NAMEKAGON BARRENS WILDLIFE AREA SELF-GUIDED TOUR

STOP 1: NAMEKAGON BARRENS WILDLIFE AREA

(Corner of St. Croix Trail & Dry Landing Road)

The Namekagon Barrens Wildlife Area (NBWA) consists of a South Unit and North Unit, with a total of 6,428 acres, over 10 square miles. You are currently on the North Unit. Historically the mixture of brush, young trees, prairie grasses, and wildflowers was very common in Wisconsin. The lack of mature forest on these burned-over landscapes caused people to refer to such areas as the "barrens." In truth, these open landscapes are home to a rich diversity of wildlife, and are covered by numerous species of plant life as well. These pine/oak barrens are part of the Northwest Sands Ecological Landscape of northwest Wisconsin, and was designated a Wisconsin Natural Heritage Scientific Area in 2017. Barrens habitat is a globally rare, fire dependent community, rich with diverse prairie flora and fauna. It is home to the largest Wisconsin population of the Sharp-tailed Grouse, and other games species, including wild turkeys, deer and bears. This is the place to see Upland Sandpipers, Brown Thrashers and other rare open-landscape loving birds, badgers and so much more.

The European settlement of Wisconsin and improved fire protection resulted in a great reduction of natural occurring wildfires. That allowed the barrens to become mostly forested. Some areas were converted to farming, actively managed for timber production through the planting of trees, and others converted to other human uses. It is estimated that the barrens habitat once covered five million acres in Wisconsin. Today this type of habitat has been reduced to about 50,000 acres, or only 1% of the original habitat remains. This rare habitat is globally significant because it is currently found in only a few small areas.

The North Unit is much larger and flatter, comprising 5,732 acres, while the South Unit, three miles to the southwest of the North Unit, consists of 696 acres of rolling hills. While the topography in the North Unit is less steep, it is very rich in both plant and animal species. Visits at dawn and dusk often result in many different species of animals seen, or heard. Visits during different months of the growing season will reward you with a variety of colors from different flowering plants in bloom.

Post settlement failure (see Stop 2) the Namekagon Barrens Wildlife Area was owned by Burnett County, and leased to the Department of Natural Resources Wildlife Management Program to manage as a wildlife area from 1956 to 2015. The DNR then gained fee title to the property through a large land swap and purchase agreement with the county. The wildlife area is surrounded by Douglas, Washburn, and Burnett County Forests. The sandy soils of this region are excellent for growing red pine and jack pine. Since both species of trees are very fire prone and can cause large crown wildfires when ignited, NBWA makes an excellent fire break in this large expanse of pine in the event of a large crown fire.

WILDFIRE & PRESCRIBED FIRE

As you travel about the barrens you may notice black areas, or recent burns of one of the 29 burn units on the NBWA. Wildlife managers use controlled fires, called prescribed burns, to set back succession and maintain this increasingly rare habitat. On average only four to six of the units are burned each year. After a spring burn these areas begin to green up within days, and you may not even notice the area was burned by the end of the growing season. Wildlife and plant species that were once abundant in Wisconsin barrens are now confined to these isolated habitats where fire is used to manage them. For example, Sharp-tailed Grouse were so abundant prior to effective control of wildfires that early accounts of hunting by settlers frequently mention shooting enough Sharp-tailed Grouse in a day to fill their horse drawn wagons. Today, the entire population of sharp-tails in Wisconsin would probably not fill such a wagon.

The sandy region of northwest Wisconsin burned frequently prior to the arrival of European settlers. Wildfires caused by lightning burned across the drought prone landscape until heavy rains or natural features such as

lakes, rivers or heavier, wetter soils put out the flames. Native Americans burned the area frequently for a variety of reasons. It made travel easier, and villages were safer from wildfire when surrounded by burned over land. Game animals were attracted to the lush vegetation that grew after a fire, and biting insects were reduced. Also, blueberries, another wild food important to the Native Americans, flourish after fire.

Hundreds of years of repeated fires resulted in a landscape of small trees, brush, and numerous species of prairie plants. Wildlife that adapted to this type of landscape thrived. Species such as Upland Sandpipers and Sharp-tailed Grouse were abundant.

