

APPENDIX F

THREATENED AND ENDANGERED SPECIES

- **FRA – USFWS Correspondence**
- **Table F-1: Minnesota Species List**
- **Table F-2: Wisconsin Species List**
- **Wisconsin Species Descriptions**



U.S. Department
of Transportation

Federal Railroad
Administration

APR 12 2012

1200 New Jersey Avenue, SE
Washington, DC 20590

Tony Sullins, Field Supervisor
U.S. Fish and Wildlife Service
Twin Cities Field Office
4101 East 80th Street
Bloomington, MN 55425

Re: Northern Lights Express (NLX) High Speed Passenger Rail Service from Minneapolis to Duluth, Minnesota and Wisconsin; Request for Concurrence – May Affect, Not Likely to Adversely Affect Determination - Canada Lynx

Dear Mr. Sullins:

The Minneapolis-Duluth-Superior Passenger Rail Alliance, in cooperation with Minnesota Department of Transportation (MnDOT), and Wisconsin Department of Transportation (WisDOT), proposes to construct the necessary infrastructure for and operate a high speed passenger rail service between Minneapolis and Duluth, Minnesota. The proposed high speed passenger rail service is known as the Northern Lights Express (NLX). FRA is providing funding to the Minnesota Department of Transportation and will serve as the lead federal agency for the project. As the lead federal agency, FRA is required to comply with Section 7 of the Endangered Species Act of 1973, as Amended (Act).

A preferred alternative has been chosen for the NLX project and approved by the FRA. The approximately 153-mile-long preferred alternative will run from Minneapolis to Duluth, Minnesota, traversing Hennepin, Anoka, Isanti, Kanabec, Pine, Carlton, and St. Louis counties in Minnesota and Douglas County in Wisconsin. This route will utilize portions of existing railroad lines, which contain intact tracks that will be upgraded from a class 3 to a class 5 line. The upgrades can be accomplished through tie replacement and ballast improvements, which can be done as maintenance on the existing line utilizing tie replacement trains and ballast placement trains. All upgrade work will be performed from the existing track and will have no impacts outside the existing track bed.

Design of the proposed alignment is being further defined. Currently, the proposed preferred alignment also includes the following:

- New parallel track (e.g., new sidings, extending existing sidings, and second mainlines with both tracks operational) substantially within an existing right-of-way (ROW) however requiring up to 50 foot wide strip ROW acquisitions in some areas of parallel track and up to 120 feet wide acquisitions at a small number of at-grade road crossings;

- New bridges associated with new parallel track over:
 - Rice Creek at Fridley, Anoka County, MN
 - Mississippi Street at Fridley, Anoka County, MN
 - Coon Creek at Andover, Anoka County, MN
 - Snake River at Grasston, Kanabec County, MN
 - Pokegama Creek at Brook Park, Pine County, MN

- Box culverts, including a new box culvert near Henriette
 - Replacement of existing bridges/underpasses at:
 - Coon Creek in Andover, Anoka County, MN
 - Cedar Creek in Oak Grove, Anoka County, MN
 - 379th Avenue North of Grasston, Isanti County, MN

- Rehabilitation of existing railroad bridges over:
 - Kanabec County, MN
 - Snake River
 - Pine County, MN
 - Grindstone River
 - Kettle River
 - Big Willow River
 - Carlton County, MN
 - Net River (two bridges)
 - State Line Creek
 - Douglas County, WI
 - W. Balsam Creek
 - E. Balsam Creek
 - Hubert Creek
 - Norvell Creek
 - Black River
 - Nemadji River
 - St. Louis/Douglas Counties
 - St. Louis River (Grassy Point)
 - Railroad Bridge South of Superior, Douglas County, WI
 - 46th Avenue bridge in Duluth, St. Louis County, MN
 - 37th Avenue bridge in Duluth, St. Louis County, MN

The Federal Railroad Administration is requesting concurrence from the U.S. Fish and Wildlife Service (Service) that the above referenced action is not likely to adversely affect the Canada lynx (*Lynx canadensis*) a federally-listed threatened species.

