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WISCONSIN DEPARTMENT OF NATURAL RESOURCES 2021 STATE REPORT May 25, 2021

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BUREAU OF WILDLIFE MANAGEMENT

<u>Staffing</u>

Due to retirements and internal transfers, the Bureau of Wildlife Management faces a program vacancy rate of 19%, including 26 field staff vacancies and three staff specialist vacancies. At this time, 12 of Wisconsin's 72 counties have no Wildlife Management staff present to serve the public and manage wildlife resources. The Northeast and Northern districts have been particularly impacted, with vacancy rates of 30% and 36%, respectively.

Throughout the first year of the COVID-19 public health crisis, the Wisconsin DNR maintained a voluntary hiring freeze, limiting recruitment efforts to essential positions providing human health and safety and front-line contact at state parks. With the number of coronavirus cases on the decline across WI, there has been an increase in the number of positions approved to proceed to recruitment with the goal of filling positions over the next calendar year.

Elk Management

Updates to Wisconsin's Elk Management Plan began in 2019, and the process is nearing completion. An opportunity for public input concluded Jan. 23, 2021, and the DNR administration has reviewed the final draft. The plan will be considered by the Natural Resources Board at its May 2021 meeting. Final formatting will be completed following approval, and the final plan will be available to the public in summer 2021. Any approved changes identified in the plan are scheduled to be in place for the 2022 elk hunting season.

Major changes to elk management include:

- Renaming elk ranges to "northern" and "central" management zones. Recommended as elk herds are no longer centrally located near original release locations. "Northern" and "central" are less geographically specific and "management zone" is more consistent with other species.
- Central elk management zone expansion. Recommended to better represent an elk herd's spatial needs, to incorporate large areas of highly suitable habitat and public land, and to



allow for increased management efficiencies through habitat management efforts, alignment with proposed elk hunting units, and use of all available management tools.

- Reduce central herd population goal. Recommended to better align population goal with small zone and conflict potential surrounding the central forest. These are long-term goals, not anticipated to be reached over the course of this plan.
- Establish elk-hunting units. Recommended to allow for targeted harvest control to more evenly distribute harvest and allow for better population control of individual elk sub-groups. Units may be grouped together each year and share a quota. Hunters would need to apply for an individual unit (or grouping of units) and could only hunt within that unit (or unit grouping).
- Eliminate split-season framework. The plan recommends eliminating the split in the season and have a single, consecutive season from the Saturday nearest Oct 15 to the Sunday nearest Dec 15 to allow for increased opportunity for hunters and reduce season complexity.

February Wolf Harvest Season

The U.S. Fish and Wildlife Service removed gray wolves from the federal list of endangered species on Jan. 4, 2021, returning management authority to the lower 48 states and tribes. In Wisconsin, state statute 29.185 requires the implementation of a regulated wolf hunting and trapping season whenever wolves are not listed as a threatened or endangered species. The law also identifies much of the framework for the season including season dates, license issuance and methods of take. In December 2020, the Wisconsin DNR announced that a wolf harvest season would begin in November 2021. On Feb. 11, 2021, a state circuit court judge ordered the DNR to schedule a wolf harvest season in February 2021. The Wisconsin Department of Justice filed an appeal and requested a stay, which was denied on Feb. 19. The DNR complied with the circuit court order to implement a wolf harvest season in February 2021. State statute closes the wolf season on Feb. 28 or earlier to achieve harvest goals. The season began on Feb. 22 and officially ended at 3 p.m. Feb. 24, resulting in a total harvest of 218 wolves.

The DNR has had a rigorous monitoring program for decades, and this commitment to annual monitoring of the wolf population will continue. Currently, the wolf population is estimated through a variety of methods including snow tracking surveys, statistical occupancy modeling, reports from the public, and data from radio-collared wolves. The latest minimum overwinter estimate was 1,195 wolves statewide.

The department continues its planning efforts for the fall wolf season to open on Nov. 6, 2021 while simultaneously working towards completing a 10-year wolf management plan.

A full report on the February 2021 season is available on the DNR website.

Wolf Management Plan

The Wisconsin DNR is in the process of updating our state's wolf management plan. Today, the DNR manages wolves following the current <u>Wisconsin Wolf Management Plan</u> and in accordance with state statute. The plan underwent a review process in 2005-06 and was updated in 2007. Wisconsin's wolf population has changed in the years since the current management plan was last reviewed. In that time, our understanding of population dynamics has improved as well. The current process to revise Wisconsin's wolf management plan will equip the DNR and

stakeholders with scientifically sound and culturally relevant management of this iconic, native species.

