

# **Appendix J**

## **T&E Species Database Reviews**

Community Wind South Repower Project  
Nobles County, Minnesota

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# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Minnesota-Wisconsin Ecological Services Field Office  
4101 American Blvd E

Bloomington, MN 55425-1665

Phone: (952) 252-0092 Fax: (952) 646-2873

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>

In Reply Refer To:

June 02, 2020

Consultation Code: 03E19000-2020-SLI-0901

Event Code: 03E19000-2020-E-04407

Project Name: Community Wind South

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the action area the area that is likely to be affected by your proposed project. The list also includes any designated and proposed critical habitat that overlaps with the action area. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representatives) must consult with the Service if they determine their project may affect listed species or critical habitat. Agencies must confer under section 7(a)(4) if any proposed action is likely to jeopardize species proposed for listing as endangered or threatened or likely to adversely modify any proposed critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website <http://ecos.fws.gov/ipac/> at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. This website contains step-by-step instructions that will help you

determine if your project will have an adverse effect on listed species or critical habitat and will help lead you through the Section 7 process.

For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within the action area.

Although no longer protected under the Endangered Species Act, be aware that bald eagles (*Haliaeetus leucocephalus*) are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*) and Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*), as are golden eagles (*Aquila chrysaetos*). Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near a bald eagle nest or winter roost area, see our Eagle Permits website at <http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html>. The information available at this website will help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
  - Migratory Birds
-

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Minnesota-Wisconsin Ecological Services Field Office**

4101 American Blvd E

Bloomington, MN 55425-1665

(952) 252-0092

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## Project Summary

Consultation Code: 03E19000-2020-SLI-0901

Event Code: 03E19000-2020-E-04407

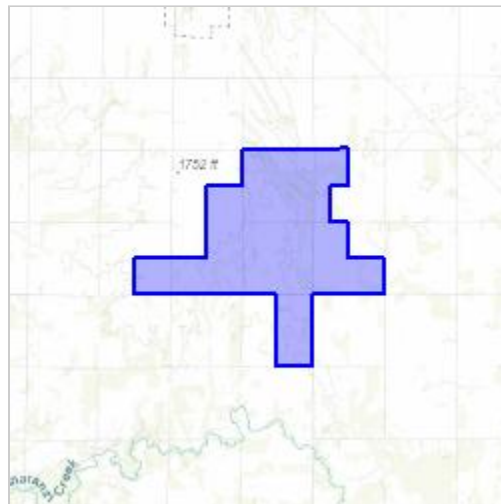
Project Name: Community Wind South

Project Type: POWER GENERATION

Project Description: Wind project, 30 megawatts, 15 turbines

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/43.71031784033748N95.79823420729421W>



Counties: Nobles, MN

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## Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Fishes

NAME	STATUS
Topeka Shiner <i>Notropis topeka</i> (=tristis) Population: Wherever found, except where listed as an experimental population There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4122">https://ecos.fws.gov/ecp/species/4122</a>	Endangered

### Flowering Plants

NAME	STATUS
Prairie Bush-clover <i>Lespedeza leptostachya</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4458">https://ecos.fws.gov/ecp/species/4458</a>	Threatened

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## Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Topeka Shiner <i>Notropis topeka</i> (=tristis) <a href="https://ecos.fws.gov/ecp/species/4122#crithab">https://ecos.fws.gov/ecp/species/4122#crithab</a>	Final

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## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

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1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a>	Breeds Dec 1 to Aug 31

## Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the

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FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

### **Probability of Presence (■)**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

### **Breeding Season (■)**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### **Survey Effort (|)**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

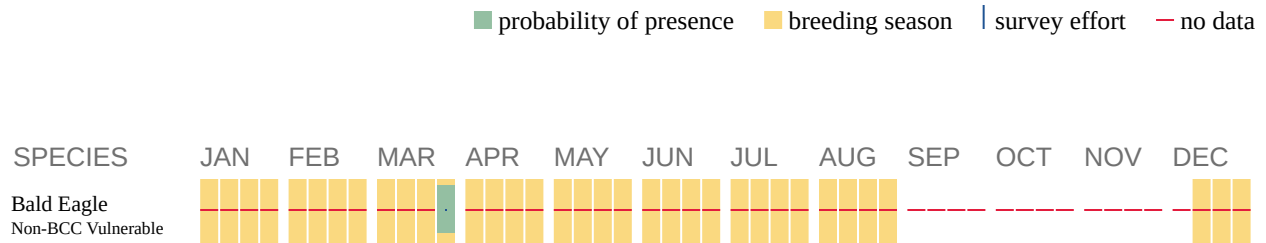
### **No Data (—)**

A week is marked as having no data if there were no survey events for that week.

### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

## Migratory Birds FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

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Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

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For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

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Division of Ecological & Water Resources  
Region 4 (Southern Region)  
21371 Highway 15 South  
New Ulm, MN 56073

November 13, 2020

David Weetman  
Westwood Professional Services, Minnetonka MN  
david.weetman@westwoodps.com

Subject: DNR Early Coordination Comments for Community Wind South Repower

Dear David,

This letter includes DNR's early coordination review comments of the proposed Community Wind South Repower project in response to a review request received on 10/12/20 with shapefile project information received 10/20/20. The proposed project, located in central Nobles County, is to retrofit all 15 turbines with larger rotors and different nacelles to increase energy yield and extend the life of the project. The review request letter describes much of the infrastructure remaining the same, but several temporary impacts as well as road/intersection upgrades will also be necessary. This project is located along the peak of the Prairie Coteau, a substantially wind-developed area within Minnesota. This is a high priority conservation region in the [MN Wildlife Action Plan](#), the [MN Prairie Conservation Plan](#), and the [Missouri River One Watershed One Plan](#).

### **General Guidance and Recommendations**

The project should thoroughly review and integrate the [MNDNR Guidance for Commercial Wind Energy Projects](#) throughout project development. Several natural resource GIS data layers are available on the [Minnesota Geospatial Commons](#) including Native Plant Communities, Calcareous Fens, and MBS Sites of Biodiversity Significance to assist in your project planning. Additional resources are also available from conservation groups such as the [The Nature Conservancy's Site Wind Right](#).

The Public Utilities Commission (PUC) protects non-participating landowners through the wind access buffer of 5 rotor diameters (prevailing wind direction) and 3 rotor diameters (non-prevailing wind direction). I am not currently identifying any issues with this setback and your current tower location in regards to State owned lands, but ensure this requirement is met for private lands as well.

### **Rare Species (NHIS Review) and Habitat Protection**

The MNDNR recommends or requires (depending on the specific type of species/community impact) avoidance of rare species/communities. A Natural Heritage Information System (NHIS) review provides direction on rare species/communities. The NHIS review must be completed, and plans to avoid impacts should be in place, prior

to submitting the PUC application. Your NHIS review was completed 6/8/20 and the results are valid for one year.

The project area is within the Rock River watershed, a designated critical habitat for the federally protected and state special concern species [Topeka Shiner](#). The project should consult with the USFWS. Generally, avoidance practices for this species include those that avoid impacts or degradation of the stream, habitat, or water quality within streams. Specific recommendations are found in the USFWS' [Recommendations for Projects Affecting Waters Inhabited by Topeka Shiners in Minnesota](#).

While none have been reported in the vicinity of this project, recent studies have indicated that the State threatened [Blanding's Turtles](#) have begun moving into this portion of the state, often overlapping with Topeka Shiner habitat. Most practices that will generally protect stream and upland habitat will also help protect Blanding's turtles – more information and specific recommendations are provided in the [Blanding's Turtle Fact Sheet](#). We also encourage on-site worker to keep an eye out for Blanding's turtles and report any sightings to our non-game staff. The Blanding's Turtle ID and Reporting Factsheet (attached) can be provided to staff to help facilitate this.

We generally recommend wildlife friendly erosion control and invasive species prevention practices (attached) to minimize risks to aquatic and terrestrial habitats.