Listed Species/Critical Habitat within the Project Area – Minnesota/Wisconsin

The County Distribution of Minnesota and Wisconsin's Federally-Listed Threatened, Endangered, Proposed, and Candidate Species list provided by the Service indicates that the following species/designated critical habitat are known to occur in the following project counties:

Minnesota				
County	Species	Listing Status	Critical Habitat	Determination
Hennepin	Higgins eye pearlymussel (<i>Lampsilis higginsii</i>)	Endangered	No	No Effect
Anoka	None	NA	No	NA
Isanti	None	NA	No	NA
Kanabec	None	NA	No	NA
Pine	Canada lynx (<i>Lynx canadensis</i>)	Threatened	No	May Affect, not Likely to Adversely Affect
	Spectaclecase (<i>Cumberlandia monodonta</i>)	Proposed as Endangered	No	No Effect
Carlton County	Canada lynx (<i>Lynx canadensis</i>)	Threatened	No	May Affect, not Likely to Adversely Affect
St. Louis	Canada lynx (<i>Lynx canadensis</i>)	Threatened	Yes – However none within the project area	May Affect, not Likely to Adversely Affect
	Piping plover (<i>Charadrius melodus</i>)	Endangered	Yes – However, none within the project area	No Effect
Wisconsin				
County	Species	Listing Status	Critical Habitat	Determination
Douglas	Canada lynx (<i>Lynx canadensis</i>)	Threatened	No	May Affect, not Likely to Adversely Affect
		Endangered	Yes –	No Effect

Minnesota				
County	Species	Listing Status	Critical Habitat	Determination
Hennepin	Higgins eye pearlymussel (<i>Lampsilis higginsii</i>)	Endangered	No	No Effect
Anoka	None	NA	No	NA
Isanti	None	NA	No	NA
Kanabec	None	NA	No	NA
Pine	Canada lynx (<i>Lynx canadensis</i>)	Threatened	No	May Affect, not Likely to Adversely Affect
	Spectaclecase (<i>Cumberlandia monodonta</i>)	Proposed as Endangered	No	No Effect
Carlton County	Canada lynx (<i>Lynx canadensis</i>)	Threatened	No	May Affect, not Likely to Adversely Affect
St. Louis	Canada lynx (<i>Lynx canadensis</i>)	Threatened	Yes – However none within the project area	May Affect, not Likely to Adversely Affect
	Piping plover (<i>Charadrius melodus</i>)	Endangered	Yes – However, none within the project area	No Effect
Wisconsin				
County	Species	Listing Status	Critical Habitat	Determination
Douglas	Canada lynx (<i>Lynx canadensis</i>)	Threatened	No	May Affect, not Likely to Adversely Affect
		Endangered	Yes –	No Effect

	Piping plover (<i>Charadrius melodus</i>)	Endangered Threatened	However, none within the project area	No Effect No Effect
	Kirtland's warbler (<i>Dendroica kirtlandii</i>)		No	
	Fassett's locoweed (<i>Oxytropis campestris</i> var. <i>chartacea</i>)		No	

Reason for Concurrence Request

As noted in the table above federally-listed species have been identified in several of the project counties. Therefore, the Service was contacted to assist in determining the appropriate consultation path in accordance with Section 7 of the Endangered Species Act of 1973, as Amended (Act). On December 29, 2011, staff from the Service, Minnesota Department of Natural Resources and the Minnesota Department of Transportation conducted a field evaluation of various locations along the project corridor with the intent of determining the potential for affect.

Determination

Based on the coordination efforts described above, the nature of the proposed activities, the federally-listed species identified and the absence of designated critical habitat within the action area, the Federal Railroad Administration has determined that the proposed action may affect, but is not likely to adversely affect the Canada lynx.