A new wolf management plan committee (WMPC) has been formed through an application process in spring 2021. The WMPC's purpose is to provide input to the DNR, ultimately resulting in an updated wolf management plan with broad public and scientific support.

The WMPC will be an inclusive and diverse committee made up of individuals representing hunting/trapping organizations, wolf advocacy/education organizations and agricultural/ranching organizations. In addition to these stakeholder seats, representation by certain government agencies, tribes and the Wisconsin Conservation Congress will also be invited by the department.

In July, the WMPC will begin a series of four meetings to determine the input it will provide to the department. A draft plan will be available for public comment in February 2022, and we anticipate a final draft going before the Natural Resources Board in June 2022. More information on updating the wolf management plan can be found on the <u>department website</u>.

Chronic Wasting Disease

In 2020, statewide CWD surveillance focused on annual areas of interest, disease assessment, disease detection and hunter-requested testing for adult deer anywhere in the state. With disease assessment the intent is to monitor and measure disease patterns to understand how prevalent the disease is in an area. Disease detection often refers to surveillance in a county with low volume sampling in recent years or surrounding a CWD positive farm-raised deer location.

New for 2020 was surveillance in northeast Wisconsin, where surveillance has not been conducted across the entire area for many years. This is part of a multi-year rotation conducting surveillance in west central, northern, & northeast Wisconsin. Wildlife Management continued a second year of enhanced surveillance in northern Wisconsin in some counties where additional samples were needed. Wildlife Management also continued to sample deer within the Southern Farmland Zone as well as around CWD positive wild deer locations and CWD positive farm-raised deer locations throughout the state.

Multiple COVID-19 safety protocols were developed to protect DNR staff, hunters, and cooperator staff safety during CWD sampling. More than 18,800 deer were sampled and tested for CWD statewide in the 2020 surveillance year (April 1st – March 31st) with 1,578 positive detections, primarily within the endemic area in southern Wisconsin. CWD was also detected in wild deer in Shawano, Washington, & Wood counties for the first time during the 2020 deer season along with additional wild positive detections in already CWD-affected counties in central and west central Wisconsin. There are currently 57 CWD-affected counties due to wild and farm-raised deer CWD positive detections.

During the 2020 season the department continued enhanced communication and outreach efforts including emailing CWD sample results, GameReg & GovDelivery messaging, a CWD brochure, and an awareness campaign on social media channels. New in 2020, Wildlife Management created an online process to allow hunters to submit data associated with CWD samples through their Go Wild account. This allowed hunters a faster and easier way to submit the data required for getting a deer sampled for CWD.

New with CWD operations, after years of planning and anticipation the department completed construction of a new CWD Processing Center with a planned move in early 2021. The new facility will allow for a more efficient work environment and a greater capacity to process CWD samples.

Wildlife Management continued the Adopt-a-Kiosk and Adopt-a-Dumpster programs while expanding the cost-share option. The main goal of the programs is to work with individuals and organizations to enhance CWD sample numbers, sampling locations, and provide hunters an option for appropriate deer carcass waste disposal, especially in areas where carcass waste disposal options are limited or not already available. The cost-share option was expanded to more counties where the department contributes 50% of the dumpster cost, up to \$500, for up to two dumpsters in those select counties.

The department also received two CWD USDA-APHIS grants. One grant focused on expanding deer carcass waste disposal dumpsters statewide. A second grant focused on outreach for engaging hunters with a statewide digital ad campaign promoting sampling for CWD and proper deer carcass waste disposal.

Conservation Grazing and Farming Agreements

In 2018, the Bureau of Wildlife Management hired a conservation agriculture and grazing specialist to expand the use of conservation grazing as a management tool on DNR-owned grasslands. An initial survey showed 23 wildlife areas using grazing in combination with other management tools such as prescription burning, mowing and haying. Over the past three years, grazing on DNR land has grown to more than 50, including state parks and state natural areas. Each new grazing site receives an initial assessment and Natural Resource Conservation Service 528 Prescribed Grazing Plan written in concert with the property manager. The plan identifies habitat management strategies and target goals for the site based on the property master plan. Grazing on state land has proven to be an effective tool for habitat management and has been very well received by agricultural producers who manage livestock in grazing systems. A Grazing Operations Plan is in development and will provide additional guidance as we continue to expand the use of this habitat management tool.

