

Mazina'igan

A Chronicle of the Lake Superior Ojibwe

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Summer 2020

KBIC Receives Treatment as State authority under Clean Water Act

By Paula Maday, Staff Writer

Baraga, Mich.—In a first for a tribe in the State of Michigan, the U.S. Environmental Protection Agency (EPA) approved an application from the Keweenaw Bay Indian Community (KBIC) for ‘treatment in a similar manner as a state’ on April 21 under section 518(e) of the Clean Water

Act. KBIC officials hailed the decision as a win for tribal sovereignty and regional water quality.

“Treatment as a sovereign is important to the KBIC for many reasons. First and foremost, TAS is a responsibility stipulated in the first treaty,” said KBIC Tribal President Warren C. Swartz, Jr. “In implementing TAS we are honoring our first treaty with all orders of creation, which include our obligations and connections to the natural environment.”

“Treatment in a similar manner as a state” (TAS) is a legal status that refers to the transfer of specific authorities from the federal government to federally-recognized Indian tribal governments for environmental regulatory programs. This approval allows the KBIC to administer a water quality standards program for its L’Anse reservation in Upper Michigan.

The process for implementing and managing a water quality standards (WQS) program is lengthy and rigorous. A tribe may be found eligible if it can demonstrate: it is federally recognized; it has a governing body carrying out substantial governmental duties and powers; it has appropriate authority; and it is (or will be) capable of carrying out the functions of the particular program.

KBIC submitted its TAS application in 2017, after 18 years of working collaboratively with the EPA on water programs. The application was a natural next step for the tribe, whose resource man-



The view from Point Abbaye near Keweenaw Bay on Upper Michigan’s Lake Superior shoreline (CO Rasmussen photo)

“Where we get our living” Welcome, wary response to spring fishing

By Charlie Otto Rasmussen, Editor

Iron River, Wis.—Under the twinkling evening sky at Bladder Lake, a GLIFWC monitoring team set up a creeling station on a sandy stub of road that formed a narrow boat launch. A LED lantern set on the water’s edge served as a beacon for returning boats.

With only a few Red Cliff fishermen plying the cold waters of the 84-acre lake for walleyes, the creel crew reserved a wide roll of police tape for managing large-lake boatlandings that would draw higher numbers of spears with their trucks, boats, and trailers. Here at Bladder Lake in mid-April, in the dark star-filled night, it could’ve been just about any season of the modern Ojibwe spearing era.

“Just getting some fish,” said returning fisherman Josh LeFerner, who parked a rectangular bin containing a dozen walleyes within range of the cool white light cast by a clerk’s lantern. LeFerner said that for him and his spearing partner, it was a year like many others—juggling work, kids, and a brief opportunity to round-up walleyes for the year ahead.

As the season unfolded, however, other walleye fishers expressed a sense of urgency to provide for home-bound extended families as the Covid-19 pandemic constrained daily life. For them this was no ordinary harvest. With so many Ojibwe community members on furlough, and the return to workplaces uncertain, spring fishing afforded a timeless constant—the ability to live on what nature makes available in the Ceded Territory. During treaty negotiations with United States government officials in 1837, it’s what Ojibwe chiefs



Youngsters from the St. John family were all smiles after a successful night spearfishing walleyes near the St. Croix Ojibwe reservation. (C. St John photo)

called *wenji-bimaadiziyaang*—a phrase literally translated as “from what or where we get our living.” In remarkable forethought, Ojibwe headmen would sign no treaty until satisfied that their successors had off-reservation access to fish, wildlife, and plants when they needed it.

The spring of 2020 is one time when the Anishinaabeg would need it most. (see Spring fishing season, page 2)

Coming Soon!
Maajii-Ojibwemowag
(They Begin to Speak Ojibwe)



W.Ballinger

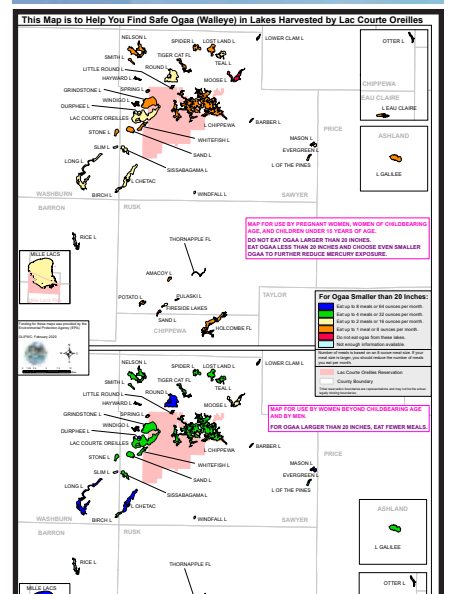
Waabanong Four-Legged theme, 3-book set and companion webpages featuring Waabooz, Ma’iingan, and Makwa.

Ojibwe language resources for tribal Head Start, Early Head Start, and daycare programs.

Tribal elders share stories using simple words and phrases to introduce cultural elements of four-legged beings traditionally harvested by Ojibwe people under reserved treaty rights.

Keep an eye to GLIFWC’s Facebook page and website (www.glifwc.org) for upcoming outreach events.

For more information contact Language/Outreach Specialist, Misty Peterson at mpeterson@glifwc.org.



Check GLIFWC’s mercury advisory maps before your next fishing trip.

Treaty-reserved resources are the stimulus package for the Ojibwe

A message from the executive administrator

By Mic Isham

GLIFWC Executive Administrator

Not long after the Ziigwan 2020 issue of *Mazina'igan* shipped to subscribers and local outlets, the Covid-19 pandemic arrived front-and-center in the Ojibwe Ceded Territory. Since then, uncertainty seems to have permeated so much of daily life. But when it comes to the seasons of the Ojibwe—the timeless cycle of harvesting traditional resources—there has been no ambiguity.

With fish in the lakes, our forests awakening and budding with food and medicines, native people have what they need to survive during this virus outbreak. Disease and hardship are nothing new to native people. Neither are tests of cultural, spiritual, and physical endurance. We will survive and we will thrive. Count on it.

Ojibwe treaty fishers and their home communities, their families and friends, can also rely on Great Lakes Indian Fish & Wildlife Commission to facilitate off-reservation harvest seasons on Ceded Territory forests, lakes, and rivers. As fish swam the shallows this past spring, tribal members took their rightful place on lakes large and small to again harvest giigoonh (fish) for extended families and community elders.

GLIFWC monitoring teams accounted for each fish brought into the boat landings, and our wardens logged long hours supervising the work and overseeing public safety—including responding to a report of tribal spearfishing harassment.

In challenging times like these, when we rely on beings like giigoonh the most, the natural world nourishes the bodies and spirits of Anishinaabe people.



Each season brings resources in abundance and the people take what they need. It is a great and ancient wheel come round again, a fulfillment of our original treaties with all those things handed down by the Creator.

Even in modern times, in days still connected by memories of wintertime tales, we know that the natural resources of Ojibwe Country helped see the people through great difficulty. I well-remember my great aunt and uncle, Marcella and Earnest “Pea Soup” Guibord, explaining how they used everything from porcupines to muskrats to put meat on the table during the Great Depression. Whatever the season offered, it was gratefully accepted. For so many generations, the hunting, fishing, and gathering seasons of the Ojibwe got people through. And so it is today.

I am heartened by leadership from GLIFWC’s Board of Commissioners, Voigt Intertribal Task Force, and Lake Committee. The quality of the 80-some dedicated individuals employed at the Commission is second to none. All have made valuable contributions as we innovate with technology and hard work to provide the services that reinforce Ojibwe culture, language, and sustenance needs.

The Commission has now completed its thirty-fifth year of cooperative natural resource management, bringing together federal, state and tribal natural resources partners across the Ceded Territories of Minnesota, Wisconsin, Michigan.

GLIFWC’s long-running and successful fusion of western science and traditional ecological knowledge is a model for Turtle Island and beyond. No matter the obstacles, no matter the health emergency, GLIFWC is built to last and will be there to help make the most of each and every season.

Spring fishing season

(continued from page 1)

Still, some long-time spearfishermen, wary of contracting coronavirus or infecting loved ones, took the season off, said Red Cliff’s Joseph Montano Sr. a GLIFWC creel clerk. Montano said he monitored one experienced fisherman who was reluctant to let clerks handle his fish at the boat landing.

“We gave him the measuring board, he determined the sex of each fish. We stood a safe distance and recorded the data,” said Montano, working with fellow clerk Henry Bresette. “Everyone is just trying to do their best.”

From Lake Mille Lacs in Minnesota, east across northern Wisconsin and into Upper Michigan, GLIFWC creel clerks and conservation wardens account for each fish harvested by Ojibwe tribal members. Walleye comprise most of the spring bag, plus a small number of muskellunge, northern pike, bass, suckers and panfish. In the Yellow River system in St. Croix Ojibwe country, a small number of lake sturgeon are also speared each season.

Back at Bladder Lake, the crew prepared to call it a night. Fishing was done as wind and choppy water made it difficult for spearers to zero-in on walleyes darting among the sand-and-stone bottom.

Craning heads back to view night sky, Montano and Bresette debated the metered appearance of lights trailing over the earth. If it were aliens, they weren’t



GLIFWC creel clerks record data from walleye harvested on Bladder Lake. From left: Joseph Montano Sr. and Henry Bresette counted, measured, and determined the sex of each fish speared by Red Cliff tribal members. (COR photo)

being very subtle. *Space Train*, announced GLIFWC Warden Mike Soulier from his patrol vehicle, *I looked it up after a guy called me from his boat about it last night.*

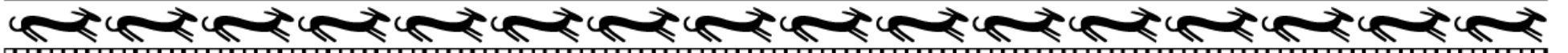
As it turned out, the long string of bright satellites was part of an ongoing SpaceX effort to bring internet access everywhere on planet. With vast areas of Ceded Territory sparsely inhabited and off the grid, better online access might be a good thing. But when it comes to the short spring season, the internet can wait. It’s all about the fish.



Caught by the camera flash, walleyes reveal their telltale look of shiny white marbles for eyes. Spearfishermen wearing bright headlamps distinguish walleyes from other species by eye-reflection. (COR photo)

Essential Ojibwemowin

wenji-bimaadiziyaang—from what or where we get our living



Ceded Territory news briefs

Wildlife managers consider scaling back elk permits in Wisconsin

With an uptick in unexpected elk mortality and a desire to ensure balanced-age herd growth, wildlife officials are considering reducing bulls-only harvest tags from 10 to six for the 2020 season. The Wisconsin Department of Natural Resources Board is scheduled to make a final decision on permit levels May 26 during a meeting in Madison. If the recommendation is approved, Ojibwe hunters would be issued three tags and state hunters would receive three tags.

Wildlife officials are also recommending to allow hunters to pursue bulls throughout the entire Clam Lake elk range. Hunting elk in the southern portion of the Clam Lake range had been discouraged during the first two seasons due to the release of elk translocated from Kentucky.

In the early morning hours of September 14, 2019, a bull was illegally killed along the side of Highway 77 around seven miles west of Clam Lake. Despite widespread publicity and a monetary reward, law enforcement authorities were unable to identify the perpetrator who shot the elk through the shoulders with a high-caliber firearm. Then in late November, during the state gun deer season, a hunter in Rusk County mistakenly killed two bull elk—a spike and forkhorn—before turning herself into the Department of Natural Resources.

The illegal kills come on top of last fall's harvest of ten bull elk in the same zone—split evenly between Ojibwe and state-licensed hunters. The Clam Lake elk herd lies within the Ojibwe Ceded Territory where state and tribal hunters share available harvest tags 50/50.

—CO Rasmussen

GLIFWC summer events cancelled or postponed

The annual Healing Circle Run, which connects GLIFWC member tribes through a weeklong spiritual walk/run in July has been postponed until a later date. GLIFWC will provide an update soon.

The annual Mikwendaagoziwag Sandy Lake memorial canoe paddle and gathering has officially been canceled for 2020. GLIFWC would like to encourage communities to take time out of their busy summers to remember all of the Ojibwe ancestors that passed away as a result of the tragedy. The 2021 dates will be established and posted in the upcoming months.

Please consider sharing the two Sandy Lake videos produced by GLIFWC. The links are: www.youtube.com/watch?v=JLig6Pv1b7Y&feature=youtu.be and www.youtube.com/watch?v=u6VaiLfy3CE&feature=youtu.be

—B Jennings

Gunshot incident on Little Saint Germain Lake, Vilas County, Wis.

On the evening of May 2, at approximately 10:00 pm, tribal harvesters reported both harassment and eventually gunshots on Little Saint Germain Lake in Vilas County, Wisconsin. Local law enforcement and GLIFWC enforcement personnel responded to a local residence and boat landing. One individual was apprehended and arrested for being armed while intoxicated. The incident is currently under investigation by the Vilas County Sheriff's Department.

Hostile and violent acts of aggression, including rock throwing and racial slurs, occur during tribal spearfishing every year. Obstruction or harassment of individuals practicing their federally protected rights can lead to fines and even arrest.

"This is indeed a sign that we need to continue to educate the broader public about federally protected treaty rights. Tribal subsistence harvesting has been a tradition for generations, and these tribal fishermen were simply out harvesting to feed their communities," said GLIFWC Executive Administrator Michael Isham.

Chequamegon-Nicolet National Forest pauses prescribed fire activities

Rhinelander, Wis.—The Chequamegon-Nicolet National Forest is pausing prescribed fire efforts this spring, which includes burns planned at Moquah Barrens in Bayfield County and the Riley Wildlife Area in Price County.

Prescribed fire is a tool used by the Forest Service and other land management agencies to improve habitat for wildlife and reduce hazardous fuel buildup. Typically, conditions are optimal for burns during the spring after the snow melts and prior to vegetation becoming green.

While frequent, low-intensity fire is essential to the long-term health of many ecosystems in northern Wisconsin, employee and public safety remains the top priority during the COVID-19 pandemic.

"Wildland firefighters and other emergency response personnel need to take pandemic precautions to reduce the spread of COVID-19 and remain available to protect the public from wildfires," said Lee Jensen, Fire Management Officer for the Chequamegon-Nicolet National Forest. "With this pause, we will not be introducing smoke from prescribed fires into communities, especially to people with underlying respiratory conditions."

Visitors are reminded that a Forest Order is in place that prohibits the building, maintaining, attending or using a fire, campfire or stove until further notice.

—USFS

GLIFWC assessment crew squeezes in walleye work

Saves runaway pontoon boat

GLIFWC Inland Fisheries section completed walleye population estimates on three Ceded Territory waters in an assessment season that was greatly affected by the novel coronavirus.

GLIFWC was one of the only agencies that was able to complete any walleye population estimates during these uncertain times as state agency crews were restricted by governor's orders in effect in Wisconsin, Michigan, and Minnesota. Instead of using up to seven crews to complete the usual 15-20 population estimates, GLIFWC reduced the number of crews and lakes assessed, and did not include any overnight travel to maintain a low level of risk while still completing some assessment work.

One crew of permanent staff completed population estimates on Upper St. Croix Lake, Douglas Co., the Pike Lake Chain, Bayfield Co., and Kawaguesaga Lake, Oneida Co. These lakes were chosen because of generally closer proximity to GLIFWC offices, and high priority of sampling.

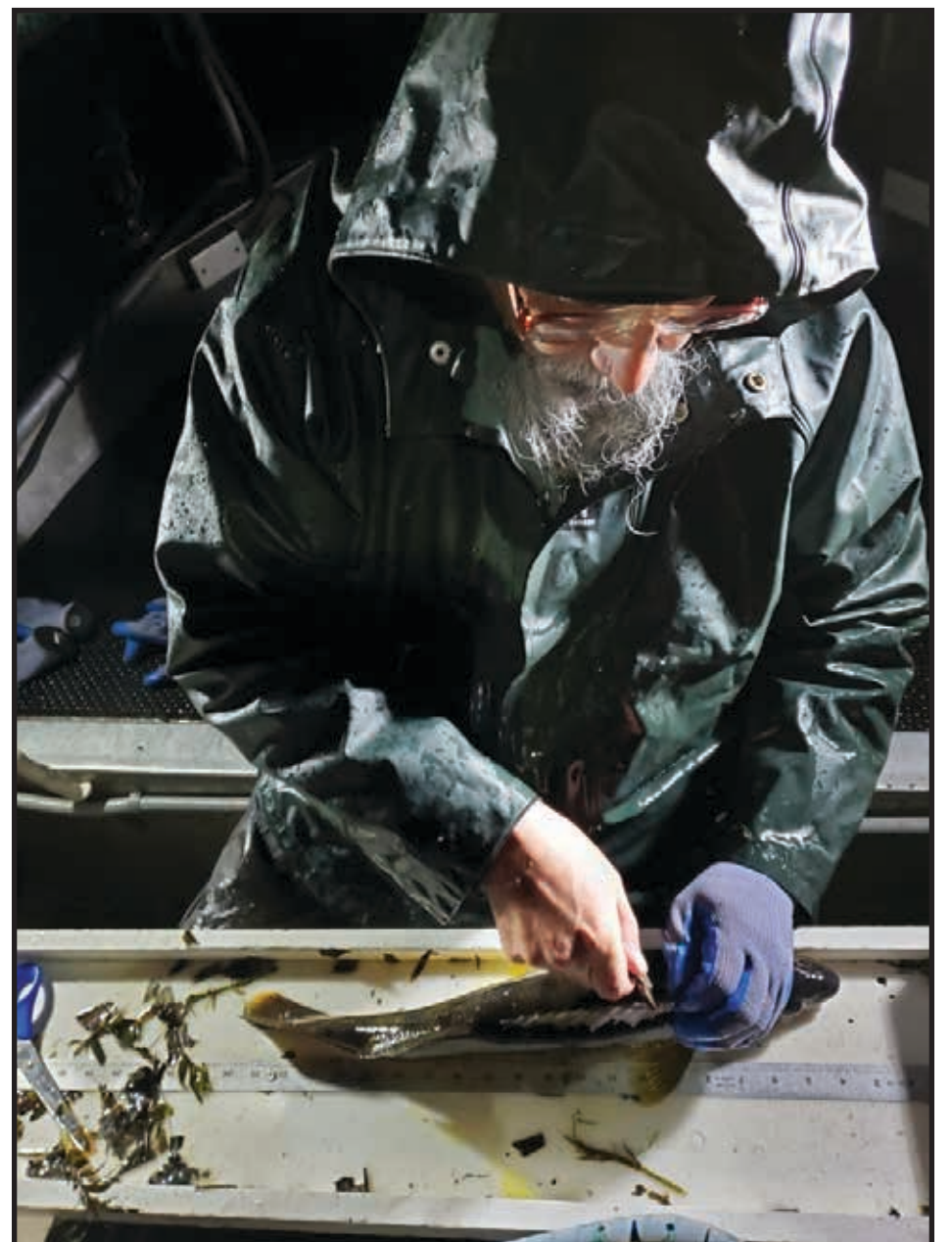
Overall, GLIFWC staff handled 1,711 walleyes, and generally enjoyed good weather. On one occasion, the crew pulled up to the boat landing in time to see an unoccupied pontoon boat adrift out in the middle of one of the lakes. Shortly after, an excited area resident pulled up in his truck and explained how the boat had drifted off the trailer earlier than expected while he was launching it. The GLIFWC crew helped him retrieve the boat and load it back on the trailer. He was glad that he didn't have to swim for it!