STOP 2: HISTORY OF THE PIONEER FARMING COMMUNITY & SCHOOLHOUSE

(School house foundation site one half mile east of Dry Landing Road on St. Croix Trail) Early settlers in the United States were faced with the daunting task of clearing forested lands before they could begin farming. The frequently burned lands in and around NBWA were largely free of mature trees, and the sandy soils were relatively easy to plow. Land speculators promoted the area as productive land ready for farming. Settlers started grazing cattle and lightly farming the region around the turn of the century, and promotion of the barrens resulted in a farmland community during the first decades of the century. Newly plowed land was initially fertile enough to grow decent crops. Favorable precipitation along with initial fertility brought some early farming success. More immigrants came from across America and Europe. Unfortunately, the soil was quickly depleted and crops failed within a few years. Settlers were facing hardship and starvation due to the infertile soils, drought, and the depression. In the 1930s government agencies assisted some farm families in moving to more fertile farm land further south in Burnett County. The last settlers left in 1938.

Many of the failed farms and over logged areas of the north were simply abandoned and became tax delinquent. In an effort to restore productive forestland, the State of Wisconsin gave the tax delinquent lands to the respective counties in a cooperative state-county program that established the county forest system. The delicacy of the sandy soil type of the barrens is most evident in the remnant crop fields. After nearly 100 years of lying fallow, the outlines of these square, farmed plots of land are sometimes still evident in the area. Imagine the feeling of desolation that faced the early settlers as they experienced a total self-reliance in this undeveloped wilderness. The first order of business for a pioneer to a new life was to construct shelter for their family, farm animals, and implements. Next were the tasks of clearing land for the next spring's planting season, and securing winter feed for animals. Once a family's survival was more secure, pioneers usually erected a place of worship and a one-room schoolhouse. In front of you is the foundation of this community's schoolhouse can be seen with an earthen firebreak around it. Wildfires had to be a serious concern for early settlers just as it had been for Native Americans before them. It is likely that religious services were still being conducted in one of the private residences or school, as no church site has been located.

STOP 3: RECREATION ON THE BARRENS

(Southeast corner of St. Croix Trail & Gomulak Firelane)

People think of state wildlife areas, they often think of a place to hunt and trap, but many visitors to Wisconsin State Wildlife Areas are there to observe nature. The Namekagon Barrens Wildlife Area (NBWA) is similar in that it draws a whole host of recreational visitors, likely more than active hunters or trappers. However, great hunting and trapping can be found on the property and many do take advantage of these opportunities.

The area has healthy populations of deer, bear, wild turkeys, coyotes, fox, and Sharp-tailed Grouse, as well as many other species of small game and furbearers. Many hunters have learned that a great diversity of wildlife is attracted to recently burned brush prairie habitats. Hunters and anglers are largely responsible for paying the costs of the NBWA. Hunting and fishing licenses and necessary permits, plus a federal tax on all equipment used in these sports help pay for wildlife surveys, habitat management, and property maintenance.

Barrens habitat consists of a great variety of prairie grasses and wildflowers, plus many species of trees and shrubs. If your interest is plants, visit the property throughout the growing season, since plants do not all flower

at the same time. An area on the property that appeared blue a few weeks ago may now look white or yellow. A good plant identification book is helpful.

This open barrens habitat makes for excellent viewing of the numerous species of wildlife, some of which are quite rare elsewhere. Most of the bird species are active during the day, but many mammals sleep during midday, or take cover against the high temperatures of a mid-summer day, and can best be seen at dawn or dusk. An area that seemed devoid of animal life at noon can be surprisingly full of activity when the sun is low. There's a chance you may see coyotes, wolves, bear, deer, badger and a host of other species. Follow the tracks in the sand or snow and discover where they went and what they did. Also look for reptiles, and the wide diversity of butterflies, bees and other important and interesting insects.

Dog training, and hunting with dogs are a popular use of the NBWA. However, all dogs must be leashed from April 15 through July 31 to protect breeding wildlife, but starting August 1, the property is open to dogs off leash. Since the open barrens habitat allows people to see their dogs more easily than the more forested public lands of northern Wisconsin, it is a highly attractive area for training dogs. Competitive sanctioned field trials occur on the property with a permit in early fall. The dog field trial community has been a great supporter of the NBWA, and welcomes people who wish to observe the activity and learn about dog field trials.

Blueberry picking attracts many visitors as well, with the prescribed burning of the barrens playing a constant role in rejuvenating this species to produce an abundance of berries.

Even kite flyers have been observed on the barrens. Still others come at night to enjoy the dark sky to view the stars and planets without the big city light pollution.