For all other federally-listed species identified we have determined that the project will have no effect. We are respectfully requesting concurrence that consultation with your office under Section 7 of the Act is complete.

If you have any questions regarding this matter, please contact Colleen Vaughn of my staff at 202-493-6096 or Colleen.Vaughn@dot.gov.

Sincerely,



David Valenstein
Chief, Environment & Systems Planning Division

cc: USFWS- Nick Rowse
MnDOT- Frank Pafko
MnDOT - Jason Alcott

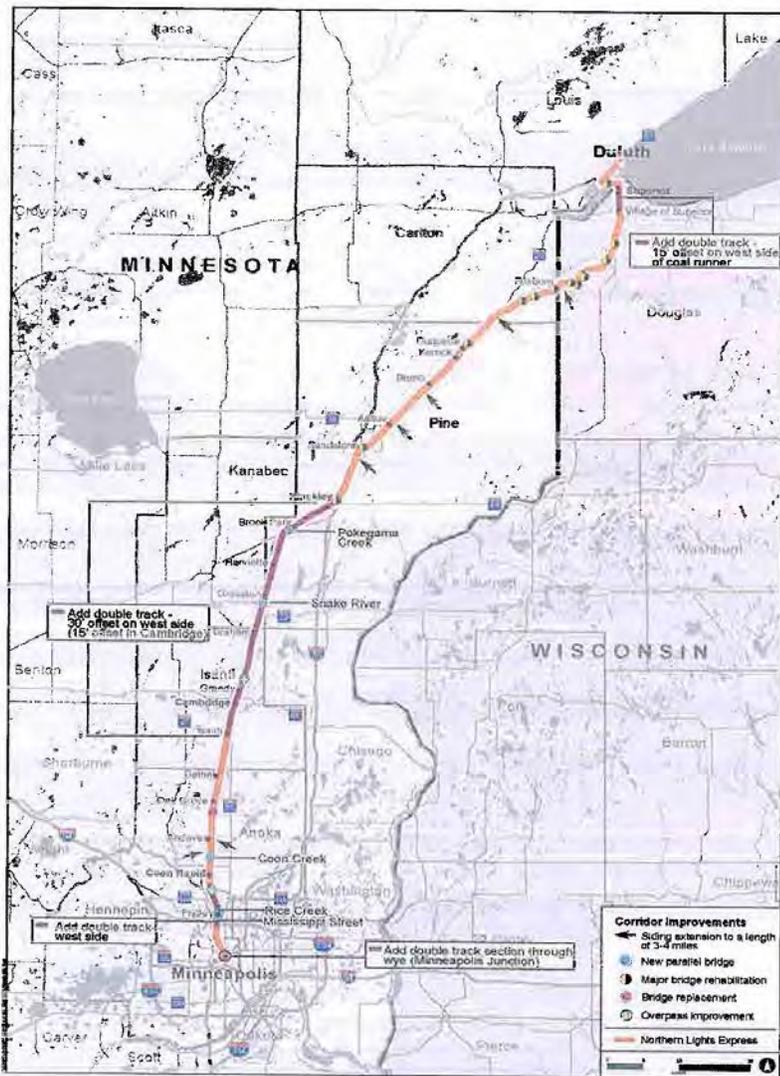


Figure 2



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Twin Cities Field Office
4101 American Blvd E.
Bloomington, Minnesota 55425-1665

September 26, 2012

Mr. David Valenstein
Chief, Environment and Systems Planning Division
Federal Railroad Administration
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, D.C. 20590

RE: Request for Concurrence of Not Likely to Adversely Affect Canada Lynx for Northern Lights Express (NLX) High Speed Passenger Rail Service from Minneapolis to Duluth, Minnesota and Wisconsin

Dear Mr. Valenstein:

This letter is in response to your request for concurrence on a not likely to adversely affect determination regarding a proposal to construct the necessary infrastructure for operating a high speed passenger rail service between Minneapolis and Duluth, Minnesota. This project would upgrade an existing 153-mile railroad passing through Hennepin, Anoka, Isanti, Kanabec, Pine, Carlton, and St. Louis Counties in Minnesota and Douglas County, Wisconsin. All upgrade work will be performed from the existing track and will have no impacts outside the existing track bed. The Federal Railroad Administration (FRA) is providing funding to the Minnesota Department of Transportation (MNDOT) and is responsible for complying with Section 7 of the Endangered Species Act of 1973, as amended.