Over the coming month, GLIFWC biologists will enter and review the data and share it with fisheries partners. Preliminary observations suggest no major surprises with these estimates.

The populations in Upper St. Croix Lake and Pike Lake Chain have not had very good natural reproduction in recent years, and adult abundances were expected to be low. Meanwhile, Kawaguesaga Lake—part of the Minocqua Chain rehabilitation plan which has included a no harvest period since 2015—appears to have a similar adult walleye population to 2019 when the estimate was close to the three adults per acre goal.

—M. Luehring

Editor's note: *With assistance from the US Forest Service, Fond du Lac Band conducted an electrofishing walleye assessment on Cadotte Lake in the Superior National Forest. A productive walleye water in the Minnesota 1854 Ceded Territory, the Cadotte Lake adult ogaa assessment represented a rare survey with state and federal fisheries crews shutdown across the state.*



Butch Mieloszyk, GLIFWC Inland Fisheries technician, removes a spine sample from a walleye, or ogaa in Ojibwemowin, last April. Dorsal spines help fisheries managers evaluate age and growth rates. (E. White photo)



KBIC receives Treatment as State authority under Clean Water Act

(continued from page 1)

agement activities have followed a substantial growth curve over the years. Milestones along that curve include development of the tribal fish hatchery in 1988; becoming a member of GLIFWC in 1989 and participating in co-management of Ceded Territory resources; and unveiling of the KBIC Natural Resources Department to manage on-reservation resources in 1999.

Today, that department employs over 50 staff who operate and oversee programs in fisheries and fish stocking, surface and groundwater quality, air quality, restoration and brownfields programs, wildlife and wetland management, native plants and food sovereignty programs, and binational protection of Lake Superior.

“KBIC is able to cooperate in partnership with state and federal agencies. Many of our natural resources such as fish and wildlife are included in our shared stewardship responsibilities along with other entities,” Swartz said. “TAS provides for locally relevant considerations of environmental quality within our area including both tribal and non-tribal communities. There is greater dependence on locally harvested food such as wild fish and game. Therefore, local environmental standards can assure greater protections for the good of the community as a whole. I look forward to working in a cooperative manner with our partners in the state, federal and local units of government.”

Kurt Thiede, EPA Region 5 administrator and manager of the EPA’s Great Lakes National Program, said:



KBIC Tribal President Warren C. Swartz, Jr.

“Through this process, the EPA is recognizing the tribe’s authority to protect rivers and streams on the L’Anse reservation and to safeguard the health and heritage of their community and their natural resources. The EPA’s decision will promote tribal self-government [and] will empower the tribe to manage their water resources. Also, by developing water quality standards, now they will also be responsible for pushing water quality certifications for actions requiring federal permits on their lands.”

With the TAS application approved, KBIC can now focus exclusively on the rigorous work of fine-tuning its WQS program. Draft standards were submitted to the EPA along with the TAS application, and now KBIC must respond to feedback and questions from the EPA about the proposed standards. Back in 2015 and 2016, KBIC collaborated with the EPA, Keweenaw Bay Ojibwa Community College, and Michigan Tech to conduct a fish consumption survey that gathered historical and jurisdictional data on water quality parameters, fish consumption, and human health criteria concerning various water pollutants. KBIC will pick up development of its water quality standards from there, continuing to work closely with the EPA and the State of Michigan.



Serene Gauthier, KBIC Environmental Response Specialist, and Ron Tilson, Seasonal Water Resources Technician, sample water on the Silver River. (KBIC Natural Resource Department photo)



Jaren Forcia, KBIC Water Resources Specialist, (l) samples groundwater as part of the water quality monitoring program. The surface water within and adjacent to the L’Anse reservation is a drinking water source, and critical for both human and environmental health in KBIC, L’Anse, and Baraga. (Superior Watershed Partnership photo)

Once the KBIC and EPA have determined standards that can be reasonably attained, a public hearing will take place, giving an opportunity for the public to provide comments. After review of public comments, KBIC will develop a responsiveness summary, submit for approval from Tribal Council, and provide Certifications from the KBIC Legal Department. All of these documents will be formally submitted to EPA, which will then have 60 days to approve, or 90 days to disapprove, of KBIC’s Water Quality Standards program.

KBIC is the first tribal nation in Michigan to be granted a TAS designation for the Water Quality Standards Regulatory Program. It joins GLIFWC member tribes Bad River and Lac du Flambeau in Wisconsin, as well as Fond du Lac in Minnesota with this status.

In total, 65 nations across the U.S. retain TAS designation for operating a Water Quality Standards Regulatory Program. KBIC’s approval comes on the heels of the October 2019 announcement from the EPA that the tribe was granted TAS for non-regulatory authority under the Clean Air Act. KBIC is the first tribal nation in Michigan to also receive this status.

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MAZINA'IGAN (Talking Paper) is a publication of the Great Lakes Indian Fish & Wildlife Commission, which represents eleven Ojibwe tribes in Michigan, Minnesota and Wisconsin.

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Although MAZINA'IGAN enjoys hearing from its readership, there is no “Letters to the Editor” section in the paper, and opinions to be published in the paper are not solicited. Queries as to potential articles relating to off-reservation treaty rights and/or resource management or Ojibwe cultural information can be directed to the editor at the address given above. For more information see GLIFWC’s website: www.glifwc.org and our Facebook page.

On the cover

Gekekibinesiikwe Jennings spent time in the woods this spring harvesting bagwaji’zhigaagawanzh (wild ramps) with her family. She enjoyed being extra helpful and providing freshly harvested goodies to community elders. Our children flourish and thrive when they are outside and harvesting traditional foods. (B. Jennings photo)



Following a ransomware attack during the early days of the Covid-19 health emergency, GLIFWC administrators were compelled to issue hand-written payroll checks to staff. Receptionist Darcey Bender provided curbside service to GLIFWC staff, including Kia Hmielewski (pictured) outside the central office in Odanah April 9. (COR photo)



Shining a light on microplastic loads in Gichigami

By Philomena Kebec, GLIFWC Policy Analyst

GLIFWC's Lakes Committee adopted a resolution on March 27th calling for intergovernmental collaboration and coordination to reduce levels of microplastics in the Great Lakes. While the issue of plastic waste and contamination of the world's oceans has been widely publicized, people are largely unaware that this problem exists in the Great Lakes as well.

The Lakes Committee is very concerned about the effects that microplastics may have on native fish populations and spill-over effects on people and wildlife who eat Great Lakes fish. With the passage of the resolution, the Lakes Committee hopes to raise awareness of this issue and to encourage research and regulations to reduce microplastics pollution in the Great Lakes.

Microplastics are defined as plastic material measuring less than five millimeters in any direction (the thickness of three quarters is a little more than five



Microplastic pollution can be found in each of the Great Lakes and virtually all waters of the world. (5Gyres.org photo)

Many products and containers derived from plants can take the place of plastics; these products break down naturally and don't lead to microplastic contamination:

Instead of:	Look for:
Personal care products with plastic microbeads	Personal care products with whole oats, jojoba beads, salt, coffee, coconut shell or similar ingredients
Styrofoam to-go containers and cups	Lined paper, bagasse, molded fiber and aluminum containers and cups
Synthetic fabrics	Natural fibers, such as cotton, hemp and wool
Single-use plastic bags	Paper bags, bring-your-own cloth bags

millimeters). Microplastic pollution can be found in each of the Great Lakes and virtually all waters of the world.

Research conducted in Lake Superior by University of Minnesota graduate student Erick Hendrickson has shown that higher levels of microplastic contamination are present in off-shore areas, as compared to near-shore areas; off-shore areas of Lake Superior contain levels of microplastics comparable to those found in the North Atlantic and South Pacific Oceans. The Rochester Institute of Technology estimates that around 22 million pounds of plastic enter the Great Lakes each year.

According to Sara Moses, GLIFWC environmental biologist, microplastics can be mistaken for food by fish, potentially resulting in obstructions of the digestive tract or malnutrition as they replace true food items. Further, an array of environmental contaminants can adhere to the surface of microplastics, which is concerning from a human health perspective, Moses explained. When consumed by fish, these chemicals can be taken up into fish tissues that may be subsequently consumed by humans or wildlife.

What kinds of microplastic contamination are found in Lake Superior, or Gichigami? GLIFWC Great Lakes Section Leader Bill Mattes has been looking into this question. According to Mattes, much of the research to date shows microplastic material in Lake Superior consists of fibers, fragments and films. Microplastics are being introduced in several ways: through discharges from water treatment plants (conventional water treatment removes 90-98% of plastics in wastewater), (see *Microplastics*, page 22)

Hazardous pipelines spark concern, dialogue among tribes

By Charlie Otto Rasmusen, Editor

Watersmeet, Mich.—More than 60 representatives from tribes in Michigan and Wisconsin convened for a mid-winter summit to review the oil and gas pipeline known as Line 5. Constructed in 1953, the aged 30-inch diameter line operated by Enbridge has become a growing liability for ecosystems across the upper Great Lakes region—especially water resources.

“We’re here to protect our environment and protect our way of life,” Jim Williams told the extraordinary collection of Ojibwe bands that included officials from Chippewa Ottawa Resource Authority and Great Lakes Indian Fish & Wildlife Commission. Williams is GLIFWC Board of Commissioners chairman, and also serves as Lac Vieux Desert Band chairman.

Enbridge Line 5, which has exceeded its original operating life span, features over 300 stream crossings on its route from Superior, Wisconsin to Sarnia, Ontario. Lower Michigan already experienced one costly disaster. In the largest inland oil spill in United States history, 21,000 barrels of heavy crude poured from Enbridge Line 6b (constructed in 1969) into a Kalamazoo River tributary in 2010, killing fish and wildlife and damaging floodplain wetlands along a 30-mile stretch of once high-quality riparian habitat.

In wide-ranging conversations January 28-29, tribal representatives discussed how to better coordinate efforts to monitor pipeline issues and developments. With up to 540,000 barrels of light crude and natural gas liquids pumped through Line 5 each day, safety at the Straits of Mackinac was an area of special concern. At the Straits—where Lakes Michigan and Huron meet—Line 5 lies atop of the lake bottom across a 4.5-mile span noted for swirling, complex water currents. A spill here, explained CORA Environmental Director Mike Ripley, would be devastating to aquatic life, water quality and the commercial fishing industry that provides whitefish to consumers throughout the region. Among other proposals, Enbridge is seeking permits from state and federal regulators to bore a tunnel under the lakebed to reroute Line 5.

With an eye toward protecting the environment and treaty resources across the Ceded Territories, intertribal workgroups continue to correspond regularly as regulators evaluate proposals for the future of Line 5.



A large talking circle at Lac Vieux Desert reservation in Watersmeet, Michigan accommodated 60 participants.

Longtime tribal attorneys Kathryn “Candy” Tierney and Howard Bichler lent their expertise to discussions about Line 5. Both highly-respected attorneys worked on the LCO v. Wisconsin case, which led to the LCO or Voigt Decision in 1983. (COR photos)





More than 125 years after arriving, wild parsnip continues its spread in the Great Lakes region

Travis Bartnick, GLIFWC Wildlife Biologist

Many readers of *Mazina'igan* have likely noticed a non-native invasive species (non-local being) known as wild parsnip (*Pastinaca sativa*), growing along roadsides, fields, and other disturbed areas throughout the Ceded Territory in recent years. Known as pigwe'wunusk in the Ojibwe language, wild parsnip can be a problem for both biodiversity and humans who come into direct contact with the Eurasian plant.

Wild parsnip is a monocarpic perennial, which means it will grow for two or three years before reaching maturity, followed by a season where the plant bolts, produces flowers—which then produce seed—and then dies. This life cycle is typical



Wild parsnip. (Kimberly Emmerson, USFWS photo)

of other members of the parsley family (*Apiaceae*), including many culinary plants such as carrots, celery, caraway, coriander, dill, and parsley.

Wild parsnip was likely first introduced to North America from Europe and Asia as a root vegetable. Wild populations are thought to be the result of escaped cultivated plants. The plant can grow quickly and forms dense stands, which can outcompete native plants. As with many non-local beings, the spread of wild parsnip and the development of large populations can lead to the reduction of biodiversity in ecosystems found in the Ceded Territory.

Wild parsnip has been observed growing across the Great Lakes states for a long time. Some early collected specimens date back to the late 1800s, including a specimen collected on Madeline Island in 1896. There has been an increase in reports of wild parsnip spreading into new areas of the Great Lakes states in recent decades. Often the reports have come from people who observe it growing along roads, spreading into agricultural fields, along walking trails, and even at pow-wow grounds. In fact, a population of wild parsnip has been growing around the Bad River Band's pow-wow grounds in recent years. This is especially concerning given the human health risk associated with the plant (more on this later).

Wild parsnip typically grows to a height of 1.5–5 ft. The single stem of mature plants is light green, which is sometimes purple tinged in color, and has deep grooves. The stem is smooth (not hairy or bristly) and can range from one-inch to 2-inches in diameter. The compound leaves alternate along the stem, with a distinct saw-toothed edge along each of the 2–5 pairs of leaflets. The flowers are small, yellow, and are produced in several clusters in a flat umbrella shape, which



Wild parsnip leaf (l) and stem (r). (S. Garske photos) Wild parsnip seeds. (Wikipedia photo)

is anywhere from 4–8 inches across. Once the flowers mature, they produce a dry fruit or seed known as a schizocarp. Seeds usually remain attached to the dead stalks and disperse between August and November.

Some of the more common lookalike species include cow parsnip, Queen Anne's lace, giant hogweed, and angelica. Wild parsnip is the only plant among these species with yellow flowers. Angelica is the only other species of these lookalikes with a smooth stem. The others have fuzzy or bristly hairs along their stems. The Ontario Invasive Plant Council has a publication with more information about these lookalikes and additional information about best management practices for wild parsnip. See the link to the publication at the end of this article.

Wild parsnip's sap or juices contain a phototoxic compound that can cause phytophotodermatitis. Phytophotodermatitis is a technical term for a chemical reaction that makes human skin sensitive to ultraviolet (UV) light. The compounds are activated by UV light interacting with oxygen and the result is much like an intense, localized form of sunburn. If someone gets the sap from a wild parsnip plant (from the stem or leaves) on their skin, they might not notice any immediate reaction, but as the skin is exposed to sunlight, the skin can turn into a reddish rash, blisters can develop, and it can cause a painful burning and stinging sensation. Blisters usually do not develop until a full day or two after exposure. However, the reaction can lead to lasting tissue damage and a discoloration of the skin known as hyperpigmentation, which has been known to persist for up to two years. Once skin is exposed to the sun and the chemical reaction occurs, the reaction from exposure to sunlight can persist for several weeks or months.

Because of the delayed reaction, many who are exposed to the sap of a wild parsnip plant may not even be aware of the cause of the rash and blisters. Often the skin reaction is misidentified and treated as exposure to poison ivy. The reaction from wild parsnip is usually not as itchy as exposure to poison ivy, and the acute discomfort generally does not last as long as the reaction from poison ivy. Unlike poison ivy, in which some people may need multiple exposures to develop a reaction, the phototoxic sap from wild parsnip appears to affect everyone.

Invasive species staff at GLIFWC have been prioritizing the management of wild parsnip populations along roadsides, walking trails, and public areas for several years. In more recent years, GLIFWC's invasive species control crew has worked with staff from the Bad River Natural Resources Department in an attempt to reduce the population of wild parsnip growing around the Bad River pow-wow grounds. The population at the pow-wow grounds has been increasing, which increases the risk of human contact with the sap of the plant in such a heavily used area. In addition to control work, GLIFWC's invasive species program staff has conducted surveys for new populations and recorded reports of new observations submitted from the public, agency partners, and county road crews. Each year, GLIFWC works with road crew staff to inform them of management plans, and recommends appropriate times to conduct mowing operations along certain stretches of highways to reduce the potential for mowing operations to further spread wild parsnip.

One of the goals of GLIFWC's work with wild parsnip is to reduce the impacts of this non-local being on native plant species. Since wild parsnip has become more widespread in recent years, GLIFWC staff focus on isolated plants and smaller outlying populations, concentrate efforts in high-priority areas (areas with lots of human activity and ecologically sensitive areas), and plan control (see Wild Parsnip, page 22)



Wild parsnip phytophotodermatitis. (Wikipedia photo)



Indigenous in digital

Culture and connection go online amid COVID-19 pandemic

By Paula Maday, Staff Writer

In 1918, an influenza pandemic swept across the globe, affecting 500 million people worldwide. The Native American population was especially affected, with mortality rates four times higher than that reported for larger cities in the US during the epidemic.¹ In Alaska, the Native population was devastated, rendering them a minority in their own homeland. But as if the physical loss of nearly entire communities wasn't enough, another immense loss awaited, for those who remained.