Please note that while the wildlife area is transected by numerous narrow roads, some are closed to public motorized travel. The DNR access roads were originally constructed as firebreaks for prescribed burning and are easily eroded. Also, a few roads are seasonally closed to protect breeding Sharp-tailed Grouse. NBWA is closed to the general use of horses to protect the easily eroded soil and prevent the spread of invasive species. The only exception is during dog trials where the negative impacts are greatly minimized because use is limited to only a few days a year, and care is taken to prevent the import of invasive plant seeds on horse hooves.

Beyond the gate is the NBWA cabin, picnic shelter, and portable biffy. Visitors to the NBWA are welcome to use the picnic shelter and 'restroom'. This area and the cabin are used by the Friends of the Namekagon Barrens Wildlife Area, competitors in dog trials, researchers, and other environmental nonprofit organizations.

STOP 4: HISTORIC WAGON TRAIL (0.6 miles north on Gomulak Firelane)

Until the 1600s, the land that today is occupied by the wildlife area belonged to the Dakota people. Then Ojibwe people migrated from the east, and, after a period of tension and cooperation between the tribes, the Ojibwe used it for several hundred years as part of their "seasonal rounds." They hunted and trapped here, gathered blueberries in the summer and harvested wild rice in nearby lakes in fall. Some trails they left have become routes still in use today. In 1837, the Ojibwe ceded the land to the U.S. government in what was known as the Pine Tree Treaty because its main goal was to open up the north woods of Wisconsin and Minnesota for American logging. The Ojibwe kept their rights to hunt and fish and gather rice in the ceded territory and many descendants of these original inhabitants live in the area today. The closest reservation belongs to the St. Croix band, once known as the "Lost Tribe" because it was left out of the 19th Century creation of reservations.

Today, the country in and around the Namekagon Barrens Wildlife Area (NBWA) contains many miles of drivable roads. These roads provide easy access for timber management, recreation, sightseeing, and fire protection. A century ago, these roads were non-existent, and access was limited to either canoeing the nearby Namekagon River, or following a two-rut wagon trail through the landscape.

Crossing the firebreak here is the route Native Americans, then fur traders, then military, and eventually immigrants came through this country from St. Paul/Fort Snelling to areas north and east of here. Travelers crossed the St. Croix River by ferry at a site located in Sterling Township in northwest Polk

County, Wisconsin. They traveled past the South Unit, northeast to the Namekagon River where they crossed a bridge built in 1863 by George Stuntz. The trail continued northeast through the North Unit and on to Bayfield and La Pointe on Lake Superior. This trail had many names over the years, including St. Paul/Fort Snelling to Bayfield/La Pointe Stagecoach Route, Bayfield Trail, St. Croix Trail, and Trail to La Pointe.

The sandy soils of this region recover very slowly from any form of disturbance. The wagon trails of the late nineteenth and early twentieth century are readily visible after a prescribed burn because the vegetation on the packed earth frequently doesn't burn, and burned vegetation no longer obscures the rut scars, leaving a distinct wagon trail across the burned section of the barrens. Shortly thereafter, regrowth of the vegetation causes the trail to disappear once again.

STOP 5: BIRDS OF THE BARRENS & CAVITY NESTERS

(Clemens Firelane 0.4 mile west of Gomulak Firelane- look for '5' on the Bluebird house) A visit to the Namekagon Barrens Wildlife Area (NBWA) in the early morning or evening with a good pair of binoculars often results in seeing many bird species, some of which may be quite rare in other parts of Wisconsin. Thus far, 121 different species of birds have been identified in this wildlife area. Both amateur and professional birdwatchers, and photographers, travel great distances to visit the barrens in hopes of seeing Upland Sandpipers and Sharp-tailed Grouse, two species that are associated with large expanses of barrens habitat, and found in only a few locations in Wisconsin and North America. Other species, such as the savannaloving Eastern Bluebird, or the open land-loving American Kestrel, are found in good numbers here. Still others such as the Bald Eagle or Common Raven are found throughout the area in both forested and barrens habitat.

The opportunity to see many different species of birds, both common and rare, has resulted in the NBWA being listed as an important birding site on a couple different registers. The Great Wisconsin Birding and Nature Trail is a series of trails throughout Wisconsin patterned after similar trails in other states. The Lake Superior Northwoods Region of the trails system lists the wildlife area as Stop Number 22. The Wisconsin Bird Conservation Initiative (WBCI) has also identified the NBWA as a "Wisconsin Important Bird Area."