The proposed permit would authorize activities that may affect the federally threatened Canada lynx (*Lynx canadensis*). On December 29, 2011, staff from my office, accompanied by staff from the Minnesota Department of Natural Resources and the Minnesota Department of Transportation conducted a field evaluation of several sites along the proposed rail corridor. Based on this field investigation and on background information, we concur that the FRA's funding of the proposed railroad upgrade may affect, but is not likely to adversely affect Canada lynx.

This concludes formal consultation on the proposed upgrade of 153-miles of railroad line between Minneapolis and Duluth, Minnesota, upon the request of the FRA. If project plans change, additional information on listed or proposed species becomes available, or new species are listed that may be affected by the project, consultation should be reinitiated. Thank you for

your cooperation in meeting our joint responsibilities under section 7 of the Endangered Species Act. If you have any further endangered species questions, please contact Nick Rowse at (612) 725-3548 x2210 or me at (612) 725-3548 x2201.

Sincerely,


T. Sullins
Acting for
Tony Sullins
Field Supervisor

CC: Jason Alcott, Minnesota Department of Transportation, St. Paul, MN

Table F-1. Minnesota Natural Heritage Database Review of the NLX Corridor

SCIENTIFIC NAME	COMMON NAME	STATE PROTECTION STATUS
Animal Assemblage		
N/A	Bat Concentration	N/A
N/A	Colonial Waterbird Nesting Site	N/A
Invertebrate Animal		
<i>Actinonaias ligamentina</i>	Mucket	THR
<i>Alasmidonta marginata</i>	Elktoe	THR
<i>Cicindela lepida</i>	Little White Tiger Beetle	THR
<i>Cyclonaias tuberculata</i>	Purple Wartback	THR
<i>Elliptio dilatata</i>	Spike	SPC
<i>Hesperia leonardus leonardus</i>	Leonard's Skipper	SPC
<i>Lasmigona compressa</i>	Creek Heelsplitter	SPC
<i>Lasmigona costata</i>	Fluted-shell	SPC
<i>Ligumia recta</i>	Black Sandshell	SPC
<i>Obovaria olivaria</i>	Hickorynut	SPC
<i>Pleurobema coccineum</i>	Round Pigtoe	THR
Vascular Plant		
<i>Aristida tuberculosa</i>	Sea-beach Needlegrass	SPC
<i>Botrychium oneidense</i>	Blunt-lobed Grapefern	END
<i>Botrychium rugulosum</i>	St. Lawrence Grapefern	THR
<i>Botrychium simplex</i>	Least Moonwort	SPC
<i>Cypripedium arietinum</i>	Ram's-head Lady's-slipper	THR
<i>Fimbristylis autumnalis</i>	Autumn Fimbristylis	SPC
<i>Hudsonia tomentosa</i>	Beach-heather	SPC
<i>Hydrocotyle americana</i>	American Water-pennywort	SPC
<i>Juncus marginatus</i>	Marginated Rush	SPC
<i>Najas gracillima</i>	Thread-like Naiad	SPC
<i>Oenothera rhombipetala</i>	Rhombic-petaled Evening Primrose	SPC
<i>Poa paludigena</i>	Bog Bluegrass	THR
<i>Potamogeton bicupulatus</i>	Snailseed Pondweed	END
<i>Potamogeton vaseyi</i>	Vasey's Pondweed	SPC
<i>Rotala ramosior</i>	Tooth-cup	THR
<i>Scleria triglomerata</i>	Tall Nut-rush	END
<i>Solidago sciaphila</i>	Cliff Goldenrod	SPC
<i>Triplasis purpurea</i>	Purple Sand-grass	SPC
<i>Tsuga canadensis</i>	Eastern Hemlock	SPC
<i>Viola lanceolata</i>	Lance-leaved Violet	THR
Vertebrate Animal		
<i>Acipenser fulvescens</i>	Lake Sturgeon	SPC
<i>Clemmys insculpta</i>	Wood Turtle	THR
<i>Emydoidea blandingii</i>	Blanding's Turtle	THR
<i>Falco peregrinus</i>	Peregrine Falcon	THR
<i>Haliaeetus leucocephalus</i>	Bald Eagle	SPC
<i>Heterodon nasicus</i>	Plains Hog-nosed Snake	SPC
<i>Ichthyomyzon fossor</i>	Northern Brook Lamprey	SPC
<i>Ichthyomyzon gagei</i>	Southern Brook Lamprey	SPC
<i>Lanius ludovicianus</i>	Loggerhead Shrike	THR
<i>Myotis septentrionalis</i>	Northern Myotis	SPC