"Alaska Natives were told they died in such great numbers because of their way of life," author Harold Napoleon, Yup'ik, said. "Clergy told them their cultural traditions were evil. Parents came to believe teaching their Native language to their children would hamper their success in the new world now dominated by non-Natives. They abandoned the old ways."²

In an article by Indian Country Today, Napoleon said generations of Alaska Natives lost the sense of self and connectedness their traditional culture had fostered. The trauma of those losses lives on today in dysfunction such as domestic violence, alcoholism, suicide, and sexual assault.³ Other tribes may have experienced similar narratives during and after the pandemic, and never even spoken about it. Today, amid the rise of a new global contagion—the COVID-19 virus—comes the opportunity to look at the health of our living culture 100+ years later. How are our Ojibwe beliefs, values, stories, and ways surviving in the time of the coronavirus?

Social distancing in a community-based culture

In the middle of March 2020, people around the United States began enacting personal safety measures in response to COVID-19. These safety measures included social distancing. Social distancing meant staying home, foregoing unnecessary travel, and maintaining at least a six-foot distance between yourself and others. For many, including the Ojibwe, this was a strange new way of being.

Ojibwe culture traditionally fosters a tight-knit community. Our ancestors lived and traveled in groups of different sizes throughout the year, harvesting and taking care of the earth and each another. The very fiber of the Ojibwe community is spun around a clan system, wherein every person has a role and a purpose within the tribe. So in a new world, where we all have to stay separate from one another, how do we maintain our sense of self and connectedness to our culture?

For the Ojibwe and many other indigenous people, culture pioneered online, to the digital world. Not long into Wisconsin's stay-at-home order, I was invited to join a Facebook group called Social Distance Powwow—literally a virtual powwow where you could browse indigenous vendors, dance, visit, and connect. The group had over 165,000 members at last check. Other groups and pages started popping up too. The Quarantine Dance Specials 2020 group created a space for dancers to compete in specials for cash, just like competition powwows. The Virtual Rounddance Facebook page live streams singers from all over the country, allowing anyone to follow the cyber powwow trail from the comfort of their own home.

And powwow and dance groups aren't the only parts of the culture that have started to flourish online. Ojibwe language speaking competitions have turned

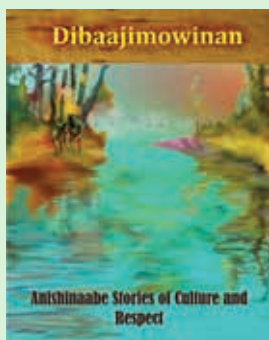


The Social Distance Powwow Facebook group is a popular online hang out for indigenous musicians, dancers, artists, performers, and community members. It fosters social connection in a time of social distancing. (P. Maday photo)

up, and web tutorials on harvesting and using plant medicines, and instructions for working with moose bone to make hide scrapers, and traditional harvesting and cooking demonstrations for maple sap, and so on and so forth. If the 1918 pandemic was a storm that washed Native traditions toward erosion, this one is a scorching sun that burns hot and fast, synthesizing new cultural growth and ecosystems from seeds buried beneath the flooded soil for a century. We are taught that when times are tough and the sun emerges, you turn your face toward it to remember and acknowledge that light will always return. And that's exactly what our Ojibwe people have done during this pandemic; they've turned the face, the body, the heart, and the soul of Ojibwe culture toward the sun. Now everyone has an opportunity to feel the light.

This is change. There is traditional knowledge available on Facebook today that was not available to me as a little girl growing up on my reservation. This is transformation. Indigenous teachings are being sought out, shared, and celebrated openly. The online powwow dancing groups bear a stark contrast to 1921, two years after the influenza pandemic, when the federal government issued an order banning traditional dancing among American Indian communities.

But the thing about all of this, is that it's not really about the technology. The technology is a tool for resilience, something that Native people have had to become experts in. It is a way for Ojibwe beliefs, values, stories, and ways to be (see **Indigenous in digital**, page 22)



GLIFWC digital resource guide now available

As schools close around the Ceded Territory in response to COVID-19, we recognize that teachers and parents may be looking for resources accessible to students while they are learning from home.

To assist with this endeavor, GLIFWC has created a Digital Resource Guide that lists all of our free and downloadable content covering topics from

treaty rights, history, and harvesting, to Ojibwe culture and language.

New educational resource offerings include Growing Up Ojibwe: Spearfishing Adventures and Ogichidaa Storytellers lesson plans and education materials.

For more information visit www.glifwc.org. (see **GLIFWC**, page 20)

Media

	Ojibwe Treaty Rights: Connections to Land & Water www.youtube.com/watch?v=hxWXwdVpj4	18 min.	Ages 9+
	The Sandy Lake Tragedy youtu.be/u6VailFy3CE	28 min.	Ages 11+
Ogichidaa Storytellers Video Series			
	Crossing the Line: Tribble Brothers youtu.be/KSpEGhWR44Q	5 min.	Ages 11+
	Lifting Nets: Gurnoe Decision youtu.be/ZmcdauLU1E	5 min.	Ages 11+
	Gathering the Pieces: The Jondreau Decision youtu.be/q5TmLyWyFM0	7 min.	Ages 11+
	Mikwendaagoziwag: They are Remembered (Sandy Lake) youtu.be/JLig6Pv1b7Y	6 min.	Ages 11+
	Place of the Pike: Ginoozhekaaning youtu.be/VBzPnETBkQ	7 min.	Ages 11+
	Every Step: A Healing Circle youtu.be/zn-DM2SQW8M	8 min.	Ages 11+
	Ogichidaa Storytellers Lesson Plans and Education Materials www.glifwc.org/publications/pdf/whs_glifw_classroom_resource.pdf		Ages 11+



Tribal Adaptation Menu workshop brings focus to Anishinaabe resources, world view

By Hannah Panci, GLIFWC Climate Change Scientist

Ashland, Wis.—Hours before Covid-19-related travel restrictions went into place, Red Cliff Natural Resource staff and GLIFWC co-hosted a Tribal Adaptation Menu (TAM) workshop at the Northern Great Lakes Visitor Center March 9-11. TAM workshops are designed to help participants integrate indigenous values into climate change adaptation planning.

Participants brought projects and spent the workshop evaluating challenges and opportunities to meeting project goals under climate change, developing adaptation actions that integrated both indigenous and non-indigenous perspectives, and discussing how to incorporate cultural considerations such as community engagement, reciprocity and respect, and language and cultural revitalization.

Participants left with project plans and clear steps for moving forward and joined a new cohort of people focused on applying indigenous approaches to climate change adaptation in their communities.

Several Midwestern tribes were represented, including Leech Lake, Bad River, Red Cliff, and Mille Lacs, as well as one representative of the Seneca Nation in New York, who underwent a 14-day isolation period after returning home.

Intertribal organization participants included GLIFWC, the Great Lakes Inter-Tribal Council Inc. (GLITC) and the Wisconsin Tribal Conservation Advisory Council (WTCAC). Non-indigenous partner organizations on hand included the National Park Service (Apostle Islands National Lakeshore), Northland College



Through wide-ranging discussions Tribal Adaptation Workshop participants addressed individual and cultural values, the importance of relationships, and ways to incorporate native perspectives into non-indigenous agencies (COR photo)

Burke Center, and University of Wisconsin-Madison Extension. The workshop was facilitated by members of the TAM author team. The two youngest team members, three-year-old Josephine and one-year-old Soren, served as a reminder that climate change planning needs to be carried out with our future generations in mind.

Vulnerability of wild leek to climate change



Bagwaji'zhigaagawanzh (Wild leek)

Allium tricoccum



Figure 1. Range map of bagwaji'zhigaagawanzh.

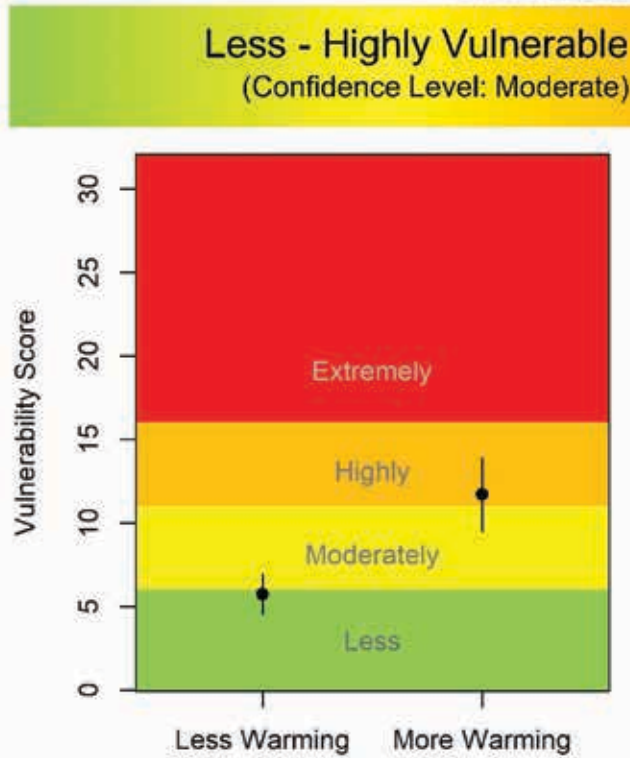


Figure 2. Climate change vulnerability scores for bagwaji'zhigaagawanzh on a scale of 0 (lowest vulnerability) to 32 (highest vulnerability). Dots indicate average score; lines indicate possible range of scores for each warming scenario.

General Description:

Bagwaji'zhigaagawanzh (bagwaji'zhigaagawanzhiig - plural), the wild leek or "ramp", is also known as bagwaji'zhigaagawanzh in the Leech Lake Minnesota area. Bagwaji'zhigaagawanzh shares part of its name with its cousin zhigaagawanzh, the wild onion (*Allium cernuum*). Parts of the Ojibwe name connect to the Traditional Ecological Knowledge about who bagwaji'zhigaagawanzh is. Bagwaji is understood to mean "wild," while zhigaag refers to our strong-smelling four-legged relative, the skunk. Those who have gathered bagwaji'zhigaagawanzhiig often mention that their strong zhigaag-like smell is strongest during the time of harvest.

A few bagwaji'zhigaagawanzh-related stories are known by the Ojibwe, each with several versions. One refers to a man who had a fight with his wife. She left, and he followed her footsteps, which stopped in a large marsh filled with bagwaji'zhigaagawanzhiig. This area is currently known as Chicago, Illinois. Many Ojibwe, along with others, believe the name for Chicago came from the word zhigaag because of the strong skunk-smelling plants of the once-present marshes.

(see Wild leek, page 19)

The workshop was opened in a good way with Ojibwe ceremony and language carried out by Anakwad Frank Montano and Ziigwanikwe (Katy) Bresette, both tribal members of Red Cliff. Speaking the language set the tone for the remainder of the workshop and created space for participants to look through an Ojibwe cultural lens. Throughout the rest of the 2.5-day workshop, participants used the Adaptation Workbook, a Northern Institute of Applied Climate Science product, as well as the TAM, to approach various projects with an indigenous perspective.

Projects brought to the workshop included GLIFWC non-local being (invasive species) management, proactive under-planting for emerald ash borer in Wisconsin, Red Cliff Treaty Natural Resources 10-year Comprehensive Plan, a lake management plan for the Penokee hills, development of a model food code for indigenous food systems, and integration of Traditional Ecological Knowledge into Apostle Islands National Lakeshore climate vulnerability interpretation and educational outreach.

Each group developed a ready-to-implement climate adaptation plan that involved actions to help treaty resources but also to engage community members in the process. Many stimulating group discussions covered topics such as consideration of individual and cultural values, the importance of relationships, and ways to incorporate indigenous perspectives into non-indigenous agencies and approaches.

Red Cliff tribal member Chris Basina catered two days of lunches for the event and provided venison stew, fresh-caught whitefish, locally harvested mushrooms, and wild rice. Eating first-foods was yet another way to support the community as well as intentionally incorporate local foods, healthy eating, and reciprocity into climate change planning. The final day was catered by locally owned El Dorado's Mexican Restaurant of Ashland.

Peggy Burkman, Biologist for the Apostle Islands National Lakeshore, said, "I really appreciated the focus on integrating traditional and scientific knowledge and the recognition that both have value and can contribute to the same story." Another participant commented that "the greatest part of this workshop has been the connections and the opening of my mind to better understand the values of the

(see Tribal Adaptation, page 19)



Waabizheshiwag and ojiigag pilot study underway at GLIFWC

By Tanya Aldred, Furbearer/Climate Change Biologist

In December 2019, my colleague Jose Estrada and I began getting equipment organized for a 2020 winter field research project. The project uses remote field cameras to assess the population density and distribution of waabizheshiwag (martens) and ojiigag (fishers) in the Chequamegon portion of the Chequamegon-Nicolet National Forest (CNNF).

Jose built several wooden platforms designed for a fisher or marten to stand on. These platforms were strapped to trees, baited with frozen beaver meat and scent lures, and set out in sites across the National Forest within known marten habitat. Nearby cameras were set and angled to get clear photographs of waabizheshiwag and ojiigag that visit the site. One camera is aimed directly at the platform to photograph the throat patches of animals that feed on the bait properly. The size and shape of these throat patches vary among species and individuals, and this data will assist biologists in determining population sizes and distribution across the CNNF.

Remote camera surveys have been used for many years in all types of wildlife research. They can be set up relatively quickly, and give researchers the ability to position cameras in areas that are difficult to access. In addition, they are very effective at documenting numerous individuals at specific dates, times, and temperatures.

Protocols for our pilot study have been adopted from recent and ongoing research conducted by the Wisconsin Department of Natural Resources (WDNR). WDNR is conducting a study in the Nicolet portion of the CNNF. Our study follows the same basic protocol with a few modifications. As our study targets both martens and fishers, our platforms are slightly larger. We also used different types of bait and cameras, as we are treating this project as a pilot study to determine what will work best for us.

To choose sites for the camera traps, we needed to determine where we might find martens and fishers across the National Forest. We used GLIFWC and US Forest Service (USFS) cover-type data, micro-habitat characteristics (forest structure data), and marten research data to give us an idea of where to start looking for current populations and individuals. Martens and fishers use similar forest types, which includes northern hardwoods or mixed coniferous/deciduous forests with embedded patches of Eastern hemlock and Northern white cedar.

Both species supplement their use of hemlock and cedar stands by using adjacent forested cover types, especially upland and lowland conifer, aspen and hardwoods. Also, both species have similar diet preferences which include snowshoe hares, squirrels and various other species of small mammals; insects; birds; fruits; and nuts. Both martens and fishers are also opportunistic and will feed upon carrion (animal carcasses) if found.

Some of the sites were known from live-trapping studies. These sites were visited and searched for evidence or recent activity by either martens or fishers. Other sites were found by driving along National Forest roads looking for marten and fisher tracks.



Waabizheshi reaching up for the bait and exposing the pattern of its' throat patch. (GLIFWC photo)



Ojiig reaching up for the bait and exposing the pattern of its' throat patch. (GLIFWC photo)

Once an area was selected, Jose and I chose two trees approximately five feet apart. The platform was placed on one tree, and one camera was placed on the other. A second camera was placed on another tree in the vicinity and facing the base of the platform. This second camera was used to document activity of other species visiting the site, but not necessarily climbing onto the platform. Once the platforms, baits, lures and cameras were all set, we left the area and would only return to check battery performance, change out SD cards on the cameras, and rebait/lure if necessary.

We sampled 18 different areas across the National Forest. Our original intent was to include more sites in the study, but field research does require a certain level of patience and perseverance to deal with any problems that may arise. These problems can include camera malfunctions, inclement weather, damage to the platforms by wildlife, or animals not visiting the site. We had various species visit the platforms, including mice, flying squirrels, bobcats, raccoons, fox, coyotes, and deer, as well as marten and fishers. GLIFWC plans to continue this project next winter by adding more sites, and using different cameras that will produce colored pictures of individuals at night.

The type of research garnered from this pilot study allows GLIFWC to track current marten and fisher populations. Marten are currently listed as the state's only endangered mammal. They are also an important clan animal to the Ojibwe.

Both waabizheshiwag and ojiigag are likely to be affected by climate change too, though in slightly different ways.

Climate change will cause warmer temperatures, warmer winters, and decreased snowfall. This will not only impact forest types and prey species of martens and fishers, but may also favor fisher populations over marten. Although waabizheshiwag and ojiigag have similar habitat use and prey requirements, one big difference is their ability to move through deep snow. Martens can move quite easily through deep snow, whereas past research has shown that fishers do not; fishers will thrive better than martens in winters with less snowfall.

This difference is an important one to take into consideration in the context of climate events shifting further north. The shift is projected to negatively impact marten populations in northern Wisconsin. Our research will help us to follow current waabizheshiwag and ojiigag populations, and to do our best to protect such an important animal to the Ojibwe.



Marten and fisher platform pilot study with ramps and camera set. (GLIFWC photo)



Meet the warden—Jim Stone

Home-grown officer serves Chequamegon Bay region

By Paula Maday, Staff Writer

Odanah, WI—Jim Stone is a well-known man in northern Wisconsin. As an emergency medical responder, Bad River fire chief, and GLIFWC warden, he serves as a caretaker for the people, animals, lands, and waters of the Chequamegon Bay area. But he didn't always know this would be his role. For Jim, his path unfolded organically over a span of 25+ years.

In 1997, Jim was working at James River paper company in Ashland, when he was offered an opportunity he couldn't pass up.

"I was given the opportunity to get a two-year degree, paid for through Northwest CEP (Concentrated Employment Program)," Jim said. Unsure of what career path to choose, Jim looked to the elder men in his family for guidance. "My uncle Vern was a GLIFWC warden, and my uncle Bob was a Bad River warden, so I decided to study law enforcement."