In 2021, the divisions of Fish, Wildlife and Parks and Forestry implemented an updated Farming Agreement Policy. All staff must now manage farming agreement data in the department's Land Management System (an integrated system for tabular, policy and geographic data) and adhere to policy for calculating rental payments, use of funds and new pesticide guidance. In conjunction with the new farming agreement policy, the FWP division will implement a phased discontinuation of neonicotinoid pesticides on DNR-managed lands. Neonicotinoid insecticides have been highly correlated with pollinator declines over the last decades. Moving forward, any new agreements and all agreements involving lands identified as high potential range/zones for federally listed invertebrates, may not include use of neonic-treated seeds. Existing agreements may continue use of treated seeds until their contract expires. Cooperators who have difficulty sourcing non-neonic seeds may continue to use treated seeds for one year only. Emergency use is allowed if all integrated pest management practices are followed.

Trumpeter Swans Telemetry Study

The Interior Population (IP) of trumpeter swans was re-established in the Upper Midwest beginning in the late 1960s. Across much of their current breeding distribution, IP trumpeter swans have transitioned from a rare to a common component of the regional waterfowl community. However, unlike many other waterfowl species, very little is known about the ecology of IP trumpeter swans, including movement ecology and habitat use at multiple spatial scales. Wisconsin DNR is partnering on a multi-state project lead by graduate student David Wolfson at the University of Minnesota to address some of these information needs through a collaborative project to deploy GPS/GSM transmitters on trumpeter swans (7 in Minnesota and 12 in Michigan). In 2020, an additional 77 transmitters were deployed on IP trumpeter swans (10 in Manitoba, 40 in Minnesota, 9 in Iowa, 5 in Wisconsin, 1 in Michigan, 12 in Ohio). Movements of marked swans have been highly variable across the IP breeding range, with swans that breed at higher latitudes more likely to migrate and travel longer distances during the winter.

Great Lakes Mallard Telemetry Study

Wisconsin DNR is partnering on a multi-state project to assess differences in movement, habitat selection, survival and the rate of return to the same breeding regions in rural and suburban nesting mallards across the Great Lakes region. Along with Illinois, Indiana, Ohio and Michigan, the Wisconsin DNR will work collectively to deploy a minimum of 350 backpack-style satellite transmitters on hen mallards across the project study region. This project was motivated in part by changes in observed mallard breeding abundance during spring aerial surveys across traditional nesting habitat in the last decade and anecdotal increases in mallards nesting in suburban and urban habitats. In addition to the regional objectives of the project, the Wisconsin DNR will use habitat selection data from birds marked within the state to help further inform and refine models depicting priority habitats for conservation and restoration in the Wisconsin Waterfowl Habitat Conservation Strategy.

BUREAU OF FISHERIES MANAGEMENT

Inland Trout

From July 1, 2018 to June 30, 2019 over 83 stream reaches were improved, including over 20 miles of habitat development work, such as erosion control, stream channel realignment, and habitat installation. Additionally, over 16 miles of stream brushing and site investigations were conducted. The projects were completed with the help of various volunteers, partners, and cooperators.

<u>The Wisconsin Inland Trout Management Plan was approved by the Wisconsin Natural</u> <u>Resources Board in October 2019.</u> The DNR Trout Team has been active in prioritization of the plan objectives and implementation planning. We have also been fortunate to partner with the Wisconsin Water Resources Institute to support a postdoctoral fellowship (Dr. Bryan Maitland) to examine groundwater withdrawal and climate change impacts on trout populations in Wisconsin streams.

Great Lakes

The Wisconsin Fisheries program initiated several updates to commercial harvest quotas in Lake Michigan and Lake Superior. In Lake Superior, we updated both our lake trout and cisco harvest quotas and in Lake Michigan updated our lake whitefish quota in Green Bay. Department staff continue to work with commercial fishers on a by-catch study in Green Bay that will inform our management on Lake Whitefish in the Bay and Lake Michigan. In addition to that study, staff continue to work with partners in Green Bay on a variety of projects including walleye diet study, walleye and whitefish movement patterns, fish passage and others. We continue to upgrade our Electronic Fish Harvest Reporting System that is used by commercial fishers to input their harvest information.

We are also in the process of updating our guide reporting requirements for guides that take anglers on fishing trips on both Lake Michigan and Superior. We hope to have these revised rules completed by January 1, 2022.