While the sandy region of northwest Wisconsin was partially burned nearly every year, areas within the barrens escaped fires for decades due to chance or location. An area surrounded by wetlands, lakes, or rivers might not be burned as often. Surviving mature trees often had cavities in them that provided nest sites or shelters for certain birds and mammals. Species such as red squirrels, gray squirrels, flying squirrels, deer mice, bluebirds, kestrels, various woodpeckers, and chickadees managed to thrive in the barrens due to these tree cavities.

Dead trees with natural cavities currently exist on the Namekagon Barrens Wildlife Area (NBWA), but not as they would if fires burned naturally. Wildlife managers leave trees to become future snags and natural cavities, but they are not overly abundant since many dead trees eventually burn. In order to provide for more of the animals that would normally utilize natural cavities, nest boxes have been erected in several locations. Bluebird boxes, like the one you see here, are heavily used by Eastern Bluebirds, and also by mice, Black-capped Chickadees, and Tree Swallows. Managers have also placed American Kestrel boxes high in large trees providing the small falcon a place to nest, as well as providing for other species such as Northern Saw-whet Owls and squirrels. Can you find the nearby kestrel nesting box?

SPRING SHARP-TAILED GROUSE MATING DANCE

The brush prairie habitat found on the barrens is home to the increasingly rare Sharp-tailed Grouse. Once abundant across five million acres of barrens habitat in Wisconsin, today the birds exist on perhaps 50,000 acres and at low densities. The Sharp-tailed Grouse have a breeding behavior that has attracted many visitors to the Namekagon Barrens Wildlife Area each spring to observe their ritualized mating display. The male birds "dance" on a site called a lek, or dancing ground, to attract, and hopefully mate, with female grouse.

A lek is a small knoll with low vegetation that allows the males to be easily seen or heard by females. It also provides a vantage point from which the grouse can easily spot predators attracted to their displays. Each spring morning in April and early May, beginning before sunrise, males will stake out their spot on the lek where it dances and "coos." The females watch the proceedings and eventually select a prime male for breeding. Mature or dominant males tend to select sites near the center of the lek and are more successful at attracting mates. The open area to the east is one of three main leks. In the spring a small 'tent' blind is erected so visitors may observe this fascinating mating display. Reservations are required, and you can sign up on the Friends of the Namekagon Barrens Wildlife Area website https://www.namekagonbarrens.org/ or call the property manager at (715) 635-4091.

STOP 6: PIONEER CEMETERY (Just east of Dry Landing Road on Five Mile Road)

The logging era in northern Wisconsin started in earnest around 1880. Burnett County was one of the earlier areas sought out by the timber industry due to the St. Croix River and its tributaries, such as the Yellow and Namekagon Rivers that provided water routes to float logs to mills downstream. But then, once logging peaked around the turn of the century, the state and land promoters sought to bring immigrants and others to the area to farm. A small community sprang up where the wildlife area is today.

On July 18, 1906, Mr. Humphrey Hillock and his wife, Jennie Hillock, of Hamilton County, Iowa, who had purchased more than 1,000 acres in the barrens from the Chicago, St. Paul, Minneapolis & Omaha Railway, sold three acres for one dollar to the Evergreen Cemetery Association to provide a final resting place for the residents of Blaine Township. The Pioneer Cemetery in front of you has been locally known as Forest Home Cemetery, Hillock Cemetery, and now Evergreen Cemetery. It served the needs of area citizens for the next 25 years or so. In all, about three dozen settlers were buried here, although only a few markers remain. In 2014 there was a rededication ceremony held at this almost forgotten small cemetery. A flagpole and bench were added making it a nice place to stop, rest, and ponder what took place here over a hundred years ago. The granite marker was also added to replace the faded plaque on the rock, and reads: *"The people are now gone and the land has been reclaimed by nature, the past almost forgotten. These inhospitable barrens saw the individual sacrifice and hardships of the Indians and early settlers in their attempt to eke out a living in the non-fertile environment. Evergreen Cemetery remains as a memorial to the strength and courage of those people who once lived here. It will serve as a reminder to future generations to pause and give tribute to those who came before them."*

STOP 7: NAMEKAGON RIVER (Namekagon River bridge on Namekagon Trail)

The Namekagon River, along with the St. Croix River, form the National Scenic Riverway system. Managed by the National Park Service, they were among the first rivers so designated in 1968. The riverway protects 252 miles of river and adjacent lands. Both rivers are used most frequently by canoeists, kayakers, and campers.