Jim enrolled in the Criminal Justice program at Chippewa Valley Technical College in Eau Claire. That same year, he started working GLIFWC's electrofishing crew. Then, in the summer of 1998 and '99, Jim was offered another opportunity that would help set him on his path: an internship within the GLIFWC Conservation Enforcement division.

"That internship really helped me," Jim said. Able to put knowledge into action, Jim found his calling. "I loved being outside, especially in the different seasons. Our job changes throughout the year because of seasonal activities. I also really liked the interactions with people, and the flexibility."



(COR Photo)

In 2001, Jim started working full-time as a warden for GLIFWC. After a brief hiatus from 2003-2006, to serve as Bad River Police Chief, he came back to GLIFWC and has been here ever since. And he's the guy people call when they need help.

GLIFWC wardens often assist other agencies with high-intensity situations, including search and rescues, traffic accidents, medical emergencies, numerous types of gun calls, and ATV and snowmobile accidents. Because of the personal and cooperative relationships that Jim has forged over the life of his law enforcement career, he'll often get a direct call from the local sheriff or dispatcher when a situation arises that warrants help.

"A lot of times, doing this work, you're put into people's lives at the worst possible time. All the training that I take is for the community. I have been fortunate enough to have been able to save people's lives using CPR and by responding to medical emergencies. I am so grateful that I am able to care for them and help them in this way."

Jim is strong and steadfast in his duties, but he is also very personable and approachable. You can usually find him with a welcoming grin on his face, and a willingness to help in any way he can. His gift is in his ability to make people feel safe in any situation, a gift he honors in a good way.

As a GLIFWC officer, Stone has served amongst the off-reservation lands and waters around the Red Cliff community and currently works in the Bad River Ceded Territory area. He has two kids—a son and a daughter, with whom he loves to camp, hike, hunt, and cook out.

Camp Onji-Akiing cancelled for summer 2020

For the first summer in more than a decade, there will be no canoemin, no spirit runs, and no warrior games at Camp Onji-Akiing. The annual cultural youth camp held at Camp Nesbit, in the Ottawa National Forest, has been cancelled in response to the current risks posed by COVID-19.

The decision to cancel camp—scheduled for August—was not an easy one to make, but falls in line with both GLIFWC and the US Forest Service's desire to protect the health and safety of all employees and visitors.

"We care about our camp kids, and we want to keep them safe. To do that, we feel it's best to continue recommended social distancing efforts into the summer, GLIFWC conservation warden and outreach officer Christina Dzwonkowski-Burns, said. Dzwonkowski-Burns has been an integral part of camp for the last few years. "We're already thinking about and looking forward to next year! I anticipate that this year's planned theme—climate change—will carry over to 2021."

Camp Onji-Akiing offers tribal youth in grades 5-8 the opportunity to explore and connect to the natural world, while building personal leadership skills. Every year, 50 kids from around the Ceded Territory travel to Upper Michigan for a week-long adventure that ignites their physical, mental, emotional, and spiritual growth. It is all part of an effort to foster environmental stewards of the next generation. Camp Onji-Akiing was first launched in 2008.

—P. Maday

Onji-Akiing (From the Earth)

2020 Natural Resource Cultural Summer Camp

Lake Nesbit Environmental Center
Sidnaw, Michigan

CANCELLED

To protect the health and safety of all employees and visitors during the COVID-19 pandemic, GLIFWC and the US Forest Service have cancelled Camp Onji-Akiing for 2020. The two organizations have partnered to run the youth camp for more than a decade.

Get your permits online



Permits are now available online at glifwc.nagfa.net/online/ for off-reservation camping, gathering, small game hunting, and spring turkey hunting. Tribal members will need their NAGFA ID number (located on last year's permit) to login and issue permits. Instructions for issuing permits are available here: (glifwc.org/online.permit.instructions.pdf)

Tribal regulations governing these activities vary by state and landownership. Please visit data.glifwc.org/regulations/ for specific tribal regulations governing the activities you are interested in pursuing.

Members are reminded to review hunter safety and mentor hunter requirements data.glifwc.org/archive.bio/hunter.safety.mentor.hunter.summary.2020-04-03.pdf to insure they are in compliance. Tribal members who lack a NAGFA ID or need a mentor hunting permit should contact their tribal registration station or conservation enforcement office: data.glifwc.org/registration/

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Great Lakes Indian Fish & Wildlife Commission

P.O. Box 9 • Odanah, WI 54861
(715) 682-6619 • www.glifwc.org

2020-2021 Season

NAGFA ID #: 8041 Tribe: BRV
Name: JOHN P DOE
Address: 777 Traditional Way Odanah, WI 54861
Phone: 000-000-0000 Hunter Safety #:
Remote Registration (deer, bear, turkey, crane): 1-844-234-5439 or glifwc.nagfa.net/online/
More Information: data.glifwc.org/regulations/

<p>GATHERING Firewood Stamp# 246845</p>	<p>CAMPING National Forest Camping Stamp# 246844</p>	<p>SMALL GAME Turkey - Spring Stamp# 246843</p>
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Ceded Territory SCIENCE

Harvester surveys help guide stewardship on Wisconsin's manoomin waters

Your responses provide key inputs to protect and enhance wild rice

By Peter David, GLIFWC Wildlife Biologist

If you are an Ojibwe tribal member and obtained a permit to gather manoomin (wild rice) or harvest migratory birds off-reservation, odds are pretty good that you got a survey in the mail from GLIFWC asking you to share information about your harvesting activities.

It might seem like a bother or personal intrusion to answer the questions, or you might think that if you didn't go ricing or duck hunting that there is no reason to send it back. You might simply wonder why we send out the surveys in the first place. As it turns out, the surveys provide GLIFWC with essential information used to guide management of wild rice, waterfowl, and the aquatic habitats they call home.

There are lots of reasons why GLIFWC is interested in your experiences on the water. It's really important to document the exercise of your treaty-reserved rights. Documenting harvest can actually help protect these rights for future generations. Harvest information can also help us steward the more-than-human beings that provide so much for us. Let's take a look at some of the manoomin information we ask you to share.

GLIFWC has been surveying both tribal and state wild rice harvesters in Wisconsin for decades now. The questions on the survey are simple: Where did you go? How many trips did you make? How much rice did you bring home? We try to keep the survey short, but we also value the knowledge of ricers, so we usually ask your opinion about a few things too. Some of the opinion questions we have been asking for many years; others may vary from year-to-year: How bad were rice worms where you picked? Was your ricing disrupted by early season duck hunters? What is your opinion about having rice authorities regulate the opening date of rice lakes?

All these questions help biologists understand manoomin, and manoomin harvesters, better—and so they help us help you, by enhancing our ability to care for manoomin. So, what are some of the things we have learned?

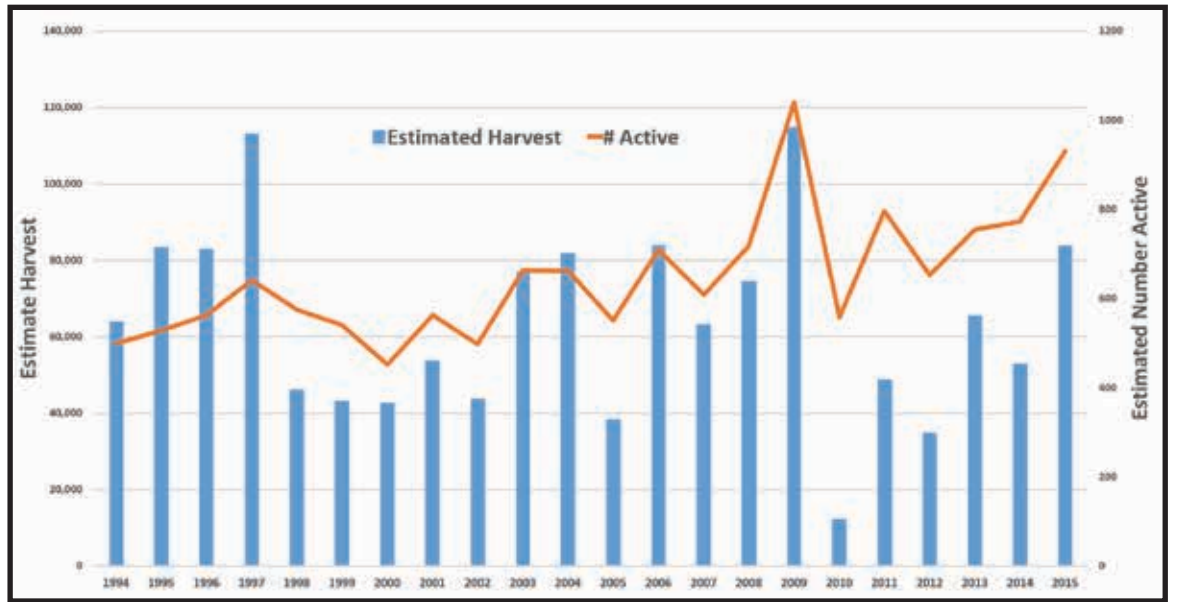


Figure 1. Wisconsin estimated off-reservation manoomin harvest, and number of active state and tribal pickers.

Well, for starters, we can estimate how much rice is harvested from off-reservation waters in the state each year. It turns out that 60,000 pounds is about the harvest in an average year, but harvest is very much variable: a really good year can be almost twice the average, and a really poor year can be far less. In 2010, estimated harvest was only 12,334 pounds; this was probably due to a massive outbreak of brown-spot disease, a fungal disease that can ruin rice crops when the weather is unusually warm and wet. That knowledge reminded us that we were really going to have to let ricers know good places to go in 2011 as their supply of manoomin started running low.

We've learned that off-reservation manoomin harvesting in Wisconsin is concentrated on a pretty small number of off-reservation lakes. Over all the years the survey has been conducted, respondents have reported harvesting rice from nearly 300 different waters. However, over half of the total reported harvest has come from just 13 waters, and the top 25 waters account for nearly 3/4ths (72%) of the total. While every stand of manoomin is sacred and merits protection, this information helps us focus our attention and our funding in some of the areas most critical to meeting subsistence needs.

It also turns out that the "average" state and tribal ricer tend to be pretty different from each other. Ricing is deeply bedded in Ojibwe culture, and that is (see [Harvester surveys](#), page 14)



Both Ojibwe tribal members and state-licensed manoomin harvesters can provide valuable insight into Wisconsin's wild rice resource by completing the annual GLIFWC survey. Harvest information helps biologists better understand the long-term abundance of manoomin and how disease and weather events impact stands of rice in off-reservation lakes and rivers. (CO Rasmussen photos)





Traditional resources: A means to sustenance for many impacted by virus

Solid off-reservation fishing returns as spring season winds down

Opening a bit earlier than the long-term average, the 2020 spring spearfishing season commenced April 5 as ice gave way to open water on southern-edge Wisconsin Ceded Territory lakes. Even as some tribes were wrapping up their two-three week seasons in late April, northernmost Ojibweg were just getting started as upper-latitude lakes became ice-free. As the season neared its end—one month after the first fish was landed—Wisconsin's six Ojibwe bands had harvested 34,824 walleye and 116 muskellunge.

In the Minnesota 1837 Ceded Territory, Fond du Lac (FdL) Band relied on Mille Lacs Lake for the vast majority of its spring harvest. In order to conduct fishing and associated monitoring as safely as possible, Fond du Lac authorities limited boat landings to a maximum of 10 individuals resulting in only seven daily permits available to members through a lottery drawing.

"Given the extraordinary measures we took to maintain social distancing and limit exposure in light of Covid-19, we still had a successful season," said Brian Borkholder, FdL Band fisheries biologist. Borkholder said resources staff also collected more than 100 walleye otoliths (ear bones) that are essential to help biologists evaluate age structure and growth rates of the Mille Lacs Lake population.

From April 25 to May 3, FdL fishers netted 14,449.4 pounds of ogaawag, plus 393.2 pounds northern pike and just nine pounds of perch. A lone trip to Lake Vermillion in the 1854 Ceded Territory yielded a negligible catch, Borkholder said.

Hometown tribe Mille Lacs Band of Ojibwe harvested 13,729.5 pounds of walleye from a catch of 7,401 fish on Lake Mille Lacs as of May 6. Band members had plenty of y-bones to navigate with 132 northern pike

destined for the cutting board, totalling in at 716.6 pounds. The only other treaty tribe to fish Mille Lacs—Lac du Flambeau—returned to northeast Wisconsin with 862 ogaawag, weighing in at 2,018.3 pounds.

In Upper Michigan, treaty spearers from Lac Vieux Desert Band had boated 2,999 walleye by May 5 along with two muskies. Harvest figures for all states are preliminary as off-reservation treaty harvests continued in early May. —CO Rasmussen



Maple candy, smoked tullibee, and more

On the west side of Lake Mille Lacs, Minnesota late spring harvesting was in full swing when social-distancing recommendations transitioned into defined orders from state and tribal officials. Businesses, schools, and other institutions were compelled to lock their doors; individuals were told to stay home.

For Curt Kalk, cultural resources educator at Mille Lacs Band's Nay-Ah-Shing School, that meant losing an enthusiast group of 6-12 graders that were learning their way around a sugarbush.

"Everything we do is hands-on," Kalk said. "The kids learn that a lot of work goes into seasonal harvesting. It's about a lot more than taking a particular resource."

With maple sap still flowing and fish in the nets, quarantine partner and wife Carmen Kalk became an invaluable asset. They gathered and boiled sap together, creating maple syrup and candy. A mess of tullibee shared by Keith Wiggins was perfect for the smoker. The season rolled on, and the Kalks rolled with it.



Maple candy and maple syrup.



Kalk pictured in his sugar shack near Mille Lacs Lake. (photos by C. Kalk)

"People that harvest are going to harvest no matter what's going on," Kalk said. "We do the same thing every year, every season."

Kalk said with so many community members laid off work, he saw an increase in effort in walleye fishing on Mille Lacs Lake. And it didn't take long for band members to hit harvest limits.

"When you need food and going to the grocery store isn't the safest option, people turn to natural resources," Kalk said. "You can feed your family from the lake."

Kalk said a community fishing event in the first week of May yielded a nice catch for elders unable to make it out on the water. But a change in the atmosphere at boat landings seemed palpable.

"It's usually a really social time. There's a lot of camaraderie that goes on. And impromptu stuff like just jumping into a boat with someone and going fishing doesn't work with social distancing," he said.

With spring fishing wrapped up, Kalk has his sights on the wild turkeys that have become a fixture in the Minnesota 1837 Ceded Territory. "Of course, Carmen sees one walking through the yard when I'm out hunting," he said with a smile. —COR

Pandemic casts ripple effects on commercial fishing

By Bizhikiins Jenning, Staff Writer

As Covid-19 ravages the coasts and sets course inland, many tribal communities have focused their efforts on treaty harvesting. Unfortunately for local tribal commercial fishermen, the trade has somewhat shutdown for the unforeseeable future.

Treaty rights have helped tribal communities in this region thrive for decades on traditional food systems that truly empower the mind, body and spirit. Tribal commerce and trading networks have always been a huge part of indigenous life-way. Commercial fishing became more prevalent after Red Cliff and Bad River both reaffirmed these rights through the 1972 *Gurnoe Decision*, which formally acknowledged the fishing rights on Lake Superior. There is no irony in the fact that many of the local Ojibwe communities are known as Lake Superior Ojibwe.

Since the *Gurnoe Decision*, many tribal families have found their way back to the big lake and have found ways to provide fresh fish for their communities.

Local tribal member and commercial fisherman Pat Peterson is one of the many individuals affected by the current Covid-19 pandemic and resulting shutdown.

Pat and her family run Peterson's Fish Market, which has been in business since 1992. They have since opened a small restaurant known as Four Suns Fish and Chips also based out of Hancock, Michigan. During the time of treaty reaffirmation, the Petersons, Red Cliff tribal members, uprooted and moved across the Ceded Territory to fish the waters near Keweenaw Bay Indian Community. Eventually, the family became attached to the area and created permanent roots through their fishing venture. Today, desperate times and desperate measures have shut down many food suppliers, and drastically cut down restaurant services—which have negatively impacted the commercial fishing industry.

"If you are a fisherman, and you don't have a market, you can't make it. There is no money in commercial fishing if the market isn't right," Peterson said. The Petersons operate a two-boat fleet and employ about twenty staff depending on the season. Nearly their entire workforce is temporarily laid off due to the pandemic.

"We made a difficult decision to close our doors. We could have tried to keep the fish market open as an essential business, but it wasn't worth the risk to our family and the communities we work with, so we decided to close down."

Just like many other small businesses around the country, the Petersons closed up shop on April 3rd after getting word that restaurants and markets were closing or freezing sales indefinitely. In fact, many of the larger markets and fish buyers are located in big cities like Chicago and New York, and are also experiencing some of the worst surges of Covid-19. Through the negative shadow cast upon local business and commercial fishing, positive rays of sunlight radiate throughout the Ceded Territory in the form of kindness. Many commercial fishermen are setting nets and



Commercial Fisherman Joe Duffy teaches his grandson Donny Livingston on the commercial fishing tug (Ava June) owned by Fisherman Bryan Bainbridge. (GLIFWC photo)

feeding their local communities for free. Peterson's just donated over 1,500 pounds of fresh lake fish to the local food bank and Salvation Army.

"My son Chris and some of the other Red Cliff fishermen wanted to help in some way, and they figured they could contribute by setting nets and donating good food."

Tribes across the nation are also experiencing a surge in food sovereignty and community members taking to the outdoors.

As far as a message to the public, Pat reminds people to "stay safe, and help your community members however you can, especially the elderly. We have always been like this, so let's continue to give, it's the Anishinaabe way!"

Many other tribal fishermen across the country have been impacted by the pandemic, but if there's one thing that indigenous communities know how to do, it's share and survive.