In 2020, we completed a majority of our fishing assessments and those that could not get completed in 2020 are slated for 2021 with a few minor exceptions due to COVID-19.

Culture

Fisheries staff raised and stocked over 5.1 million fish during 2020, and we continue to plan for numbers at or near these for 2021. The program is currently working out final equipment issues prior to taking possession of our new Kettle Moraine Springs Hatchery in Sheboygan County, Wisconsin. Our new facility will have the capacity to rear 340,000 steelhead for stocking into Lake Michigan waters as well as starting half of our Coho salmon production during the year. We will be utilizing recirculation aquaculture technology to efficiently use the available ground water.

OFFICE OF APPLIED SCIENCE (Wildlife and Fisheries Research)

Northern Highland Fishery Research Area (NHFRA) – 75th Anniversary

On June 20th, 2021, we celebrate the 75th anniversary of the Northern Highland Fishery Research Area (NHFRA), the longest running fisheries research project by the Wisconsin Department of Natural Resources (DNR). The NHFRA sits in the Northern Highland American Legion State Forest about 10 miles south of Boulder Junction in Vilas County. Thanks to its diverse lake types and fish populations, the NHFRA has been a rich resource for researchers since it began and is well-known by fisheries professionals. However, few outside of the research community know how much the NHFRA has contributed to the state.

One of the NHFRA's most notable and unique contributions is its angler survey dataset. This dataset is one of the longest, continuous fish harvest datasets in the world. The dataset stems from a mandatory angler survey first imposed on all five lakes in 1946 (when the NHFRA was established), which requires anglers to stop by the Escanaba Lake creel station twice to fill out a free permit – once prior to fishing the lakes and once afterwards. The major benefit of having anglers go through these extra steps is that it creates a complete record of every angler who has fished the lakes and every fish that has been legally harvested from the lakes since 1946.

Snapshot Wisconsin

Snapshot Wisconsin, one of the DNR's largest citizen science programs, has reached two big milestones in 2020. Snapshot Wisconsin is made up of a community of volunteers who host trail cameras that take "snapshots" of wildlife as they pass by. Volunteers classify the species from their trail cameras with help from more volunteers on the crowdsourcing platform, <u>Zooniverse</u>. The data helps the DNR understand the distribution of wildlife populations around the state and make important wildlife management decisions.

Thanks to the nearly 2,000 volunteers already with the program, Snapshot Wisconsin celebrated collecting its 50-millionth photo and released an interactive map in November 2020 of the team's favorite photos from across the state. The map highlights each photo and tells a story about the photo itself or the species shown. Rare species sightings, unusual animal behaviors, and even a few multi-species encounters can all be seen in the <u>interactive map</u>.

Also in 2020, Snapshot Wisconsin released the first version of its <u>Data Dashboard</u>, an interactive tool that offers volunteers and the public a new way to explore our Wisconsin wildlife species. Anyone can discover how species are spread across the state, when they are most active and how many sightings Snapshot has observed in each county. The data for 18 wildlife species is currently available to explore, and more species will be added over time.

Southwest Wisconsin CWD, Deer and Predator Study

Field work concluded in spring 2020 for the Southwest Wisconsin CWD, Deer and Predator Study. The study is principally concerned with the potential for chronic wasting disease to negatively impact deer populations. At the end of the 4-year field season, over 1,200 deer and predators were captured and GPS-collared for this ground-breaking study. Analysis now begins on this massive dataset where we are exploring the infection rates at which CWD may reduce population levels. Other factors can influence deer populations too, such as hunting, depredation, and habitat quality. Therefore, researchers will closely track these factors as well. This study will also estimate the abundance and distribution of bobcats and coyotes within the study area and will examine their impact on deer survival and behavior. This work was only possible with the participation of volunteer landowners in Grant, Iowa, and Dane Counties, where our study area lies. They generously allowed researchers to collar and monitor animals on their land, and we thank them for their support.

BUREAU OF NATURAL HERITAGE CONSERVATION

Note – most of these summaries are adapted from the program's 2020 Field Notes.

Wisconsin Citizens Show Strong Support for The Recovering America's Wildlife Act

The department's "Spring Hearings," held annually in conjunction with the Wisconsin Conservation Congress county meetings, are designed for citizens to provide input on numerous proposed fish and wildlife management issues and Conservation Congress advisory questions. In 2021, twenty counties voted on citizen resolutions to support the Recovering America's Wildlife Act (RAWA), and there was overwhelming support with 86% voting in favor of the legislation. RAWA would provide significant funding for Wisconsin and other states to implement their state Wildlife Action Plans which would benefit both non-game and game species and their habitats.