The Historic Wagon Trail (Stop 4) crossed the river about one mile downstream from this location. Several nonmotorized boat accesses, similar to the one here, are maintained by the National Park Service. The Park Service also maintains numerous rustic campsites that are available without charge to river travelers. Day use areas and hiking trails are situated along the rivers as well. Additional information about the National St. Croix and Namekagon Rivers Scenic Area can be found at one of the National Park Service Offices at Trego on Highway 63, or in St. Croix Falls, Wisconsin.

STOP 8: SOUTH UNIT (Scenic pull-off on Namekagon Trial 0.5 mile south of river)

While most people admire the South Unit for its scenic quality, wildlife biologists also recognize it as a site of great plant and animal diversity. Steep slopes facing the sun are hotter and dryer than those facing away from the sun. Hilltops may experience direct sunlight most of the day while valleys may be shaded part of the day. Wind and water erosion cause hilltops to have more sterile soils than bottomlands. Varying fire intensities favor different species of plants. All of these variables create a great diversity of vegetation across the South Unit.

Wildlife responds to this variability as well with different species of reptiles, insects, birds, and mammals being abundant in some parts of the barrens and nearly absent in others.

Some of the more obvious plant diversity can be seen where you are standing. Young quaking aspen, or poplar trees, are abundant on the wetter, cooler, north facing slopes. Oak thrives in the dryer, more direct sunlight areas. Wetlands are noticeable in the bottomlands, including the small bog lake with its own unique grasses, sedges, and wildflowers below. A pair of binoculars might show more subtle changes in vegetation as well as document some bird species favoring certain habitat types. Scientific collections of both plants and animals have documented this great variability, and reinforces the need to preserve this rare barrens habitat predominated by rolling topography.

STOP 9: THE BARRENS' PLANT COMMUNITY & ALIEN INVADERS

(Scenic Overlook parking lot on Springbrook Trail)

Since the arrival of the first settlers from Europe, the frequent naturally burned sandy soil region of northwest Wisconsin has probably been referred to as the "barrens." Compared to the old growth forests that covered much of northern Wisconsin this area was usually considered quite sterile and was of little value to the timber barons of the nineteenth century. In actuality, thousands of years of sporadic fires created an extremely diverse mixture of grasses, forbs, shrubs, and trees. These plants are all well adapted to surviving fires or regenerating immediately after a fire. These species thrive in relatively sterile sand, love direct sunlight, and have adaptations that allow them to persist through frequent periods of drought that would kill off many other species.

Many of these plants have roots extending several feet into the sand to find moisture when lack of rain causes the shallower soils to dry out. Several species have seeds that can lie dormant for 40, 60, sometimes 100 years to survive prolonged drought or forested intervals between fires. Most are capable of sprouting from their roots after a fire burns off the above ground plant. All the species of plants in front of you demonstrate these survival tactics, but a cursory look at the tree species demonstrates a few of these traits.

The small oaks here could actually be centuries old. They burn and top kill during a fire, but their deep roots sprouts new stems that replace the burnt off stems. Jack pines have cones that remain closed until a hot fire causes them to burst open and shower the blackened ground with seeds. Red pines have thick bark that often protects them from fires that race along the ground. Aspen send numerous shoots up from one root mass after a fire and shade out understory grasses and forbs preventing many fires from carrying through a stand of trees.

You may or may not be an expert when it comes to identifying plants, but please take a short walk out onto the barrens and notice how diverse the area actually is. Also, think of the tough conditions these plants have adapted to over thousands of years of fire, drought, and sand. Currently, 246 species of plants have been identified on the Namekagon Barrens Wildlife Area.

While the NBWA is a remote property, it has not escaped the invasion of non-native plant species. Two especially aggressive invaders, spotted knapweed and leafy spurge, have found their way onto the Barrens. Due to these exotics ability to take over intact plant communities DNR Wildlife Management has worked to control these plants. Disturbed ground is often a perfect bed for foreign seeds to grow. This is why managers regulate such activities as motorized uses, horse riding, and other uses that may create bare trails within wildlife areas.

Thankfully, even with a few invasive species, the NBWA remains an ecologically rich community of diverse native plants and wildlife worth visiting over and over at various times of the year.

For more great information regarding all aspects of the Namekagon Barrens Wildlife Area please visit the WI DNR website, and see the Friends of the Namekagon Barrens Wildlife Area website at <u>https://www.namekagonbarrens.org/</u> The Friends are also on Facebook and Instagram.