SCIENTIFIC NAME	COMMON NAME	STATE PROTECTION STATUS
<i>Percina evides</i>	Gilt Darter	SPC
<i>Perognathus flavescens</i>	Plains Pocket Mouse	SPC
<i>Pipistrellus subflavus</i>	Eastern Pipistrelle	SPC
<i>Pituophis catenifer</i>	Gophersnake	SPC
<i>Seiurus motacilla</i>	Louisiana Waterthrush	SPC
Minnesota County Biological Survey (MCBS)		
MCBS site with outstanding biodiversity significance (2 Locations)		
MCBS site with high biodiversity significance (7 Locations)		
MCBS site with moderate biodiversity significance (18 Locations)		
MCBS site with below minimum biodiversity significance threshold (20 Locations)		

THR = State Threatened, END = State Endangered, SPC = State Special Concern

Table F-2. Endangered, Threatened, and Special Concern Species found in proposed NLX corridor in Douglas County, Wisconsin, January 2010

Source: Wisconsin Department of Natural Resources

The following species are known to occur in or near the corridor for the NLX Corridor. Specific list history information is given below.

Group	Scientific Name	Common Name	State Status *
Bird	<i>Bartramia longicauda</i>	Upland Sandpiper	SC
	<i>Oporornis agilis</i>	Connecticut Warbler	SC
	<i>Charadrius melodus</i>	Piping Plover	END
	<i>Sterna caspia</i>	Caspian Tern	END
Fish	<i>Acipenser fulvescens</i>	Lake Sturgeon	SC
	<i>Anguilla rostrata</i>	American Eel	SC
Mammal	<i>Canis lupus</i>	Gray Wolf	SC
	<i>Martes Americana</i>	American Marten	END
Plant	<i>Ranunculus gmelinii</i>	Small Yellow Water Crowfoot	END
	<i>Ranunculus cymbalaria</i>	Seaside Crowfoot	THR
	<i>Parnassia palustris</i>	Marsh Grass-of-parnassus	THR
	<i>Caltha natans</i>	Floating Marsh Marigold	END
	<i>Petasites sagittatus</i>	Arrow-leaved Sweet-coltsfoot	THR
	<i>Eleocharis nitida</i>	Slender Spike-rush	END
	<i>Sparganium glomeratum</i>	Northern Bur-reed	THR
	<i>Juncus vaseyi</i>	Vasey Rush	SC
	<i>Calamagrostis stricta</i>	Slim-stem Small-reedgrass	SC
	<i>Carex crawei</i>	Crawe Sedge	SC
	<i>Carex nigra</i>	Smooth Black Sedge	SC
	<i>Platanthera orbiculata</i>	Large Roundleaf Orchid	SC
<i>Salix planifolia</i>	Tea-leaved Willow	THR	
Reptile	<i>Glyptemys insculpta</i>	Wood Turtle	THR
Community		Emergent Marsh Northern Sedge Meadow	