Trail Cameras Reveal High Marten Survival Rate

NHC and partners have worked for over 50 years to recover endangered American martens. Now, trail cameras are efficiently adding important insights about these secretive nocturnal animals and documenting gains from past marten reintroductions, research and monitoring with partners Chequamegon-Nicolet National Forest, Apostle Islands National Lakeshore, UW-Madison and the Great Lakes Indian Fish and Wildlife Commission. NHC's trail camera project reveals a stable and sustainable Nicolet population, with a very high annual survival rate of 81%, and documents a shift in active hours to avoid fishers, a larger competitor and predator. Trail camera and genetic research in the Apostle Islands show martens thriving and some animals dispersing to boost mainland Wisconsin populations; genetic testing confirms them as recent migrants from Michigan's Upper Peninsula.

New Strategy for Wisconsin's State Natural Areas

State Natural Areas protect some of Wisconsin's best remaining prairies, oak savannas, wild lakes, old forests, and geological and archaeological features. These nearly 700 sites owned and managed by DNR and 60 other partners are also critical to sustain Wisconsin's biodiversity: populations of 90% of endangered plant species and 75% of endangered animal species live on these sites. Our native landscapes — and the science for how best to protect them —have changed since the first State Natural Area was designated in 1951. In 2020, NHC staff completed the first strategic plan in 35 years to help preserve these special sites in light of six major threats: habitat loss; alteration of the natural processes that shaped them (e.g., fire suppression, wetland draining, damming rivers); invasive species; high populations of whitetail deer; excessive nitrogen and phosphorus deposition; and climate change. New strategies to manage these challenges provide a framework for establishing State Natural Areas protection and management priorities for the next decade.

Record Number of Terns Fledged In 2020

A newly refurbished "Ashland Tern Island" helped common terns, one of four endangered tern species in Wisconsin, fledge a state record high number of young — 510 chicks from four colony sites. Habitat loss, predators and chemical contamination have threatened the birds in past years, with habitat loss the greatest threat. NHC and public and private sector partners worked to provide secure nesting habitat. In addition to the Ashland island sites, nests on dredge spoil islands in the Duluth-Superior estuary and on Lake Butte des Morts in Winnebago County, as well as nests at two rafts maintained on Lake Puckaway in Marquette County by the lake district, also contributed to 2020's high-flying total.

Encouraging Kirtland's Warbler Finds

Habitat work on county and national forests to aid the Kirtland's warbler and other pine barrens species hit a high note in 2020 as the small songbird showed in locations where it hadn't been heard for some time. Connie Weedman heard a singing Kirtland's warbler while looking for native prairie plants in the Jackson County Forest and reported it to the DNR; NHC staff and Weedman subsequently visited the site and confirmed three singing males and later sighted a

female Kirtland's. These discoveries marked the first time in 13 years of statewide censuses the birds had been found there. The discovery followed work to restore the jack pine habitat the bird needs. One male was found much farther north in the Chequamegon-Nicolet National Forest where habitats had been restored, the first time in six years one had been recorded there during the breeding season.

Globally Rare Bedrock Glade Restored

Bedrock glade communities are globally rare and are characterized by prairie and savanna plants on very shallow soil over quartzite. Scattered oaks and red cedars grow slowly due to the shallow soil, so are much older than their size might suggest. In some places, trees only grow 20 to 30 feet tall, earning them the nickname "pygmy forests." In 2019, NHC staff conducting extensive botanical and ecological surveys of Devil's Lake State Park documented numerous rare plants and high-quality natural communities, including bedrock glades. Some of the glades were already in good shape, while others were more degraded and needed to be restored to allow sunlight to reach plants. In 2020, NHC staff and SNA field crews spent a day clearing trees and brush from one degraded glade at the park, opening it up significantly and turning it into the second largest glade at the site. This summer, native plants like skullcaps, spiderworts and shooting stars had already reappeared, a huge success for such a rare community type.

Hatching Success for Rare Turtles

Female wood turtles don't lay eggs until they're 14 to 18 years old and then lay only four to 17 eggs a year, so losing even one adult female a year can potentially sink small, local populations. Since 2014, the DNR and partners have studied and monitored these state-threatened turtles and carried out multiple conservation strategies to protect nests from predators and reduce turtles killed crossing roadways. They've created or restored more than 20 nest sites protected with electric fencing and communal nest boxes protecting over 100 individual nests. A minimum of 410 hatchlings have been documented from those sites. DNR wildlife biologists, U.S. Forest Service, Turtles for Tomorrow, and private individuals maintain similar sites on public and private land.