Fisherman finds street corner success

The shutdown order arrived one morning as Joe Newago Jr. and his commercial fishing crew were preparing to motor out onto Lake Superior to pull their gillnets after an overnight set. Non-essential businesses were directed to close by the Wisconsin Department of Health Services March 20 in a bid to slow the progress of a new coronavirus known to spread by human-to-human contact.

"I figured that as a food supplier, we'd be one of the last ones to shutdown, if it even got to that point," said Newago, an Ojibwe fisherman that operates out of Bayfield, Wis. "Next thing you know, the markets dried right up."

With restaurant closures across the nation, his regular catches of whitefish and lake trout no longer had a place to land. Even in Midwest communities where Friday night fish fries are legendary, wholesale buyers on both the local and regional level could not move his product. In a bind, Newago made a few calls and found an alternative to wholesale sales by going consumer-direct, right at the corner of Lakeshore Drive and Vaughn Avenue in Ashland—just a stone-toss away from Chequamegon Bay.

"It's going better than expected. People really want to buy their food locally," Newago said May 1 from the high-visibility parking lot corner. With a cashbox and a pair of large ice chests, he's on his way to develop an alternative outlet for his fish that just might become permanent. "We're looking for a building in town to start up a fish market."

Since just after Easter, Newago has sold freshly pin-boned, skinless fillets every Thursday and Friday. In addition to the vacuum-packed fillets, he also offers smoked fish, which is processed on Wednesdays. Everything sells out.

"Everyone that's come has been happy. It's a lot of repeat customers," he said. "You can't beat the price. It's good for the consumer and it's working for us."

While the fallout from the coronavirus pandemic continues to create challenges for many Gichigami commercial fishermen, there are some silver linings—some revelations that give way to opportunity. With a healthy product and strong community support, Newago looks forward to the day when a temporary street corner location might evolve into a brick-and-mortar family business. For more information on fresh fish, including large orders, contact Newago at 715.209.1077. —COR



On a business trip to Ashland, Altoona resident Tom Peacock (above left) picked up a handful of smoked lake trout packages from Joe Newago Jr. Newago sells fresh and smoked fish on the corner of Lakeshore Drive and Vaughn Avenue in Ashland on Thursdays and Fridays.



Upon returning from fishing runs on Lake Superior, Newago and his crew vacuum-pack skinless, pinboned whitefish and lake trout fillets for direct-to-consumer sales. (COR photos)



GLIFWC's Traditional Food Code Project returns *This time, as a webinar*

By Owen Holly Schwartz, GLIFWC Community Dietician

Spring is here and we are all looking forward to fresh fish, spring greens like ramps and fiddleheads, and the songs of returning birds. This spring finds many of us in an unprecedented circumstance. As many are sheltering in place, we are finding new ways to connect with each other.

“GLIFWC Ceded Territory Traditional Food Regulatory System Project” staff, who were in the midst of scheduling community events when the Covid-19

Viewed from an online link, webinars contain a collection of contaminant, food safety, and Model Food Code information GLIFWC staff has developed or collected throughout the project. Each GLIFWC member tribe selected one traditional treaty-harvested food to feature such as manoomin, venison, and fish.

pandemic hit, spent the early days of the shelter-in-place orders learning about telecommunication software in order to transition in-person community workshops and trainings to online formats.

After many hours and several awkward online meetings involving questions like: “Can you see me?”, “How ‘bout now?”, “Where is the screen-share button?” and my personal favorite—“I’ve been on mute the whole time?!”—staff completed their first webinar test run. We are excited to announce that the webinars are ready to go live!

Each webinar will be full of information about a featured traditional food in relation to harvest regulations, food safety and contaminant concerns, plus a chapter in the new Model Food Code related to the traditional food topic. Staff is working hand-in-hand with community partners to identify the time and date for each webinar.

During the summer of 2019, project staff hosted community roundtables within each of GLIFWC’s eleven tribal communities. The roundtables provided an opportunity to share and discuss the project and to receive feedback from community members about the Model Food Code. During each roundtable, community members selected the traditional treaty harvested food that was the most important to their community to focus on for their (see **Traditional Food Code**, page 20)

Chemical Contamination Risk Lead in Venison

- Cost/benefits associated with using non-toxic ammunition
 - Nontoxic ammunition is made with a metal other than lead, such as copper and doesn't fragment in the same manner as lead ammunition.
 - Nontoxic ammunition may cost more than lead ammunition.
 - Nontoxic ammunition follows a different trajectory than lead ammunition requires hunters to re-sight their firearms.
 - State and federal regulators are unlikely to approve the use of lead harvested deer for sale to federal programs or available for retail sale.



Photo Credit: The National Rifle Assoc.

Harvester surveys help guide stewardship on Wisconsin's manoomin waters

(continued from page 11)

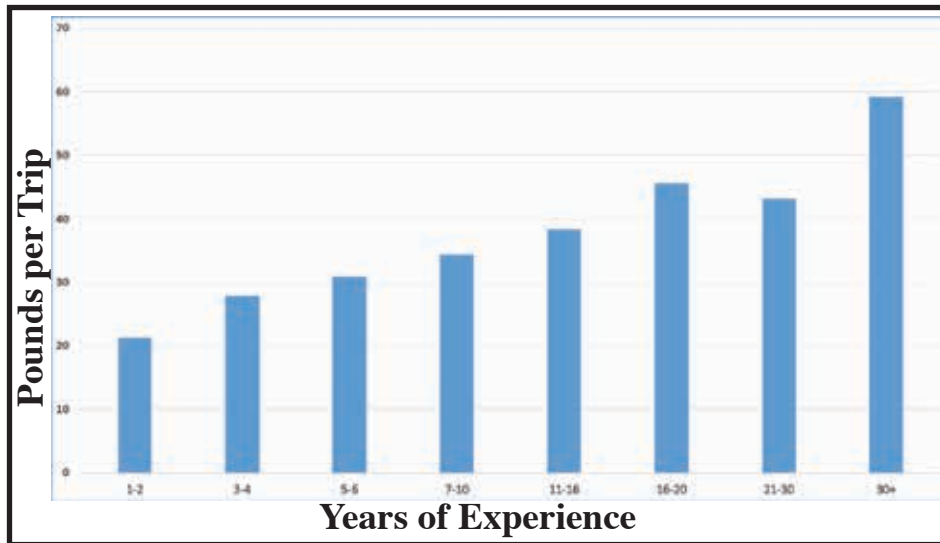


Figure 2. Years of ricing experience versus pounds of rice harvested per trip.

reflected in the harvest data. On average, active tribal ricers make about 0.7 more ricing trips a year (3.3 vs 2.6), and they harvest about one-third more rice per trip (45 pounds versus 34). This is likely due, in part, to the higher levels of experience reported in the average tribal ricer: about 23 years (see Figure 2).

We know the comparable number for state ricers is biased low, because the state does not require ricers over 64 to get a permit, but with an average of 8.4 years of experience among state respondents to the survey, there is likely a significant difference. The differences in experience levels suggest a couple of things that rice stewards might want to consider.

For example, it might be good to create educational materials for state ricers about how to harvest in a good way, since nearly half of the state ricers have been ricing for three years or less. On the flip side, it suggests we are not getting enough of our tribal youth to become ricers, as it is being practiced mostly by elders with many years of experience (at least off-reservation).

As a final example, we can use harvest data to help us evaluate possible changes in ricing regulations. One issue currently under consideration is the list of “date-regulated” lakes in Wisconsin. On these lakes, no one is allowed to harvest from them until they have been opened by tribal and state opening authorities. Out of all of Wisconsin’s manoomin lakes, 53 of them are currently date-regulated;

many others are not. The list of date-regulated waters has not changed in over 30 years. A lot of effort goes into the opening of date-regulated lakes—they must be visited, often several times, to determine ripeness; they have to be posted open, and that opening information must be posted to the public in a timely way.

Harvest data suggests that we may be able to make improvements to the list. Many of the lakes on the list provide very little harvest; in fact, just nine of the 53 listed lakes account for 82% of the total harvest from date-regulated lakes (see Figure 3). The harvest data also tells us that there are some heavily harvested lakes that are not currently date-regulated.

In fact, the data indicates that we could cut the number of date-regulated lakes in half, and actually increase the proportion of the harvest coming from date-regulated waters by over 25% just by changing which lakes are date-regulated. This could be good for manoomin, and make life less tasking for the tribal rice chiefs who are responsible for evaluating and opening lakes to harvest.

These are just a few examples how GLIFWC uses the information we request from tribal members exercising their treaty rights. So if a survey ends up in your mailbox, **please** take a few minutes to fill it out and send it back—even if you did not pick rice, or hunt ducks, or do whatever exercise you are being surveyed about; that’s important information too! It is one small way you can help us help you, by increasing our understanding of, and ability to protect, the more-than-human beings we rely upon. MIIGWECH!

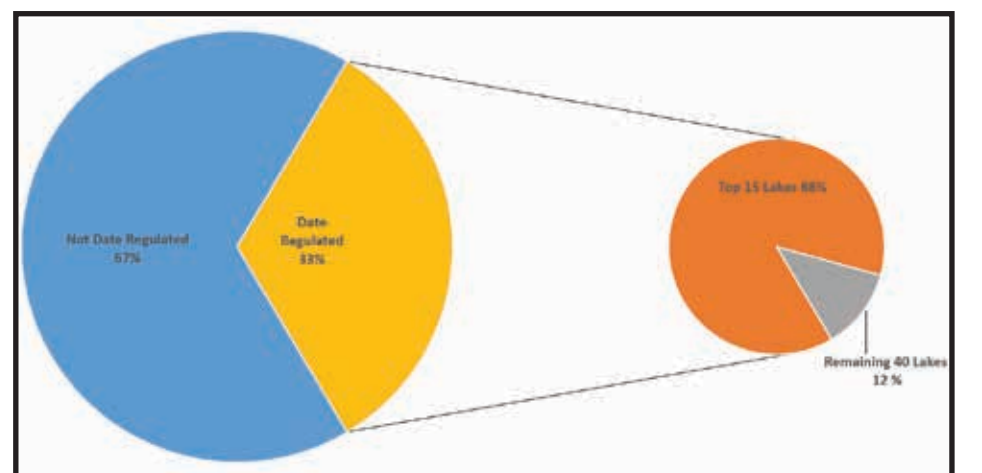


Figure 3. Off-reservation manoomin harvest in Wisconsin from date-regulated and non-date-regulated waters.



The Healing Power of the Ziibaaska'iganagooday (Jingle Dress)

By Paula Maday, Staff Writer

The Jingle Dress is known throughout Ojibwe country to bring healing to the sick. There are many different origin stories about this powerful dress and the beautiful ceremony of dancing it. Here is one such story that comes from the Mille Lacs community. The late Larry “Amik” Smallwood, learned this story from elders:

A Mille Lacs man kept having a recurring dream of four women dancing in red, blue, green and yellow dresses featuring metal cones, traditionally crafted from snuff tobacco tins. After he told his wife the dream and showed her the springlike dance steps he saw, she and other community women created the dresses. Later the man shared his dream more widely, and the women demonstrated the dance. At the same time, the man's daughter was very sick, hardly able to move. When the women began to dance, the girl stirred and watched, and by the end of the evening, she was up and dancing with the women.¹

The jingle dress and dance are said to have first appeared around 1918-1919, at a time when a sickness (influenza) was making its way around the world. In the wake of this illness, and the fear of its destruction, came the dream of the jingle dress and its healing power.

The tradition of the jingle dress lives on in Ojibwe culture today. Recently, dancers from St. Croix, Lac Courte Oreilles, Turtle Mountain, Bad River, Red Lake, and Wabigoon Lake Ojibway Nation, Canada, came together virtually to dance “old style” in a video published on Facebook.

The caption to their video reads, “We respect this dress and the teachings we were given. Together we dance and pray for all of those affected by this sickness that has come to Mother Earth. We also pray for the frontline workers to be strong, and we pray that love and happiness touches everyone.”

On March 21, another group of women put on their jingle dresses in Bad River to dance for healing. As they danced, three eagles flew in and circled overhead. That day, migizi saw that the Ojibwe people are still living in a good way.

What does a jingle dress look like?

Traditional jingle dresses were often made from old formalwear or plain cotton dresses. They were sewn with rows of round, metallic snuff tins, rolled into a cone-shape.

Today, jingle dresses are made from fabrics in every color imaginable, including bright yellows, deep reds, even neon! Many dancers choose shiny, sparkly materials that reflect light off of the jingles as they move.

Today, jingle dresses are made from fabrics in every color imaginable, including bright yellows, deep reds, even neon! Many dancers choose shiny, sparkly materials that reflect light off of the jingles as they move.

Traditional jingle dresses didn't have a lot of decoration beyond the jingles, but today's dresses feature fringes, beading, embroidery and more. Some contemporary dresses even use colored jingles in place of silver ones!

Whether traditional or contemporary, jingle dresses are usually long, falling to a dancer's calf or ankle. The sleeves are long as well. A thick belt secures a dancer's dress at the (see **Jingle Dress**, page 22)

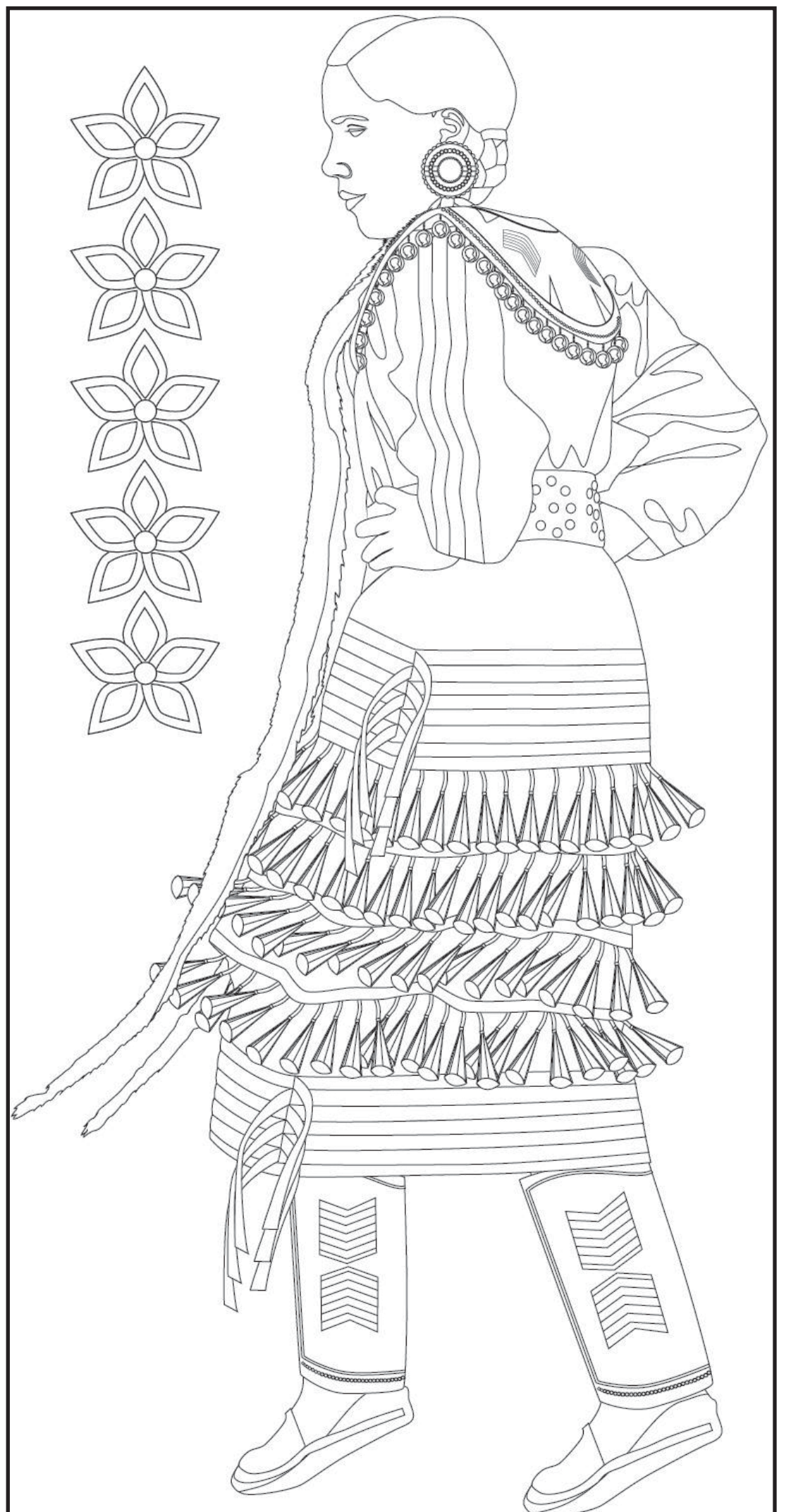
Let's Speak Ojibwemowin!

ziibaaska'iganagooday—jingle dress

ziibaaska'iganan—metal cones

ikwe-niimi—she dances the women's dance

niimikaage—she dances for people (for a purpose)



Did you know?
 Old style jingle dancers move in a specific way. They do not cross their feet, do not turn in a complete circle, nor dance backwards.