* SC = Special Concern (those species about which some problem of abundance or distribution is suspected but not yet proved.); THR = Threatened; END = Endangered

1. **Upland Sandpiper** (*Bartramia longicauda*) – A bird of special concern in Wisconsin. It prefers tallgrass prairies, sedge meadows, unmowed alfalfa/timothy fields and scattered woodlands. The breeding season extends from early May through late September.
2. **Connecticut Warbler** (*Oporornis agilis*) – A bird of special concern in Wisconsin. It prefers mature, multi-layered pine stands, particularly jack pine, and occasionally in tamarack-pine stands with dense hardwood understory. The breeding season extends from mid-June through mid-July.
3. **Piping Plover** (*Charadrius melodus*) – A state endangered bird that prefers large isolated cobble beaches on the shores of Lake Michigan and Superior. Breeding occurs from early May through mid-September.
4. **Caspian Tern** (*Sterna caspia*) – A state endangered bird that prefers undeveloped sand beaches and islands along the Great Lakes, typically on sandy or gravelly coastal islands. Breeding occurs from late May through mid-July.
5. **Lake Sturgeon** (*Acipenser fulvescens*) – A species of Special Concern in Wisconsin that prefers large rivers and lakes. It also lives in the shoal waters of the Great Lakes. Inland it shows a preference for the deepest mid-river areas and pools. Spawning occurs from late April through early June in cold, shallow, fast water.
6. **American Eel** (*Anguilla rostrata*) – A fish of special concern in Wisconsin. It prefers large streams, rivers and lakes with muddy bottoms and still waters. To reach these conditions the eel has to traverse a wide variety of less suitable habitat including swift-flowing waters with a wide variety of substrates. Spawning occurs in the Sargasso Sea.
7. **Gray Wolf** (*Canis lupus*) – Also referred to as the timber wolf, and is listed as special concern in Wisconsin. Wolves are social animals that live in packs, and pack sizes in Wisconsin average up to six individuals with a few packs as large as ten animals. A wolf pack's territory may cover 20-120 square miles.
8. **American Marten** (*Martes Americana*) – A state endangered mammal that lives in mature, dense conifer forests, mixed conifer-hardwood, and hardwood dominated forests. American martens prefer forests with a mixture of conifers and deciduous trees including hemlock, white pine, yellow birch, maple, fir and spruce. Marten young are born in tree dens in late March and April and are weaned when about six weeks old.
9. **Small Yellow water Crowfoot** (*Ranunculus gmelinii*) – A plant species that is endangered in Wisconsin. It is found in cold brooks and springs, shallow water and muddy shores of ditches, streams, and lakes. Blooming occurs late June through late August; fruiting occurs early July through early September. The optimal identification period for this species is late June through early September.
10. **Seaside Crowfoot** (*Ranunculus cymbalaria*) – A state threatened plant which is found in sandy or muddy shores and marshes, ditches and harbors along Lake Michigan, and salted roadsides near the City of Superior. Blooming occurs early June through late August; fruiting occurs late July through late August. The optimal identification period for this species is early June through late August.