Turtle Research and Efforts To Reduce Road Mortality

Citizen reports to NHC's Wisconsin Turtle Conservation Program have identified 69 previously unknown populations of rare turtles and updated information on 106 known populations since 2012, greatly boosting information to help better conserve these ancient species. Critically, citizens have reported over 3,000 turtle road crossings, and the DNR has been working with partners like Girl Scout Ella Kreuziger to improve turtle safety at particularly deadly sites. In 2020, Kreuziger contacted the DNR about a county highway along the Bark River in Waukesha County. She raised money to pay for stenciling a turtle crossing sign to alert motorists. The county highway department did the work this fall, and Ella received her Silver Award in scouting for helping turtles cross to safety.

New Rare Mussel Populations

Freshwater mussels are the most imperiled animals globally and in Wisconsin, with nearly half the state's 50 native species endangered, threatened or declining. 2020 brought good news for two very rare species, spectacle case and salamander mussels. NHC biologists documented many new populations of both species in 2019 and 2020 by searching specific habitats not typically

sampled for other riverine mussels. Locating more spectacle case mussels has demonstrated good reproduction in localized areas that can be used for future propagation efforts. Meanwhile, NHC and partners are working with Genoa National Fish Hatchery to propagate salamander mussels and place them on mudpuppies, their host species, to deliver the juvenile mussels to waters within their historic range.

Historic Bat Vaccine Trials Continued In 2020

Wisconsin's four cave bat species are state-threatened and severely impacted by white-nose syndrome, a deadly disease decimating hibernating bats across North America. Since 2014, NHC has worked with the USGS National Wildlife Health Center, UW-Madison, Mississippi Valley Conservancy and Virginia Tech to develop and evaluate vaccines to help bat populations recover, including undertaking the first vaccine trials in the wild for any disease affecting bats. Two vaccine candidates were tested in little brown bats at two hibernacula in Wisconsin just as the bats were entering hibernation. The field trials demonstrated the vaccines were safe for bats, and at least one vaccine increased survival in males and significantly reduced levels of the fungus causing white-nose syndrome. More trials got underway this fall in Wisconsin to test specific vaccine candidates.

New Invasive Grass Contained

Invasive species are a grave threat to native species and landscapes, so the serendipitous discovery and containment in 2020 of an aggressive invasive grass new to Wisconsin was worth celebrating. A volunteer for NHC's Rare Plant Monitoring Program identified the dreaded invasive Japanese stilt grass while checking on rare plant populations in a state forest in La Crosse County, spurring NHC staff and partners to action. They surveyed the property, hand-pulling small patches of the grass, and State Natural Area field crews sprayed larger areas with herbicide. As a result, the stilt grass is being contained. The effort showcases the continued need for quick detection and response, involved citizens, and partnerships to protect Wisconsin's ecosystems and economy from damaging invasive species not yet established within our state's borders.

Targeted Efforts for Some of Wisconsin's Rarest Plants

Prairie bush clover is the rarest of the rare: a federally threatened plant of prairies, which themselves cover less than 1% of their historic acreage in Wisconsin. In 2020, NHC transplanted seedlings to a Nature Conservancy-owned natural area where cattle grazing and fire maintain the prairie's open structure. The hope is that grazing will reduce competition from prairie grasses and allow the clover to thrive, showing how working farms can also meet conservation goals. In other actions to restore globally rare plants, NHC Rare Plant Monitoring Program volunteer Ben Johnston carefully checked sandstone cliffs in Vernon County, a stronghold for northern monkshood and the location where Johnston discovered a new population in 2016. Such monitoring work by volunteers allows NHC botanists to focus on other priority plants. In other Rare Plant Monitoring Program news, volunteer Tara Buehler rediscovered the federally threatened eastern prairie fringed orchid at a site where it had not been seen in six years despite annual surveys. And program coordinator Kevin Doyle was able to hand pollinate it as part of broader efforts to improve the orchid's seed production and genetic diversity.

