



Blue Goose VirtualCaching Challenge

National Wildlife Refuges...places where people can come to experience the beauty and diversity of plants and wildlife that are part of our nation's natural heritage. Explore the diversity of Necedah National Wildlife Refuge and all the rewards it brings, whether you hunt, hike, berry pick, birdwatch, draw, paint, or take pictures. Thank you for visiting.

Now...get outside and enjoy this adventure.

TOOLS

Handout and clipboard, your gps unit, refuge map, and transportation

RULES

- Virtual Caching is about discovering a location rather than a container (as in traditional geocaching). The requirement for logging a Virtual Cache requires you to answer a question about the location, take a picture, complete a task, etc. You must visit the coordinates before answering any of the questions.
- Caches are found only along refuge roads.
- Please do not travel off road for your safety.
- Once all questions have been answered please come back to the Visitor Center by 3:30pm to be "graded" and awarded a certificate of completion and Blue Goose pin.
- **It's recommended you visit the Refuge Visitor Center first before venturing outside on the challenge for any additional rules and activities before you begin.



Thanks again for joining us and good luck. But most of all...HAVE FUN!!!

1. Visitor Center (5)

Coordinates: N 44° 03.312 W090° 10.309

The NEW Visitor Center of Necedah National Wildlife Refuge opened its doors on April 30, 2011 and is a class act within itself as a GREEN facility. By visiting an exhibit inside the building or on the kiosk located near the front entrance what green materials were used in the construction?

Answers: _____

2. Observing Wildlife From Above (2)

Coordinates: N 44° 03.190 W090° 09.744

The _____ offers a chance to see a remnant of the Great Central Wisconsin Swamp from a bird's eyeview. At the refuge how do we mimic Mother Nature's natural cycle?

In what seasons of the year does this occur?

There is only a _____ difference in elevation from the north end to the south end of the refuge.

3. What's Soaring Above???

Coordinates: N 44° 02.052 W090° 09.682

Whether soaring high or skimming over the vegetation, Necedah National Wildlife Refuge hosts a variety of _____ or _____.

4. Oh Savannas

Coordinates: N 44° 03.191 W090° 10.192

At one time, savannas covered 4 million acres in Wisconsin. Only about 5 thousand acres remain today. What animal species can you find in Refuge savannas?

Answer: _____

Others not listed? _____

5. Managing for Water (4)

Coordinates: N 44° 02.850 W090° 10.450

A water management program began on the refuge in 1941. Now, over 5,000 acres of permanent marsh in 50 impoundments are managed for wetland species.

What wetland species could you find here?

Answers: _____

6. A Boghaunter We Will Go

Coordinates: N 44° 04.250 W090° 11.526

Named after the ringed boghaunter dragonfly because of its love for sphagnum bogs and sedge meadows in which this area has a lot of. The insect is an endangered species in the state of Wisconsin. Only the counties of Jackson, Wood, Adams, and Juneau have confirmed sightings.

Draw the shape and label the three plant types found in this area. Use the diagram as a guide.

7. Cache In Trash Out

Coordinates: N 44° 07.133 W090° 11.081

Cache In Trash Out is an activity intimately tied to geocaching. While searching for your next cache, collect litter along your way and properly dispose of it or use the trash bag provided to you when you checked in at the Visitor Center. *Cache In Trash Out* Events are larger gatherings of geocachers that focus on litter clean-up, removal of invasive species, revegetation efforts or trail building. We appreciate your time and assistance in this challenge.

8. Fins & Fun

Coordinates: N 44° 08.530 W090° 11.501

Catching these aquatic animals can be fun and exciting with the right bait. Found in these waters contain up to seven animals. Referring to the informational panel please list the seven that are native to this habitat.

Answers: _____

- **Photo Challenge:** Using your Smartphone you have been challenged to take a picture of yourself with the backdrop of the Sprague-Goose Pools in the background. Describe your location and provide any wildlife sightings and send it to Necedah@fws.gov or post on the Necedah Refuge Facebook page. Please put your last name or Geocache user name in the subject line.

9. Karner Blues

Coordinates: N 44° 09.083 W090° 11.606

Along the _____ Karner Blue butterflies can be seen during in late spring and early summer and are about the size of a quarter.

According to the diagram what month(s) do the little green caterpillars emerge from eggs on the lupine plant in the refuge? _____

10. Habitat Restoration

Coordinates: N 44° 08.454 W090° 08.225

As you read this panel what two habitat management tools are used to restore habitat and what do they do for the surrounding area?



11. Sedge Meadows

Coordinates: N 44° 05.802 W090° 09.696

You are you standing near one of several sedge meadows. They are comprised of the tall and thin, wispy grass (wiregrass). Sedge Meadows are the only old growth habitat in the Refuge. The meadows have remained since the glaciations. Sedge meadows are a northern relic and because they are present at Necedah in central Wisconsin, they are holding species further south than normal. Sedge meadows are comprised of a high water table creating the wetlands. The soil consists mostly of peat soil, which holds in moisture, and sedge meadows are generally open spaces with different species of grasses.

Sedge meadows on Necedah National Wildlife Refuge house six different species of birds: Sedge Wrens, Blue Winged Warblers, Golden Winged Warblers, Henslow's Sparrows, LaConte's Sparrows and Bobolinks. These six species are listed on the National Audubon Society's Watch List and the US Fish and Wildlife Service Region 3 Conservation Priority List. Along with the birds, invertebrates such as dragon flies are in abundance. The newest and rarest dragon fly species, the Ringed Boghaunter, lives in the sedge meadows of Necedah along with a few dozen other dragon flies. Aspen and willow stand better on the wetter soils and occur naturally in the sedge meadows. Game animals also use sedge meadows as part of their habitat. Sedge meadows need to be burned and mowed periodically to be perpetuated.

12. Watch this Spot

Coordinates: N 44° 04.206 W090° 07.468

A _____ is defined as open grasslands speckled with scattered trees and shrubs.

Congratulations! YOU have completed the Blue Goose VirtualCaching Challenge. Please return to the Refuge Visitor Center before 3:30pm to check your answers and be awarded your certificate of completion and Blue Goose Pin.

OR

Email your answers to Necedah@fws.gov and provide a mailing address so that we can send you your certificate and pin.