11. **Marsh Grass-of-parnassus** (*Parnassia palustris*) – A state threatened plant found on clay bluffs on Lake Superior, cold northern fens, and gravel pits with calcareous sandy areas. Blooming occurs early August through early September; fruiting occurs throughout September. The optimal identification period for this species is throughout August.
12. **Floating Marsh Marigold** (*Caltha natans*) – A state endangered plant found in shallow water in creeks, pools, ditches, and sheltered lake margins. It typically roots in mud, silt, or clay, and spreads by rooting at the nodes. Blooming occurs throughout July; fruiting occurs throughout August. The optimal identification period for this species is early July through late August.
13. **Arrow-leaved Sweet-coltsfoot** (*Petasites sagittatus*) – A state threatened plant that is found in cold marshes and swamp openings, often forming large clones. This species hybridizes with *Petasites palmatus*. Blooming occurs throughout May; fruiting occurs throughout June. The optimal identification period for this species is late may through late August.
14. **Slender Spike-rush** (*Eleocharis nitida*) – A state endangered plant that is found on wet exposed clay in ditches and openings in alder thickets and marshes, only near Superior. Blooming occurs throughout June; fruiting occurs late June through early September. The optimal identification period for this species is late June through late August.
15. **Northern Bur-reed** (*Sparganium glomeratum*) – A state threatened plant found in cold ditches and pools in sedge meadows, willow-alder thickets, and, occasionally, tamarack stands on the Lake Superior clay plain. Blooming occurs late June through late July; fruiting occurs late July through early September. The optimal identification period for this species is early July through early September.
16. **Vasey Rush** (*Juncus vaseyi*) – A plant of special concern in Wisconsin that is found in moist old fields, ditches, and moist prairies. It has been most commonly found on the Lake Superior clay plain. Blooming occurs early July through late August; fruiting occurs early August through early September. The optimal identification period for this species is early July through late August.
17. **Slim-stem Small-reedgrass** (*Calamagrostis stricta*) – A plant of special concern in Wisconsin. It is usually found on dry to moist dunes, barren, and dolomite or sandstone ledges, mostly near the Great Lakes, as well as calcareous wetlands. Blooming occurs throughout June; fruiting occurs early July through late August. The optimal identification period for this species is early July through late August.
18. **Crawe Sedge** (*Carex crawei*) – A plant of special concern in Wisconsin. It is found in calcareous wetlands and dolomitic pavement, often near Lake Michigan. It is also found in fens and moist calcareous prairies. Blooming occurs late in April through late May; fruiting occurs late May throughout late June. The optimal identification period for this species is throughout May.
19. **Smooth Black Sedge** (*Carex nigra*) – A plant of special concern in Wisconsin. It is found mainly on the edge of dry meadows and wet/sedge meadows and shrub-carr habitats. Fruiting occurs July through August. The optimal identification period for this species is early July through late August.

20. **Large Roundleaf Orchid** (*Platanthera orbiculata*) – A plant of special concern in Wisconsin which is found in moist hardwood or mixed conifer-hardwood forests. Blooming occurs late June through late July; fruiting occurs early July through late August. The optimal identification period for this species is late June through early August.
21. **Tea-leaved Willow** (*Salix planifolia*) – A state threatened plant that is found near Lake Superior, including bedrock shorelines in the Apostle Islands. Blooming occurs throughout May; fruiting occurs throughout June. The optimal identification period for this species is early June through early September.
22. **Wood Turtle** (*Glyptemys insculpta*) – A state threatened species that prefers clean rivers and streams with moderate to fast flows, adjacent riparian wetlands, and upland deciduous forests. The wood turtle becomes active in spring as soon as the ice is gone and air temperatures reach approximately 50 degrees in March or April. They can remain active into mid-October but have been seen breeding under the ice. Wood turtles can breed at any time of the year but primarily during the spring or fall. Nesting usually begins in late May and continues through June. They usually nest in sand or gravel, and usually very close to the water.
23. **Emergent Marsh** (Community) – An open marsh, lake, riverine or estuarine community with permanent standing water. Generally dominated by emergent macrophytes, in pure stands of single species or in various mixtures. Dominants include cattails, bulrushes, bur-reeds, giant reed, pickerel-weed, water plantain, arrowhead, spikerush, and wild rice.
24. **Northern Sedge Meadow** (Community) – An open wetland community that is dominated by sedges and grasses and occurs primarily in northern Wisconsin. There are several common, fairly distinctive, subtypes: Tussock meadow; wire-leaved sedge meadow; and broad-leaved sedge meadow. Sphagnum mosses are either absent or they occur in scattered, discontinuous patches.