Adaptation Efforts for A Changing Climate

Climate change is an important consideration for all of NHC's work to conserve species and maintain State Natural Areas. While the conditions shaping natural habitats for Wisconsin's plants and animals have always changed, their evolution can't keep pace with our changing climate. Wisconsin is generally getting warmer and wetter, albeit unevenly across the state. Working as part of the Wisconsin Initiative on Climate Change Impacts, NHC has sought to sustain habitats and native species by analyzing and developing adaptations and offering workshops to help State Natural Area managers translate the science into on-the-ground actions. NHC and WICCI partners are integrating climate considerations as they pursue demonstration projects restoring wild rice beds on Spur Lake in Oneida County and wetlands on a Winnebago County site farmed for over a century. As another example, NHC conservation biologists contributed significantly to WICCI's recent report to the Governor's Task Force on Climate Change, identifying impacts to Wisconsin communities, natural resources and economy and recommending solutions including incentives for property owners who place their land into conservation easements and agree to restore the land to promote native plants and natural communities.

Citizen Scientists Boosted Their Efforts in 2020

Sales of bird feeders, fishing licenses and camping gear soared in 2020 as people turned to nature to help cope with the COVID-19 pandemic. Many used their increased time outdoors to help Wisconsin's rare species by reporting the plant and animal species they saw at home, in local and state parks or while safely distancing on the road. Checklists submitted to Wisconsin eBird surged 27%, bumble bee sightings to NHC's Bumble Bee Brigade exceeded the total from the previous two years, and rare species were documented in new locations, adding information that helps NHC better understand species populations and work to conserve them. In just three short years, NHC's trained Bumble Bee Brigade volunteers have turned in more than 6,800 observations and documented 17 of 20 species, seven of them rare. That's good news for helping preserve and improve habitat and addressing other threats to these important pollinators of native wildflowers and agricultural crops. Volunteers have helped to identify 167 new sites and 12 new counties with endangered rusty patched bumble bees. Importantly, too, these citizen observations confirm that native plant gardens in urban, suburban, and rural areas are making a difference and providing important habitat for pollinators.

BUREAU OF PARKS AND RECREATION MANAGEMENT

Recreation Management Section Highlights

• Listening to Our Customers

The PRM bureau has initiated a comprehensive approach to soliciting regular feedback from customers, including an update to customer feedback forms to include online options, and a biennial solicitation of customer opinions on a variety of topics designed to help steer program investments and targeted improvements.

• <u>The Future of the State Park System</u> The Bureau of Parks and Recreation Management (PRM) developed a business plan which will serve as a blueprint for the future of the program, including the Wisconsin State Park System. While the plan provides an overview of the current status of the program and recent data relevant to proposed initiatives, the plan lays out actionable items to create a sustainable future for the Wisconsin State Park System and the PRM program.

• <u>Collaborative policy making</u>

Working across all land-managing programs of the Wisconsin DNR, the Recreation Management section of the PRM program leads a cross-program team to develop policy for all department lands. Recent initiatives include a policy on neonicotinoids, use of department lands with accessibility devices (track chairs), increasing consistency and communication on COVID-19 operations, and the revision of state code regarding land management.

• Racine County Trail Expansion

The department recently inked a deal to expand a rail trail in southeastern Wisconsin 10+ miles through multiple communities and toward the state's most populated area. The trail expansion will serve as a backbone for the Route of the Badger initiative, a collaborative project with the Rails to Trails Conservancy and other public and private partners.

Camping Program

2020 was a very busy year for camping even amidst the pandemic. Despite being closed for the beginning of the season, we still saw an increase of 6.7% in camping nights for the season as compared to 2019. We are also seeing a trend for longer camping seasons, as RV sales and other equipment is being purchased at a record rate allowing people to camp longer as the weather changes.

- 2020
- 2020 Camping Nights: 477,752
- Increase from 2019 to 2020 calendar year: +6.7% (difference of 30,027 camping nights).
- 2020 Overview
 - WSPS campgrounds were closed statewide for more than two months, from 3/20/20 to 6/9/20.
 - Once re-opened, campgrounds saw increased visitation compared with the previous summer, with bookings up more than 25% in July and about 15% in August.
 - Visitors camped later in the season: the system saw a 62% increase in October bookings and a 190% increase in November bookings—historically a quiet month— compared with 2019.
 - A busy summer and fall made up for the delayed start and the system ended with about 10% more bookings and 6.7% more nights camped in calendar year 2020 compared with calendar year 2019.
 - The trend looks to be continuing as we are already seeing an increase in advance reservations this year. 33% more bookings have been made for 2021 than had been made at this time last year for 2020.