### **Bat and Bird Protection**

The project proposer will need to prepare an Avian and Bat Protection Plan (ABPP a.k.a. Bird and Bat Conservation Strategy) per [US Fish and Wildlife Service Land-Based Wind Energy Guidelines](#) to identify and document measures to avoid and minimize risks to rare species. After the Tier 1 and Tier 2 Evaluations, we can discuss if any additional surveys are recommended. The ABPP should include, as an Appendix, a post-construction fatality monitoring plan to assess project impacts using the [Minnesota Avian and Bat Survey Protocols for Wind Energy Projects](#).

Recent Minnesota Public Utilities Commission site permits have required that all turbines are locked or feathered up to the manufacturer's standard cut-in speed from one-half hour before sunset to one-half hour after sunrise from April 1 to October 31 of each year of operation. Site permits also state that operating turbines must be equipped with operational software capable of adjusting turbine cut-in speeds. The MNDNR supports this site permit requirement.

### **Waterbodies**

Three public water streams, their floodplains, and several other smaller flow paths are within the project boundary. Some National Wetland Inventory wetlands and sensitive groundwater areas are also located within the project boundary. Any crossings of public waters will require a [DNR Utility Crossing License](#). If any dewatering or water appropriations are necessary, we encourage early coordination with DNR Hydrologists when applying for water appropriations permits due to sensitive groundwater and surface water features found in and near the project area. The project should work with the appropriate authority (typically the county) to ensure any Wetland Conservation Act, flood plain, or other local environmental requirements are fulfilled.

We look forward to working with you on this in a positive and collaborative manner to ensure that sustainable energy sources are developed while protecting Minnesota's natural resources. Please contact me if you have any questions about these comments.

Sincerely,

A handwritten signature in black ink that reads "Joanne Boettcher". The signature is written in a cursive, flowing style.

Joanne Boettcher, Regional Environmental Assessment Ecologist

cc:

Cynthia Warzecha, Energy Project Planner  
Megan Benage, Regional Ecologist  
Lisa Gelvin-Innvaer, South District Nongame Wildlife Specialist  
Brent Beste, Groundwater Protection Hydrologist  
Tom Kresko, Area Hydrologist  
Ryan Doorenbos, Area Fisheries Supervisor  
Bill Schuna, Area Wildlife Supervisor  
Todd Kolander, EWR South District Supervisor  
Tim Gieseke, EWR Assistant Regional Manager  
Robb Collett, EWR Regional Manager  
Nick Utrup, USFWS  
Dawn Marsh, USFWS





# HAVE YOU SEEN A BLANDING'S TURTLE ?

State-listed Threatened Species



**Carapace**



**Male=concave Plastron Female=flat**

**Carapace** (upper shell): Round, dome-shaped, very smooth, dull black with specks and streaks of yellow throughout.

**Plastron** (lower shell): Yellow with dark splotches on each scute (section); hinged between 3<sup>rd</sup> and 4<sup>th</sup> pair of scutes (front closes like a drawbridge) So the Blanding's turtle is sometimes called a "semi-Box Turtle"

The **bright yellow chin and underside of the long neck** is one of the most conspicuous features of this turtle. Marshes, ponds, rivers & streams, adjacent uplands; Also travel overland & cross roads. May bask on logs, shore



**Yellow neck/chin; no stripes**



**Domed Carapace**

The MNDNR Nongame Wildlife Program (NWP) is seeking reports of **Blanding's turtles** in the counties of southern Minnesota\*.

If possible, sightings should be verified promptly by either:

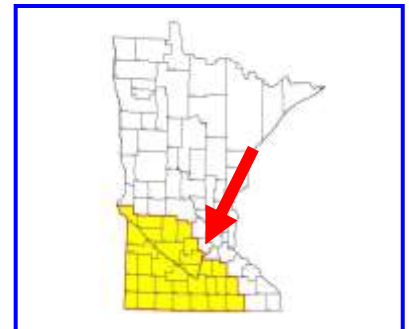
1. photographs showing identifying characteristics (top & bottom of shell, jaw) AND/OR
2. a detailed written description specifying identifying characteristics and circumstances of the sighting. (incl. if turtle shell is marked in any way)

Please include:

- Name phone number &/or email address of person reporting sighting
- Date of Sighting
- Number of Blanding's turtles observed
- Specific Location of Sighting  
e.g. GPS coordinates OR Township, Range Section to the nearest 1/4 1/4 section &/OR
- Specific directions (e.g. roads with distance and direction from nearest town or other conspicuous landmark with any other information that may be helpful for locating the site. Details about the habitat & landowner contacts also really help. **Many Thanks !**

