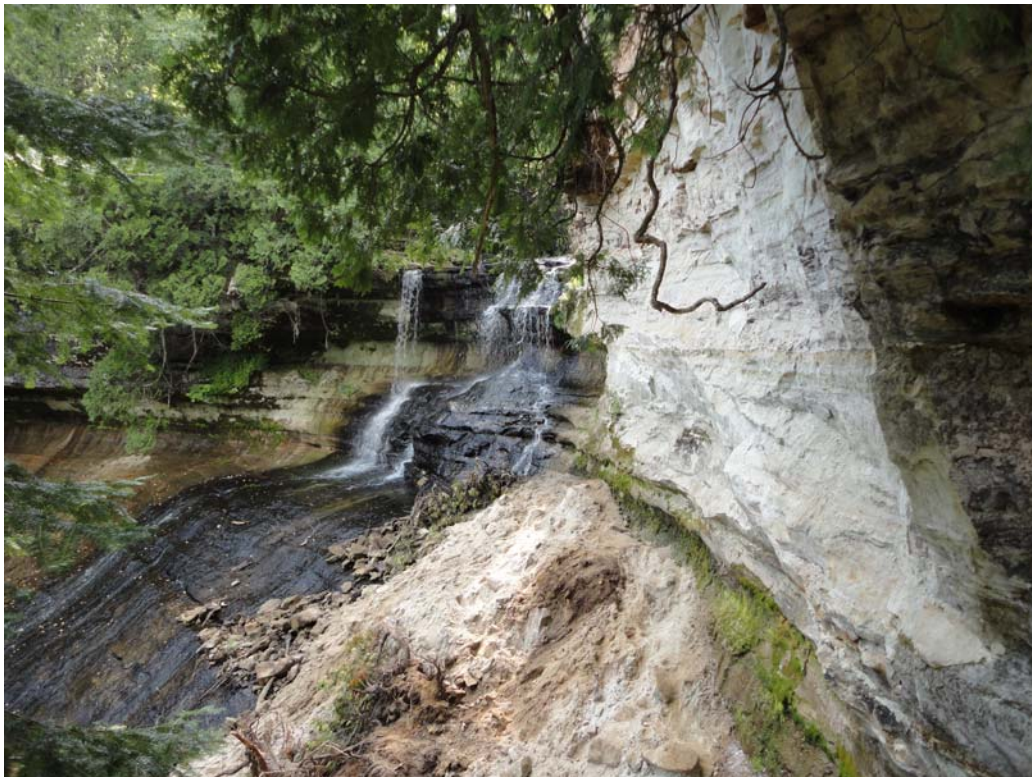
**Upper East Branch Fox River**

Conducted surveys to evaluate peatlands. Documented high-quality muskeg (two element occurrences), bog, poor fen, patterned fen, northern fen, poor conifer swamp, and northern shrub thicket.

**VIII.3**

**Duke-Rock-Fish Complex**

Surveys were conducted to re-evaluate the mesic northern forest in Laughing Whitefish Falls State Park as part of a contract with PRD. During the course of this survey, high-quality sandstone cliff and northern shrub thicket were documented. In addition, the high-quality mesic northern forest contains inclusions of high-quality hardwood-conifer swamp.



Sandstone cliff, Duke-Rock-Fish Complex (Photo by Joshua Cohen).



Rich conifer swamp (above) and northern wet meadow (below), Bates Lake NFW (Photos by Joshua Cohen).



## IX.1

### Bates Lake NFW

Surveys focused on wetlands and uplands associated with the Fence River. Documented high-quality rich conifer swamp, northern wet meadow (two occurrences), northern shrub thicket, and muskeg. Also documented restorable dry-mesic northern forest.



Northern wet meadow, Bates Lake NFW (Photo by Joshua Cohen).



Granite lakeshore cliff, Little Presque Isle Complex (Photo by Joshua Cohen).

## IX.2

### Bass Lake Little Presque Isle Complex

Surveys focused on granitic features and shoreline on State Forest land. Documented high-quality granite bedrock glade, granite cliff, granite lakeshore cliff, granite bedrock lakeshore, dry-mesic northern forest, sandstone lakeshore cliff, and granite cobble shore.



Granite bedrock glade, Little Presque Isle Complex (Photo by Joshua Cohen).



Submergent marsh and bog, Notre Dame Reserve (Photo by Joshua Cohen).



Bog, Sylvania (Photo by Joshua Cohen).

### **IX.3 and IX.5**

#### **Notre Dame Reserve**

Noted high-quality bog and submergent marsh in passing.

#### **Sylvania**

Surveys focused on documenting high-quality wetlands within matrix of old-growth mesic northern forest. Documented high-quality hardwood-conifer swamp and bog. Documented additional acreage of high-quality mesic northern forest, muskeg, and poor conifer swamp to incorporate into existing element occurrences.

### **IX.6**

#### **Porcupine Mountains (IX.6)**

Surveys on State Park land focused on wetlands associated with the Lake of the Clouds and the Big Carp River. Documented high-quality hardwood-conifer swamp.



Hardwood-conifer swamp, Porcupine Mountains (IX.6) (Photo by Joshua Cohen).