- 2021
- 2021 (calendar year) advance camping reservations as of 5/1/2021: **121,656**
 - **70%** increase from 2020 advance camping reservations as of 5/1/2020.

DNR Website Rebranding and Launch:

On July 31, 2020, the DNR launched a new Content Management System (CMS)-based website. The Parks Bureau took advantage of the CMS to completely redesign state park webpages for a better user experience. With over 2,000 webpages, the Parks Bureau has one of the largest presences on the DNR website. Since the launch in late summer, Wisconsin State Park System pageviews have accounted for 22% of all DNR website pageviews.

Annual Sticker Sales:

2020 was also a record year for annual sticker sales, partially because only Annual Passes could be sold due to offices and other outlets being closed. We also saw record visitation to the properties prompting the need for many to purchase the annual passes for visitation. The Bureau had to completely redesign the way we sold these annual passes to the public due to the pandemic and we were able to develop two new avenues to best serve our customers during this time.

We were able to develop and stand up a toll free call center within days to centralize the selling of annual passes, this call center was in operation from May, 2020, until recently in March as office drive up windows and other sales options were once again available.

In May 2020, the Wisconsin State Park System launched an online store for customers to purchase state park vehicle admission stickers – addressing the most common complaint of the last few years – that park stickers could not be purchased online. Through the store, online customers also get instant access to the parks without having to stop at a contact station, by receiving a temporary email receipt to display in vehicle windshields.

2020 WI ADMISSION PASS SALES	TOTAL December 1, 2019 - November 30, 2020		2019 Sales	Percentage Increase
2020 Annual Pass Sales w/trail passes	REVENUE	QUANTITY	QUANTITY	
Resident Annual	\$8,035,158.50	286,970	199,670	43.7%
Resident Reduced Rate Annual	\$600,500.25	38,742	50,178	-22.8%
Non-Resident Annual	\$3,920,158.50	103,162	43,458	137.4%

The following table represents total sticker sales for 2020 compared to 2019:

Non-Resident Reduced Rate Annual	\$43,624.00	2,128		
Senior Annual	\$808,652.00	62,204	53,185	17.0%
Totals	\$13,408,093.25	493,206	346,491	42.3% increase in sales

Bulk Sales:

Another emerging trend is bulk annual sticker sales by companies or organizations for things like employee recognition programs or marketing campaigns. For example, we had a number of large purchases of 100's and even up to 1000 annual stickers purchased by Wisconsin companies as part of employee gift or recognition programs. Another example was a WI auto dealer who purchased approximately 1000 stickers as a test drive promotion where people received a free state parks sticker. In total we have made over 50 bulk sale purchases where a group or organization purchased more than \$500 worth of stickers at once. With the largest purchases being almost \$30,000, which was done twice by two different companies.

Electronic Payment Kiosks:

The electronic payment kiosks continue to be a popular customer service feature to be able to sell daily and annual passes through credit card purchases. This program has now grown to 14 electronic kiosks around the State with plans for more at properties around the state.

In March 2021, the newest prototype electronic kiosk was installed at Devil's Lake State Park that will dispense an actual Resident Annual Vehicle Sticker. Prior to this technology, all kiosks dispensed receipts only that could be used as temporary proof of purchase until the sticker could be redeemed at a later date. Once fully tested and successful, the existing kiosks within our properties could be retrofitted to this technology and any new purchases moving forward would have this feature, providing enhanced customer service throughout the State.

Public Relations and Partnerships

- Completed the capital development backlog data collection, phase one of data analysis and competed a report draft
- Successfully executed countless concession, land use and other agreements to continue our long-standing relationships with partners across the state and our collaborative efforts to serve visitors
- Formed new partnerships with the Birkie organization, Thrivent Financial, AARP and handful of new Friends groups in the last year
- Negotiated and closed out multiple historic FEMA grants by work with Wisconsin Emergency Management and FEMA in 2020
- In the last year several significant projects that the program has been working on for at least five years have come to completion:

- Willow River State Park Dam
- Great River State Trail Winona Connector connecting MN to the WI trail system
- The Winter Depot trail depot restoration on the Tuscobia State Trail
- Completion of the new accessible fishing pier, with the Friends of Potawatomi State Park, at Potawatomi
- Completion of the Eagle Tower at Peninsula State Park
- Completion of \$15 million in work at Peninsula alone since 2019, finishing in 2020 with over \$3.0 million from partners