Please Report Sightings as soon as possible to:

MNDNR Nongame Wildlife Program- Southern Region  
Lisa Gelvin-Innvaer, Phone: 507-233-1254 Email: [lisa.gelvin-innvaer@state.mn.us](mailto:lisa.gelvin-innvaer@state.mn.us)  
Mike Worland Phone: 507-362-8786 Email: [michael.worland@state.mn.us](mailto:michael.worland@state.mn.us)



## Standard Erosion Control and Invasive Species Prevention Best Practices

Take precautions when working near waterbodies to prevent sedimentation and erosion:

- Erodible surfaces should not be left exposed for greater than one day. For example, work should not commence late in the week if it will be left unfinished over a weekend.
- Work should not commence if rain is predicted.
- All wheeled or tracked construction equipment should be restricted to work areas above the stream bank.
- Fill material should not be stockpiled in the floodplain.
- Backfill placed below Ordinary High Water (OHW) should consist of clean granular material free of fines, silts, soils, and mud.
- Use [Best Practices for DNR General Public Waters Work Permit GP 2004-0001: Species Protection](#). Refer to pages: 3, 11, 14, 16, 25, 33, and 34 as relevant to a particular project.
- Vegetative “grout” should be incorporated with any installed rip rap (see page 33 of above link).
- [Native species planting/seeding](#) should be used.
- DNR Public Waters Work Permit may be required. Permit requirements must be followed.

Use wildlife friendly erosion control:

- Biodegradable netting should be used, preferably natural materials with short degradation periods.
- Erosion control blankets should be limited to bio-netting or natural netting types due to the risk of entanglement and death of small animals. [2018 MnDOT Standards Specifications for Construction](#) identify acceptable materials in Category 3N or 4N mulches.
- Do not use products that require UV-light to degrade (also called “photodegradable”), as they do not degrade properly when covered/shaded.
- Do not use products containing plastic mesh netting or other plastic components.
- Do not use mulch products that contain synthetic (plastic) fiber additives near waterbodies.
- See [Wildlife Friendly Erosion Control](#) for more information.

Take active steps to prevent invasive species introduction and spread:

- Clean all equipment (including but not limited to: vehicles, clothing, and gear) at a site prior to moving to another site. All soil, aggregate material, mulch, vegetation, seeds, animals, etc. need to be removed using a hand tool, brush, compressed air, pressure washer, or otherwise.
- If equipment is not cleaned before arriving to a work site, then clean the equipment in the parking or staging area, ensuring no material is deposited at the new site. Material cleaned from equipment should be disposed of legally.
- All equipment (including but not limited to: waders, tracked vehicles, barges, boats, turbidity curtain, sheet pile, and pumps) used for work in an “infested water” must be adequately decontaminated. See [Watercraft Decontamination Manual](#) for more information.
- See [Come Clean, Leave Clean](#) for more detailed guidance. This guidance is required for those working on DNR lands as part of grant or contract or are working under a permit, your grant, contract, or permit.

### Referenced Links

[https://files.dnr.state.mn.us/waters/watermgmt\\_section/pwpermits/gp\\_2004\\_0001\\_chapter1.pdf](https://files.dnr.state.mn.us/waters/watermgmt_section/pwpermits/gp_2004_0001_chapter1.pdf)

<https://bwsr.state.mn.us/seed-mixes>

<https://files.dnr.state.mn.us/eco/nongame/wildlife-friendly-erosion-control.pdf>

<http://www.dot.state.mn.us/pre-letting/spec/2018/2018-spec-book-final.pdf>

<https://www.dnr.state.mn.us/invasives/dnrlands.html>

<https://www.dnr.state.mn.us/invasives/dnrlands.html>

[https://files.dnr.state.mn.us/natural\\_resources/invasives/mndnr\\_ais\\_decontamination\\_handbook.pdf](https://files.dnr.state.mn.us/natural_resources/invasives/mndnr_ais_decontamination_handbook.pdf)