Jingle dress coloring page image courtesy of Jamey Penney-Ritter. Additional regalia coloring sheets available free, for personal and educational use, here: www.bemusedposters.com/regalia-series



Smithsonian National Museum of the American Indian provides depth to the native experience in North & South America

Anchors recovering indigenous landscape of East Coast

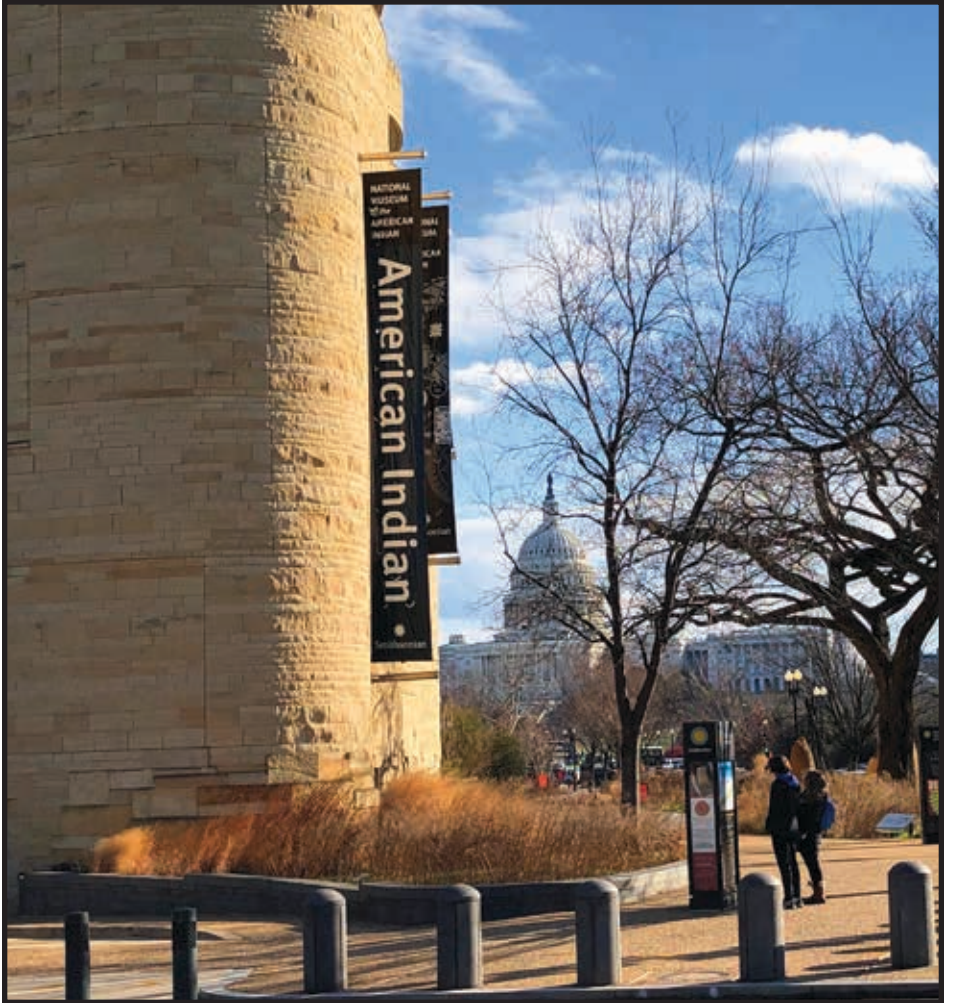
Text & Photos by Charlie Otto Rasmussen, Editor

Washington, DC—Situating almost within earshot from the US Capitol dome, the National Museum of the American Indian evokes a wild and natural character unlike anything else in a city of marble and neoclassical designs. Completed in 2004 on the National Mall, the museum collects more than 800,000 objects and 125,000 images under the guidance of tribal members from across the United States and beyond.

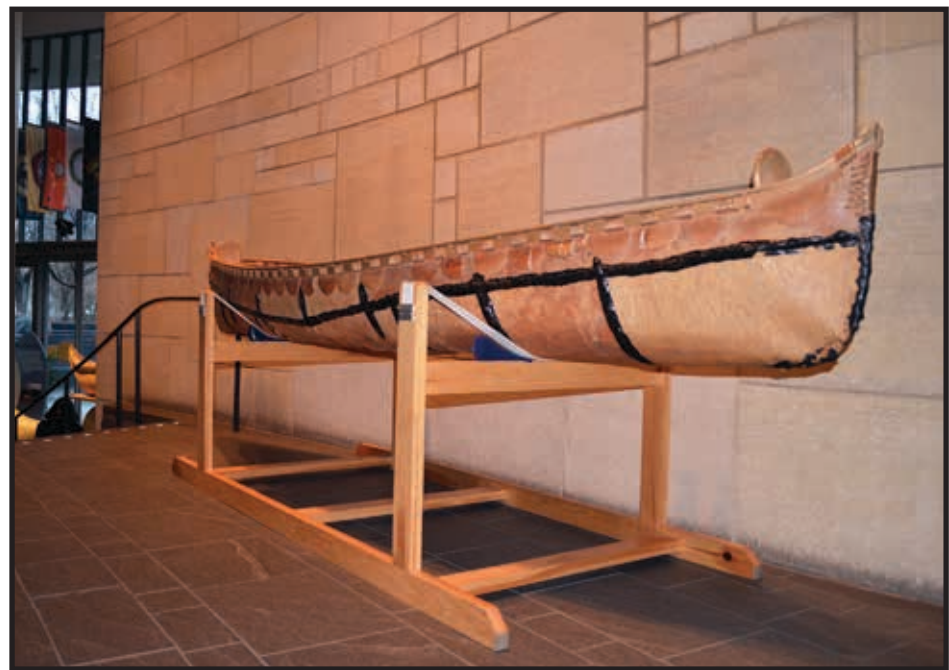
Among four levels of both sweeping and intimate exhibits that feature native people of the Americas, the “Nation to Nation” display is a poignant walk through history that contrasts how natives, Europeans, and colonists view diplomacy and treaty-making. For most tribes, treaties are emblematic of the troubled relationship between the United States and native nations. Broken promises and underwhelming responses to tribal needs abounds. But exhibition curators remind us that treaties are ongoing, living agreements that cannot be easily dismissed.

Featured prominently in “Nation to Nation,” the rise of the treaty commissions is documented beginning with the *Boldt* decision in 1974, which led to the creation of Northwest Indian Treaty Fisheries Commission. Soon thereafter, subsequent court rulings affirming treaty-reserved off-reservation indigenous rights would lead to Columbia River Inter-Tribal Fisheries Commission in 1977 and Great Lakes Indian Fish & Wildlife Commission in 1984. Each agency is supported by United States officials. These uncommon examples of a treaty signatory, the federal government, making good on commitments to native people show that an honorable path is very much achievable and yields mutually beneficial results.

For residents of the western Great Lakes, one item that strikes close to home is a birch bark canoe exhibited prominently in the Potomac Atrium. Constructed on site by Fond du Lac Band’s Jeff Savage and Marvin DeFoe Jr. of Red Cliff, the 12.5-foot wiigwaasi-jiimaan contains traditional, hand-picked materials harvested from the Ceded Territory forests of Minnesota and Wisconsin. For more information see <https://americanindian.si.edu/>



On the National Mall in DC.



One of first items displayed at the entrance of the National Museum of the American Indian is a wiigwaasi-jiimaan constructed onsite by Fond du Lac Band Ojibwe Jeff Savage and Marvin DeFoe Jr. of Red Cliff. The pair gathered birch bark, roots and other materials to make the canoe from their homelands in Minnesota and Wisconsin. Construction took place over a two-week period in the summer of 2008.

While prominent native foods like bison and fresh-water perch were featured entrées at the Mitsitam Cafe, an amended Three Sisters dish proved to be an unexpectedly savory delight.

Joining the classic pairing of beans and corn, cubed gourd replaced squash in this salad mix renowned by many Indian Nations. Museum cooks seasoned the blend only with salt, pepper, and olive oil.



From surviving to thriving

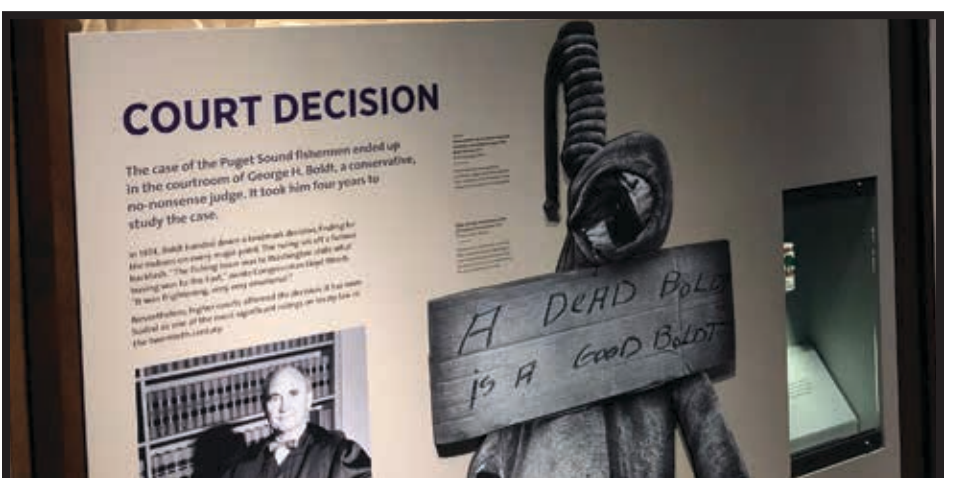
Despite centuries of removal efforts, American Indians have forever lived in Virginia and Washington DC. In the early 1600s, tribes of the Tidewater and adjacent Piedmont region entered into treaties—nominally called peace treaties—with the recently-arrived English who came to colonize the eastern seaboard.

“Our people met the settlers and actually provided a means for them to endure those harsh winters, only to be repaid by the greed of those folks where enough was never enough,” said Chickahominy Chief Stephen Adkins.

Beginning in 1646 the provisional English government initiated a removal policy, setting in motion what would become a long-used template to move American Indians westward and away from their homelands. Many native people resisted removal, Adkins said, and some individuals were able to purchase and retain property over time as the United States assumed dominion of the region.

After a long absence from formal rolls of indigenous nations, Adkin’s Chickahominy Band and five additional tribes finally garnered federal recognition when President Trump signed H.R. 984, the Tomasina E. Jordan Indian Tribes of Virginia Federal Recognition Act in January 2018. The tribal nations include Eastern Chickahominy, Upper Mattaponi, Rappahannock, Monacan, and the Nansemond.

“It’s time to move from surviving to thriving,” Adkins said.



The 1974 Boldt decision in Washington state gave rise to intertribal treaty commissions.



MTRES to graduate first cohort of tribal resource leadership

By Bizhikiins Jennings
Staff Writer

The University of Minnesota Duluth is set to graduate its first cohort of students through the highly anticipated MTRES program.

MTRES stands for Master of Tribal Resource and Environmental Stewardship. Not to be confused with the popular MTAG—Masters of Tribal Administration and Governance—MTRES was created to provide Indian Country with the finest level of natural resource professionalism and cultural competency in the country.

The curriculum involved in MTRES is based upon the “interrelationship of biological, physical, and cultural systems,” according to the admissions page at UMN.edu. The courses also offer maximum flexibility not seen at many larger universities. Flexibility in the form of online and weekend coursework, which is definitely appealing to the average professional.

The program itself was actually designed and created by tribal leadership says Director Tadd Johnson, UMD American Indian Studies Director of Graduate Studies and Professor. “We started these discussions in 2013 and some of the Minnesota tribes approached

us referring to MTAG and said what about the environmental side? We began gathering the right players and we had many meetings to start planning this out, which would eventually take 3 years of consultation. It was a really wonderful collaboration between various departments at UMD.”

Former GLIFWC Executive Administrator James Zorn also had great influence in elevating MTRES to a reality. Zorn had dedicated well over three decades of leadership at GLIFWC.

He had vast experience working with tribal communities and environmental issues, and brought a lot to the proverbial table. Zorn was pivotal in

developing a huge portion of MTRES, which added the necessary balance of policy and science pertaining to tribal management. He also connected MTRES to many key individuals across the ceded territory.

When asked about his ambitions and reasons for helping with the program, Zorn humbly acknowledged, “The needs for Tribes and their communities to take care of their lands, it’s imperative, and you just need people that have the core competencies and the vision. The vision to care for the people and the surrounding neighbors that all rely upon the clean water and clean air is (See MTRES, page 20)

2020 phenology calendar



By Climate Change Program Staff

Want another way to explore your own backyard? Need something to do while stuck at home? This issue contains our summer/fall phenology brochure for you to record your own observations. Phenology is the study of the timing of biological events throughout the year—when the maple sap starts running, the ruffed grouse begins drumming, or blueberries ripen. Observing the timing of seasonal events

and harvesting accordingly is how indigenous people have been surviving for thousands of generations.

If you submit your observations to GLIFWC, some of them will be included in future phenology calendars! If you would rather submit observations online instead of mailing in the paper form, please visit <https://data.glifwc.org/phenology.calendar/>. This can be a fun activity for schools, families, or anyone that enjoys spending time outdoors!

(see **What are you observing in the Ceded Territories**, page 18)

PLACE
STAMP
HERE

Tape and stamp this form and return to GLIFWC by December 31, 2020. Make sure to include the information below:

Name: _____

Address: _____


Tribal affiliation (if any): _____

Phone number or email: _____

To submit observations via our online submission form, go to:


<https://data.glifwc.org/phenology.calendar/>

Please print return address clearly:




Aaniin ezhiwebak Anishinaabe-akiing?

Please Help GLIFWC Observe Seasonal Events in the Ceded Territories



GLIFWC is trying to understand how environmental changes could be affecting treaty resources.

Help us study phenological and seasonal changes by writing down your observations on this form. Keep it on your bulletin board or refrigerator. Share your knowledge by mailing it back to GLIFWC by December 31, 2020.

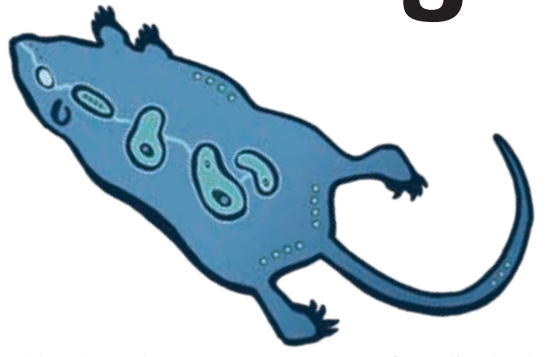


GLIFWC — Climate Change
72682 Maple Street
P.O. Box 9
Odanah, WI 54861



A call to embrace indigenous teachings

Intimate connection between humans, animals maligned by food production that promotes suffering



By Michael Price
GLIFWC TEK Specialist

There is a belief in the Anishinaabe tradition, that is also shared by many Indigenous peoples around the world, that says, "If the water is sick, we will be sick. If the land is sick, we will be sick." This belief comes from the idea that we, as human beings, are intimately connected with the earth and all of her inhabitants that we call "our relatives." This belief system has roots that go back, perhaps, thousands of years and is still apparent today. COVID-19, the disease that originates from the novel coronavirus, is a direct communication from the natural world that, according to our cultural beliefs, says our connection to the natural world is out of balance and damaged. From an Indigenous viewpoint, we should ask the question of the virus, "Why are you here among us?"

Studies have shown that the coronavirus likely originated from the wet markets of China. These wet markets are known for their cruel and inhumane treatment of livestock animals. They are called "wet" markets because the concrete floors are always wet from washing away the blood from freshly slaughtered livestock, mostly fish, chickens and other fowl. Chickens are crowded into cages too small for them to move and are oftentimes stacked upon one another allowing urine and feces to rain down upon the filled cages below. Also, the sale of wild and exotic animals,

which China banned in 2003 because of the SARS outbreak and reinstated once again in 2020 because of COVID-19, has been linked to the Wuhan Wholesale Market that is most likely to be the point source of the coronavirus pandemic.

If the animals are made to suffer, we will suffer too. This is another Indigenous belief that correlates with the teachings of the water and land. Indigenous beliefs hold that zoonotic viruses, such as coronavirus, swine flu and bird flu, have all emerged from the systematized suffering of animals, a result of expedient and inhumane food production. The term "zoonotic" refers to the passing of a virus from animal to human and then transmitting among people. In some instances, animals may be blamed for the virus that has impacted human beings around the world, but it is the inhumane treatment of animals and the violent disruption of their natural world that has evolved this virus into a global pandemic. Many Indigenous people would refer to this virus as a spirit who has purpose and intent.

In our Anishinaabe cultural beliefs, our teachings guide us to have respect for all living beings, both plants and animals, that we depend upon for our sustenance and nourishment. By offering tobacco, *asemaa*, we acknowledge the spirits that watch over these animals and we humble ourselves spiritually before we kill an animal or harvest plants for our well-being. By practicing these cultural protocols, we create a new consciousness within ourselves and acknowledge the spiritual beings that could impact our lives. If we

Wazhashk (muskrat). (courtesy of Elizabeth LaPensée)

neglect these protocols, the plants and animals that we depend upon may abandon us or bring negative repercussions upon us. Many Indigenous people see COVID-19 as a result of disrespect for and cruel treatment of the natural world.

In 2016, many Indigenous youth from around the country gathered at the Standing Rock reservation in North Dakota to protest the construction of the crude oil pipeline that was deemed to be a threat to the water of the Missouri River, the freshwater source for not only the people of Standing Rock, but 19 million people downstream from the pipeline crossing. This gathering, which inspired a new consciousness about the earth, was based upon the ancient Indigenous teaching that, "If the water is sick, we will be sick."

Today, as the fires burn the montane savannahs of the west and the rainforests of the Amazon, as violent storms and winds rage across the Midwest, as drought and heat blanket the southwest, we see that these teachings have validity. People are beginning to suffer. As Oren Lyons, Faithkeeper of the Onondaga Nation stated at the United Nations Forum on Climate, "Nature has no mercy, only law. If you break that law, you pay the consequences." Our future survival as a species will depend upon our reconciliation with nature.

 (continued from page 17)

What are you observing in the Ceded Territories? Ozhibii'an ezhiwebak noopiming.

***Please record the date, location, and species (if applicable) for each observation. Return to GLIFWC by December 31, 2020. Miigwech!

<u>Niibin / Summer</u>	<u>Date/Location</u>	<u>Dagwaagin / Fall</u>	<u>Date/Location</u>
Dates/amounts of heavy rain events (>1" in 24 hrs)	_____	First grouse harvested _____	First snowfall _____
_____	_____	First duck harvested _____	First snow that sticks _____
First monarch butterfly _____	_____	Last ducks on the lake/river _____	Lake frozen solid (specify lake) _____
First firefly _____	_____	Last loons on lake _____	<u>Other dagwaagin observations:</u>
Deer seen with summer coat _____	_____	Bucks in rut _____	_____
First birch bark harvested _____	_____	First polished deer antlers _____	_____
Flowers on berry plants (species) _____	_____	Deer have winter (gray) coat _____	_____
Berries ripe (species) _____	_____	First deer harvested _____	_____
Loons nesting _____	_____	First princess pine harvested _____	_____
Loon chicks _____	_____	First apples harvested _____	_____
Wild rice in floating leaf stage _____	_____	First cranberries harvested _____	_____
First wild rice ripe _____	_____	First leaves changing color (species) _____	_____
First wild rice harvested _____	_____	Peak fall color _____	_____
<u>Other niibin observations:</u>	_____	First leaves falling (specify tree species)	_____
_____	_____	Nighthawks migrating _____	_____
_____	_____	First fire in the woodstove _____	_____
_____	_____	Sandhill cranes flying south _____	_____
_____	_____	First frost _____	_____
_____	_____	First day temperature stays below freezing (32°F)	_____
_____	_____	_____	_____



Tribal Adaptation Menu workshop



(continued from page 8)

Anishinaabe people.” Another appreciated “listening to and learning from different perspectives, ideas, and beliefs.”

The TAM is a tool designed to help indigenous communities, tribal natural resources staff, and non-indigenous partners approach climate change adaptation in a way that meets the needs of indigenous communities.

The Menu was created by a team of tribal and non-tribal collaborators. It was released in 2019 and the author and facilitator team has since conducted five workshops using the Menu, in the Midwest and Northeast US. The team continues to get requests for presentations and workshops for a variety of meetings and groups.

For more information and to download the Menu, see www.nicrn.org/tribal-climate-adaptation-menu.html or contact Rob Croll, GLIFWC climate change program coordinator, at rcroll@glifwc.org.

Ramp Salt

Bagwaji zhigaagawanzh or wild ramps are in the wild onion family and are a great food source this time of the year. The whole plant can be used for medicinal or culinary purposes. Save the leaves and make delicious ramp salt or ramp butter. Ramps have a wonderful light onion/garlic aroma and taste.

Directions for making ramp salt

1. Wash the leaves very well, and set out to dry. Once dry, place in a food dehydrator or on a cookie sheet in an oven on low temperature. If using an oven, make sure to put down a baking sheet.
2. Once the leaves become brittle and are crunchy, break them up and put them in a food processor or blender. Hand crushing them can also work.
3. Place the desired amount of coarse salt into the crushed leaf mixture and turn on the food processor or blender for a few seconds at a time. Repeat until the mixture is at its preferred consistency.
4. Store in a dry container in a dry area. Use on meats, soups, or whatever foods you desire.

—B. Jennings



Ramp leaves drying.



Crushed ramp leaves. (B. Jennings photos)

Vulnerability of wild leek to climate change

(continued from page 8)

Bagwaji'zhigaagawanzh prefers rich, mesic soils in hardwood forests. It is most commonly found in sugar maple, basswood, and birch forests and often grows near other wildflowers such as bellwort, bloodroot, ginseng, trout lily, and trillium. Bagwaji'zhigaagawanzh can usually only be found in specific areas such as forest depressions, along streamside bluffs, or in moist, marshy, forested areas. Bagwaji'zhigaagawanzh is one of the first beings to come up in the spring. It is considered to be a spring tonic and provides a boost in vitamins and minerals, which are not as readily available throughout the winter. Parts of bagwaji'zhigaagawanzh are known to be dried and stored while bulbs and leaves can be eaten raw, such as in salads. They are also used in soups and other cooked dishes. The root is known to be a powerful medicine used to cause vomiting, which can also be extremely dangerous.

During TEK interviews, some recalled that in the past, bagwaji'zhigaagawanzhiig were more prevalent south of the Ojibwe Ceded Territories. During a group interview held in Lac du Flambeau, tribal members believed that bagwaji'zhigaagawanzhiig weren't found anywhere on the reservation many years ago. A majority of the elders interviewed noticed more interest in harvesting bagwaji'zhigaagawanzhiig among their children and grandchildren, due to increased availability and popularity as a traditional food. Interviewees from the Bad River Reservation, which is known for its highly significant wetlands, referenced gathering them annually near the southern edge of the reservation.

Bagwaji'zhigaagawanzh is found across the Ceded Territories and across much of eastern North America (Figure 1). It is susceptible to overharvest—one study found that harvesting rates of 5-15% may lead to a population decline. Bagwaji'zhigaagawanzh is slow to reproduce.

Summary of climate threats:

Bagwaji'zhigaagawanzh was in the 58th percentile relative to other plants in the vulnerability assessment. Relative to other beings in the vulnerability assessment, bagwaji'zhigaagawanzh was in the 66th percentile. Bagwaji'zhigaagawanzh depends on moist soil, minimal disturbance, and little competition, all of which may be affected by climate change. Its low genetic diversity and limited dispersal ability also make it particularly vulnerable.

Factors that increase the vulnerability of bagwaji'zhigaagawanzh to climate change:

- N/SI** **Natural barriers:** Large waterways, open areas, and any other landcover which fragments suitable rich woods act as barriers to bagwaji'zhigaagawanzh.
- SI** **Anthropogenic barriers:** Agriculture, urban areas, major roads, and logged areas with complete canopy removal can be barriers to bagwaji'zhigaagawanzh.
- I** **Dispersal:** Bagwaji'zhigaagawanzh has limited dispersal abilities. It is primarily dispersed by gravity, with most seeds falling on the ground, though occasionally the seeds are carried farther by deer mice.
- SI** **Historical hydrological niche:** The area that bagwaji'zhigaagawanzh occupies has experienced slightly lower than average variation in precipitation in the past 50 years.
- N/SI** **Physiological hydrological niche:** Changes in soil moisture may stress bagwaji'zhigaagawanzh, which has shallow roots and relies on moist soils.
- N/SI** **Disturbance regime:** Bagwaji'zhigaagawanzh thrives in areas with minimal disturbance and grows in areas with full canopy cover. Increases in disturbances such as extreme storms, soil erosion, wind storms, or any other disturbances affecting the canopy cover may affect bagwaji'zhigaagawanzh.
- SI** **Competition:** Earthworm invasion compacts soil, which can make it unsuitable for bagwaji'zhigaagawanzh. The dominance of sedges associated with earthworm invasion can also negatively impact its habitat. Other non-local forest beings favored by climate change, such as honeysuckle or garlic mustard, also have the potential to disrupt its habitat.
- SI** **Genetic variation:** Bagwaji'zhigaagawanzh genetic diversity is low, particularly at the northern edge of its range. Reproduction is vegetative or relies on self-fertilization, neither of which favors genetic diversity. This may hinder its ability to respond to changing conditions.

Legend	GI Greatly Increase This factor greatly increases vulnerability	I/GI Increase/Greatly Increase This factor may increase or greatly increase vulnerability	I Increase This factor increases vulnerability
	SI/I Somewhat Increase/Increase This factor may somewhat increase or increase vulnerability	SI Somewhat Increase This factor somewhat increases vulnerability	N/SI Neutral/Somewhat Increase This factor may not increase or may somewhat increase vulnerability



Red Cliff breaks ground on fish processing facility

Bayfield, Wis.—After nearly a decade of planning, the Red Cliff Band of Lake Superior Chippewa has broken ground on its 3,500 square foot commercial fish processing facility. The facility will be home-base for the Red Cliff Fish Company, and will process commercial fish and provide packaged products to distributors and local markets. Construction is expected to finish in September, with plans for operation to begin by Labor Day weekend

“This groundbreaking today for the Red Cliff Fish Company is an historic milestone in furthering our community and food sovereignty goals,” said Tribal Chairman Rick Peterson. “The need to be able to feed our own community with our own resources has really been highlighted by the COVID-19 pandemic. Our people have been fishing the waters of Lake Superior for many generations and this new facility will also allow our tribal fishermen to have a more direct role in selling their catch. I’d like to say Miigwech on behalf of the Tribal Council and community to all who were involved in making this new facility possible.”

“It’s an honor to be part of this endeavor,” said Chad Abel, Director of Red Cliff Treaty Natural Resources. “With this new tribal business, the Tribe can achieve local food control, maximize the fisheries’ economic potential, preserve the commercial fishing tradition here at Red Cliff, and nourish it’s community.”

Once operations begin, the Red Cliff Fish Co will purchase catches from independent Tribal commercial license holders. The facility will process, package, and sell different fish products to distributors, markets, and restaurants. The facility will also have a 400 square foot retail space for direct over-the-counter sales, including fresh and frozen fillets, smoked fish, fish spreads, and caviar. Any fish waste produced by the facility will be converted to compost for fertilizer at the Mino Bimaadiziwin Tribal Farm.

Traditional Food Code

(continued from page 14)

2020 workshop. For example, St. Croix community members chose manoomin, while Keweenaw Bay Indian Community chose whitefish. Each of the eleven GLIFWC member tribes who were not able to host a community workshop prior to the shelter in place orders will now have an opportunity to participate in a live webinar for their community.

Each webinar is free to attend and both an online and a standard call-in option will be available. Project partners are working with GLIFWC staff to provide locations or ways to access a printed version of the webinar for those interested in participating over the phone. Keep an eye on your community’s e-newsletter and the GLIFWC Facebook page for the date of the webinar for your community.

Later this summer, we will be providing additional training opportunities for harvesters, food handlers, food managers, regulators, and tribal food systems staff that will be available online for free. Those trainings will also be advertised in tribal newsletters and the GLIFWC Facebook page.

MTRES continued

(continued from page 17)

what’s crucial for subsistence, spiritual, and economic purposes. Having worked in the field for many years, I understood that the leadership needed to come from the communities themselves.”

The first cohort definitely embodied this need, and every graduate this year is a tribal member that has held meaningful positions for tribal communities.

“I had a blast being involved with this program and I give so much credit to the students that went through the first cohort.”

Just as the program had suspected, even current leadership from some of the tribal nations in Wisconsin, Minnesota, and Michigan participated. Fond du Lac Natural Resource Department Manager and GLIFWC Voigt Task Force Rep. Tom Howes is set to graduate from the program this spring and is one of four individuals to finish as the first cohort. Howes, a strong advocate and proponent of cultural infusion and integration into resource management was involved in the early discussions.

“At one point a question was posed as to how many students the University could expect. I said that if it were offered, I would be among the first to sign up. I knew the individuals involved in the program design and it gave me further confidence that it would be both rigorous and relevant to Indian Country.”

Rigorous and relevant is definitely accurate. In fact, the first year of the program boasts robust courses in Tribal Sovereignty, Integrated Ecosystems, and even Indigenous Environmental Science and Worldviews. The final semesters conclude with more specified and tailored courses and research projects. In total, 36 credits of hands-on work with local tribal leadership, professors, and guest speakers will yield a professional MTRES degree.

If your wondering what MTRES could do for your professional career, just ask Mr. Tom Howes.

“MTRES has provided me a deeper understanding of natural resource policy, federal Indian law, and improved my spoken and written skills. All of these skills benefit my community as I perform my duties to facilitate treaty harvest and work to protect the landscape that supports our Ojibwe lifeway.”

Tribal communities with the seventh generation ideology at heart are often at the forefront in environmental protection. Programs like MTRES are a sure sign that traditional knowledge; environmental sciences and tribal sovereignty can all be coalesced into a program that creates a powerful arsenal of environmental leaders.

MTRES is recruiting for the fall 2020 cohort. Visit their site here: <https://cla.d.umn.edu/departments/masters-programs/mtres> for more information and consider applying.



Fond du Lac Natural Resource Department Manager and GLIFWC Voigt Task Force Representative Tom Howes is set to graduate from the program this spring and is one of four individuals to finish as the first cohort. (GLIFWC staff photo)

GLIFWC digital resource guide

(continued from page 7)

Children’s Books and Activities

	Growing Up Ojibwe www.glifwc.org/publications/GUO%20flipbook/inc/pdf/flipbook.pdf	24 pg.	Ages 7+
	Growing Up Ojibwe: Spearfishing Adventures www.glifwc.org/publications/pdf/Spearfishing_web.pdf	24 pg.	Ages 7+
	Spearing Through the Ice Activity Booklet www.glifwc.org/publications/icespearingactivity.pdf	24 pg.	Ages 7+
	Thankful for our Mother Earth Activity Booklet www.glifwc.org/publications/MotherEarthflipbook/files/inc/6e47b86c73.pdf	24 pg.	Ages 7+
	Anishinaabe Coloring and Activity Book www.glifwc.org/publications/colorbook/flipbook/inc/pdf/flipbook.pdf	23 pg.	Ages 7+

Language Resources

Nenda-Gikendamang Ningo-Biboonagak (We Seek to Learn Throughout the Year) Language Landing Page
www.glifwc-inwe.com/

Nenda-Gikendamang Ningo-Biboonagak (We Seek to Learn Throughout the Year) Language Landing Page www.glifwc-inwe.com/			
Storybooks, Teacher/Parent Editions, Work Books www.glifwc-inwe.com/printables.html		Ages 5+	
Biboon (Winter) Language Learning Games www.glifwc-inwe.com/biboon.html	Interactive	Ages 5+	
Ziigwan (Spring) Language Learning Games www.glifwc-inwe.com/ziigwan.html	Interactive	Ages 5+	

Language Resources continued

Niibin (Summer) Language Learning Games www.glifwc-inwe.com/niibin.html	Interactive	Ages 5+
Dagwaagin (Fall) Language Learning Games www.glifwc-inwe.com/dagwaagin.html	Interactive	Ages 5+
Dibaajimowinan: Anishinaabe Stories of Culture and Respect www.glifwc-inwe.com/dibaajimowinan-stories.html	Audio	Ages 5+

Other Resources

A Guide to Understanding Ojibwe Treaty Rights www.glifwc.org/publications/pdf/2018TreatyRights.pdf	60 pg.	Ages 14+
Sandy Lake Brochure www.glifwc.org/publications/pdf/SandyLake_Brochure.pdf		Ages 11+
Climate Change Phenology Study www.glifwc.org/ClimateChange/PhenologyStudy.html		
Growing Up Ojibwe: The Game play.google.com/store/apps/details?id=com.GLIFWC.GrowingUpOjibweTheGame&hl=en_US glifwc.itch.io/growing-up-ojibwe-the-game	Interactive	Ages 7+



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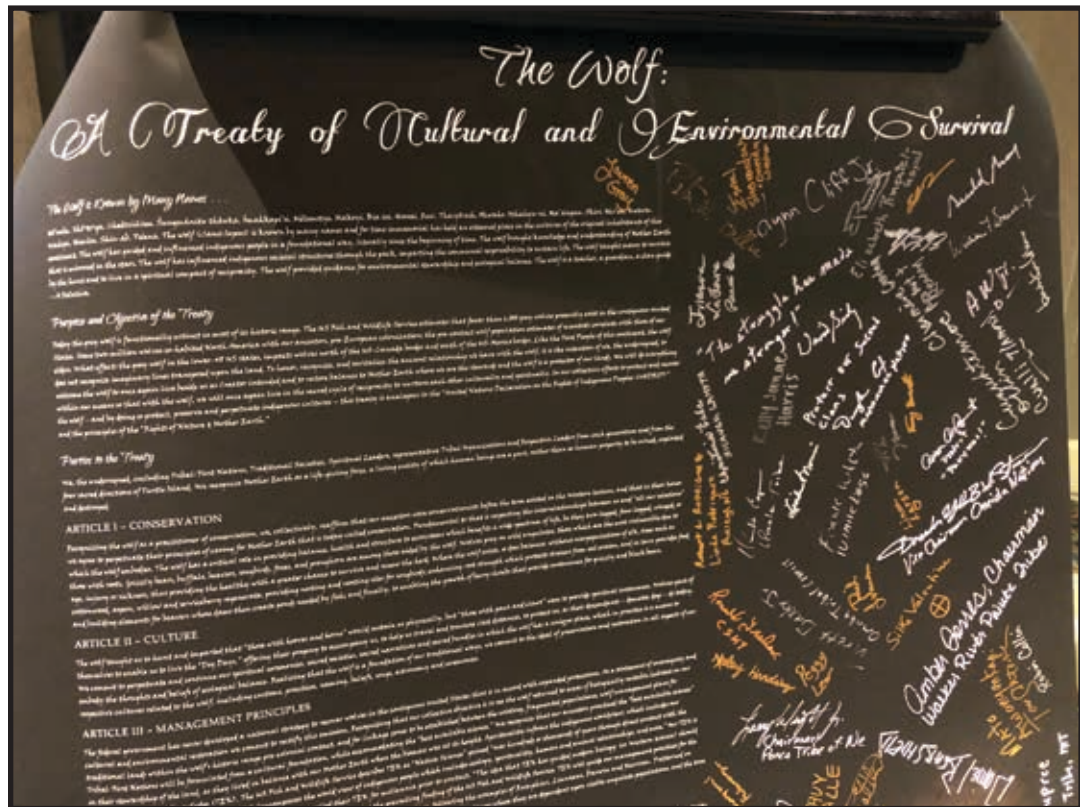
Ojibwemotaadiwag Anishinaabewakiing. They speak Ojibwe to each other in Indian Country.

Ani-niibing, indaa-biindaakoojigemin. Apane indaa-miigwechiwendaamin. Ziibing, inga-jiimemin. Ganabaj niwii-kabeshimin imaa. Ganabaj ina babagiwayaanegamig giwii-piidoon? Gigwayakwenimin. Wii-aabawaa waabang awaswaabang idash . Indaashaan! Inashke! Wiish ina i'iw? Eya', i'iw amikwiish aya a besho apakweshkwayag Michaa. Aaniin ezhi-ozhichigewaad? Nitaa-amikwiishikewag. Ogiinaabajitoonaawaa azhashki. Amikwag nabagaanowewag. Moozhag nizaagitoon ayaayaan zaaga'iganing.

(As summer arrives, we should make a tobacco offering. Always we should be thankful. On the river, we will go canoeing. Perhaps we will camp there. Perhaps you want to bring a canvas/cloth tent? I think you are right. It will be mild weather tomorrow and the day after. Come here! Look! Is that an animal lodge? Yes, that beaver lodge is near the cattails. It is big. How do they make it? They really know how to make it. They used mud. Beavers have a flat tail. I always love being at the lake.)

<h3>Bezbig — 1</h3> <p>OJIBWEMOWIN (Ojibwe Language)</p> <p>Double vowel system of writing Ojibwemowin. —Long vowels: AA, E, II, OO <u>Waa</u>booz—as in father <u>Mii</u>gwech—as in <u>jay</u> <u>Aa</u>niin—as in <u>seen</u> <u>Moo</u>z—as in <u>moon</u></p> <p>—Short Vowels: A, I, O <u>Dash</u>—as in <u>about</u> <u>Ing</u>iw—as in <u>tin</u> <u>Niizh</u>o—as in <u>only</u></p> <p>—A glottal stop is a voiceless nasal sound as in A'aw. —Respectfully enlist an elder for help in pronunciation and dialect differences.</p> <p style="text-align: center;">VAI Verbs, Animate Intransitive— Simple sentences/negation; Always start: Gaawiin- No. Suffix VAI with -sii(n) or -zii(n). Mawinzo.—S/he picks berries. Gaawiin mawinzosiin.—No s/he isn't picking berries. Gaawiin ingii-mawinzosiin.—No I didn't pick berries. Gaawiin mawinzosiiwag.—No they are not picking berries. Nimawinz.—I pick berries. Gashkendam.—S/he lonely/lonesome/sad. Gaawiin ningashkendanziin.—No I'm not sad. Gaawiin gii-kashkendanziin!—No he was not sad. Gaawiin niwii-kashkendanziimin.—No, we will not be sad. Eya' wayiiba , niwii-minwendaamin.—Yes, soon we will be happy.</p>	<h3>Niizh — 2</h3> <p>Circle the 10 underlined Ojibwe words in the letter maze. (Translations below)</p> <p>A. Inaabin keyaa waabanong! Mitigoog. <u>Mitigokaa</u> imaa. B. Babaamosedaa iwidi <u>waasa</u> noopiming/megwayaak! C. <u>Asiniikaa</u>. Gego ozhaashaabikishingen! Dibaabandan! D. <u>Niwaabamaag</u> ingiw wiigwaasaatigoog. Wiigwaasikaa! E. <u>Aawi</u> na biisaandago-zhiingwaak? Eya', <u>mindido</u>. F. Howah! <u>Giizhikag</u>. Giizhikikaa. G. <u>Eya'</u>, indayaamin mashkiigong H. Ongow <u>mitigoog</u> miikawaadiziwag!</p> <div style="text-align: center;"> <p>W E Y A ' , N W A A S A M M H D O I K I J I G N A N E T C E N Z A Y I M I G E W D H O O I A G I I Z H I K A G K S O A Y ' O N D Z H I A I K M I T I G O O G E W A A N I W A A B A M A A G A E K N G A ' G A K W O</p> </div> 
<h3>Niswi — 3</h3> <p>IKIDOWIN ODAMINOWIN (word play)</p> <p>Down: 2. No 5. It's warm weather. 6. Nearby</p> <p>Across: 1. By, to the river 3. Perhaps, maybe 4. That (inanimate) 7. Always 8. Wow! 9. Beaver lodge</p>  <p style="text-align: center;">Waabigwan(iin) Flower(s)</p> <p style="text-align: center;">Online Resources ojibwe.lib.umn.edu ojibwe.net glifwc.org glifwc-inwe.com</p>	<h3>Niiwin — 4</h3> <p>Aaniin ezhi-ayaayeg noongom?—How/what way are you all now/today? Niminwendam abiyaan.—I'm happy when/if I am at home. Aangodinong gaawiin niminwendanziin.—Sometimes no I am not happy/glad. Giminwendam ina abiyaa?—Are you happy? when/if you are home? Minwendamoog ina abiwaad?—Are they glad? when they are home? Eya! Apegish gechi-minoseyeg.—I wish/hope you all well/goodness. Miigwech mashkikiwininiwag, mashkikiwininiikweg miinawaa mashkikiwikweg. Anokiiwikweg anokiiwininiwag idash miigwech!—Thank you (male) doctors, (female) doctors, and nurses. Female workers and male workers, thank you!</p> <p style="text-align: right;">—yan —yaan —waad —yeg Gaawiin —zii</p> <p>1. _____ ina giigooyike _____ indede? Wii-kashkendam 2. Aaniin ezhi-ayaa _____? A: Nimino-ayaa. Giin dash? 3. Aaniin apii waa-mawinzo _____ megwayaak? 4. Aaniin apii waa-babaamose _____ zaaga'iganing? 5. Aaniin waa-wiidookaage _____? Miigwech miinawaa.</p>

Translations:
Niizh — 2 A. Look in the direction of the east! Trees. There are lots of trees there. B. Let's all take a stroll over there far in the bush/in the woods. C. There are many rocks. Don't you slip and fall on the rocks! Look it over! D. I see those birch trees. There are a lot of birches! E. Is s/he a white pine? Yes, s/he is big. F. Wow, cedar trees. There are a lot of cedars. G. Yes, we are in the swamp. H. Those trees are beautiful!
Niswi — 3 **Down:** 2. Gaawiin 5. Aabawaa 6. Besho **Across:** 5. Ziibing 3. Ganabaj 4. I'iw 7. Apane 8. Howah 9. Amikwiish
Niiwin — 4 1. Is my dad **not** going fishing? He will be sad. (Gaawiin -zii(n)) 2. How are **you**? A: I am well. And you? (-yan) 3. When will **they** go berry picking in the woods? (-waad). 4. When will **you all** take a stroll by the lake? (-yeg) 5. How can **I** help? Thank you again. (-yaan)
 There are various Ojibwe dialects; check for correct usage in your area. The grammar patterns may help a beginner voice inanimate and animate nouns and verbs correctly, as well as create questions and negate statements. Note that the English translation will lose its natural flow as in any world language translation. This may be reproduced for classroom use only. All other uses by author's written permission. Some spellings and translations from The Concise Dictionary of Minnesota Ojibwe by John D. Nichols and Earl Nyholm. All inquiries can be made to **MAZINA'IGAN**, P.O. Box 9, Odanah, WI 54861 lynn@glifwc.org.



Wild parsnip

(continued from page 6) efforts based on the phenology of the plant by timing herbicide application when it will be most effective.

By reducing wild parsnip populations, there is likely to be a lower impact on the native plant and animal species, and less of a reduction in the biodiversity in the ecosystems they have been growing in. The dense stands of wild parsnip can have a negative affect pollinator species by displacing the native plant species pollinators typically depend on. GLIFWC's invasive species control work centers on protecting treaty resources and the health of treaty harvesters.

More information on wild parsnips:
http://invasives.glifwc.org/Pastinaca_sativa/id.html
https://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/07/OIPC_BMP_WildParsnip_Feb182014_FINAL2.pdf
<https://hort.extension.wisc.edu/files/2016/08/Wild-Parsnip.pdf>

The Mashküzüü Ma'iingan Symposium brought together wolf advocates from around the upper Great Lakes region to the Northern Great Lakes Visitor Center in Ashland, Wis. in late January. The three-day event included research and cultural presentations, informal discussions and storytelling with Paul DeMain, Bob Shimek, and more. The wolf, or ma'iingan plays a central role in the Anishinaabe creation story. In a move that long ago solidified the relationship between the Anishinaabe and ma'iingan, the Creator told them that while the two would walk separate paths, what shall happen to one of you, shall also happen to the other. This prophecy led to the original treaty between wolf and man—laying a foundation for mutual assistance going forward. A traveling copy of a modern "Wolf Treaty" was on display (pictured) at the conference and available for attendees to add their signature. (CO Rasmussen)

Indigenous in digital

(continued from page 7) shared widely and quickly, so that people can meet them, know them, and bring them new life within their own homes and communities. In a physically isolating moment in history, those relatives still found a way to reach us, and to sprout the seed of spiritual growth. Changes in one cultural ecosystem affect another.

There is one social media post that has stuck with me throughout this shifting paradigm. It reminds me that as Ojibwe, we were told this time would come, and that we would be prepared for it.

According to The Mishomis Book by Edward Benton-Banai, through the Prophecy of the Seventh Fire, the people were told:

"In the time of the Seventh Fire New People will emerge. They will retrace their steps to find what was left by the trail."

"If the New People will remain strong in their quest the Water Drum of the Midewiwin Lodge will again sound its voice. There will be a rebirth of the Anishinaabe Nation and a rekindling of old flames. The Sacred Fire will again be lit."

The digital world has become a site at which many Ojibwe have begun to retrace their steps. The warriors, philosophers, medicine people, chiefs, all of us—are grasping the knowledge available there at our fingertips, and using it.

Within my own community, gatherers are going online and watching YouTube videos about plants that can be used for respiratory health, and when and how to harvest them. They are brewing up old tea recipes shared by other Ojibwe nations and using social media to reach out and deliver these plant medicines right to our elders' doorsteps. Jingle dancers are suiting up in full regalia and dancing in their backyards for healing, transmitting this energy through their footsteps on the ground, and through Facebook. And with the closure of the schools in the state, Bird Clan teachers are developing online curriculum that brings language and stories directly to our children in their living rooms. These are more than just a few examples of how Ojibwe cultural traditions are surviving in this time of the pandemic, it is evidence that they are growing, adapting, and thriving in place-based ways on both a local and a global scale.

The Prophecy of the Seventh Fire ends with a choice, which many believe is the choice between materialism and technology, and spirituality. But technology has revealed itself as a shape-shifter which accommodates humanity's free will and intention. Throughout the COVID-19 pandemic, indigenous people across the world have chosen to become indigenous in digital. And this brave and resilient choice has brought love, culture, connection, and spirituality to a world standing at the fork in the road, wondering which path to choose.

Microplastics in Gichigami

(continued from page 5) through atmospheric forces (i.e. global wind currents), and through water-based inputs from people fishing and recreating on the water.

What can be done to solve this problem? Environmental groups are raising awareness about microplastic contamination in the Great Lakes and are encouraging consumers to rethink their reliance on disposable plastics and synthetic fabrics, which shed microplastics in water when washed. Several states, including Wisconsin, have banned plastic microbeads in personal care products. Many jurisdictions have also banned single-use plastic bags (the primary source of microplastic films). Tribal governments, which retain civil regulatory authority to issue and enforce regulations within their sovereign terri-

tories, can also take steps to ban harmful plastics in their communities through regulation and with their purchasing power.

Formally known as Great Lakes Indian Fisheries Committee, the Lakes Committee is comprised of five GLIFWC-member tribes that have reservation lands connected to one of the Great Lakes. Committee members deal primarily with Lake Superior, making recommendations on fishing harvest levels and seasons for tribal fishers.

GLIFWC Biological Services Division has teamed up with researchers at University of Wisconsin Superior to analyze microplastics in the digestive tracts of fish harvested from Lake Superior. Look for an article about this research in an upcoming edition of Mazina'igan.

Jingle dress

(continued from page 15) What does a jingle dress sound like?

Jingle dresses have a very unique sound when they are danced. Some say that as the ziibaaska'iganan (metal cones) hit one another, it sounds like rain falling. The brand and placement of the cones affects the sound in different ways too. Cones that are sewn closely together hit against one another more, creating a very full, intense sound, whereas cones that are spaced farther apart produce a more rhythmic, traditional sound.

With a parent's help and permission, visit the link below to learn more about the jingle dress tradition, and to hear the sound of the jingles!

www.youtube.com/watch?v=gk7Cha5BVUc

¹Peck, Lauren. "The Origin of the Jingle Dress." *Minnesota Good Age*, March 27, 2019, www.minnesotagoodage.com/voices/mn-history/2019/03/the-origin-of-the-jingle-dress/?fbclid=IwAR0N2XKwb2DqhVcsQd_qeaILFRaw8IQ28jApTE6F3UKwdH2ri7UW6wdAbrE.

²www.facebook.com/ceefaves/videos/1697788023711732/



Honoring service to GLIFWC, member tribes and aki



A diverse assembly of GLIFWC professionals including conservation wardens, biologists, resource technicians, and an accounts payable manager were recognized at the February 26 All Staff meeting in Odanah.

From left: Julie Ante (15 years); Travis Bartnick (5 years); Brad Kacizak (10 years); Ronnie Parisien (5); Riley Brooks (10); Alexandra Wrobel (10); Sara Moses (10); Lisa David (10); Hannah Panci (5); Jonas Moermond (15); Dara Unglaube (15); Jim Stone (15); Roger McGeshick; and Dan North (20). Additional anniversary celebrants not pictured: William Soulier (5); Dylan Jennings (5); Ben Michaels (10); and LaTisha Coffin (10).



In honor of the three decades invested in leading Ceded Territory fisheries surveys, Inland Fisheries Technician Ed White (I) was recognized with a reward by GLIFWC Executive Administrator Mic Isham.

Mike Plucinski (I) accepted a gift from Mic Isham at the All Staff meeting. Plucinski has logged an impressive 35 years conducting assessments on Lake Superior and its tributaries. →



Over the last 25 years, spiritual leaders from Ojibwe communities in the United States and Canada have gifted ceremonial items, as well as teachings, to GLIFWC and its employees. From staffs used on spiritual runs, to pipes constructed for specific needs, the items are very much a tangible part of GLIFWC's mission to infuse Anishinaabe traditions with a science-based approach to managing natural resources as well as encouraging bimaadiziwin—living a good life.

In recognition for their unique roles in caring for GLIFWC ceremonial items, five Commission staffers received Pendleton blankets at All Staff Day. From left, Bizhikiins Jennings, Melonee Montano, Alexandra Wrobel, Miles Falck and Jennifer Krueger-Bear.



Essential Ojibwemowin
bimaadiziwin—living a good life

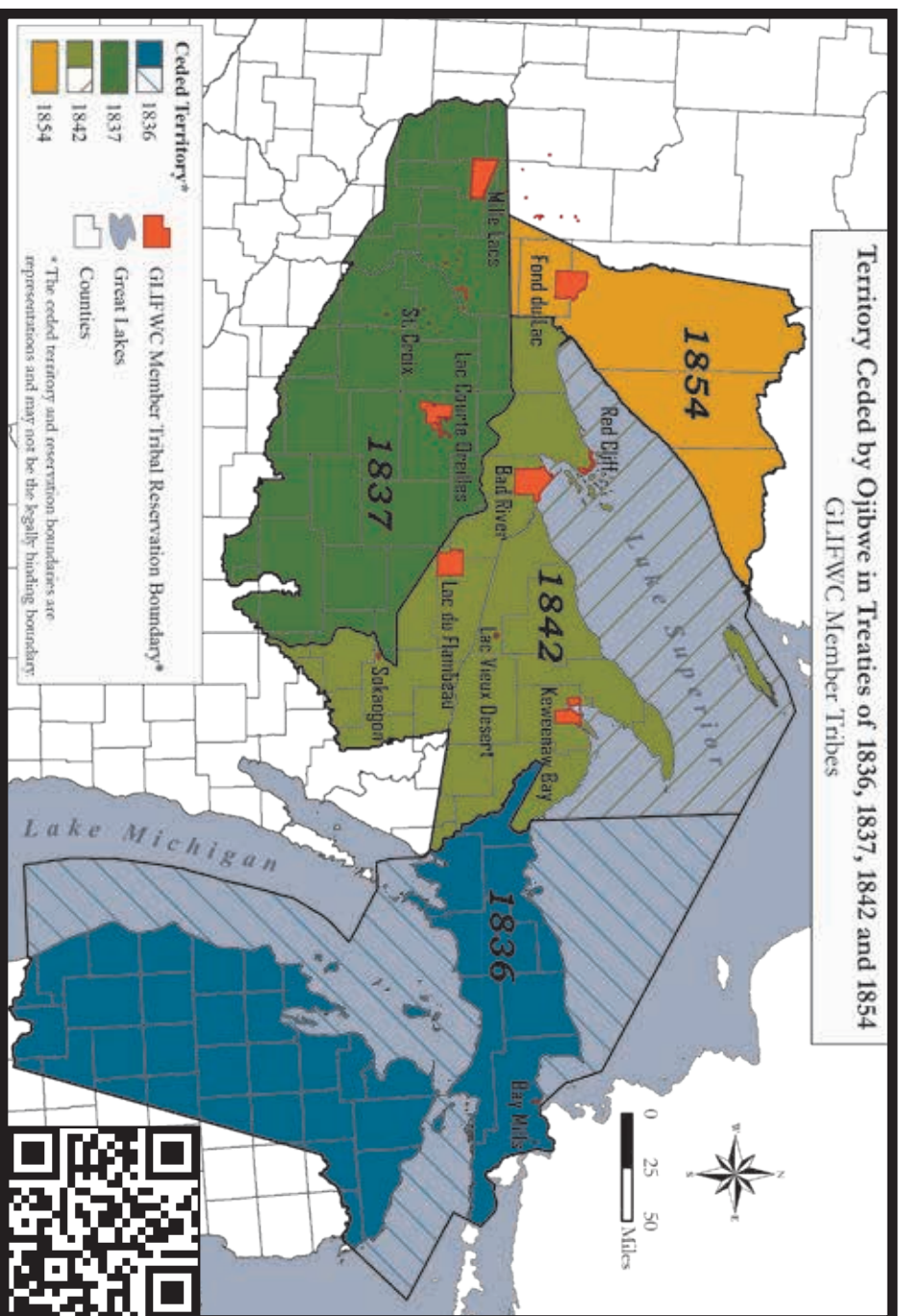


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Ojibwemowin: Listen and read along online

Dibaajimowinan: Anishinabe Stories of Culture and Respect is now available in a digital flipbook format. In an effort to expand availability and access to GLIFWC's Ojibwe language materials, the original story transcripts and audio recordings have been integrated into the www.glifwc-inwe.com website.

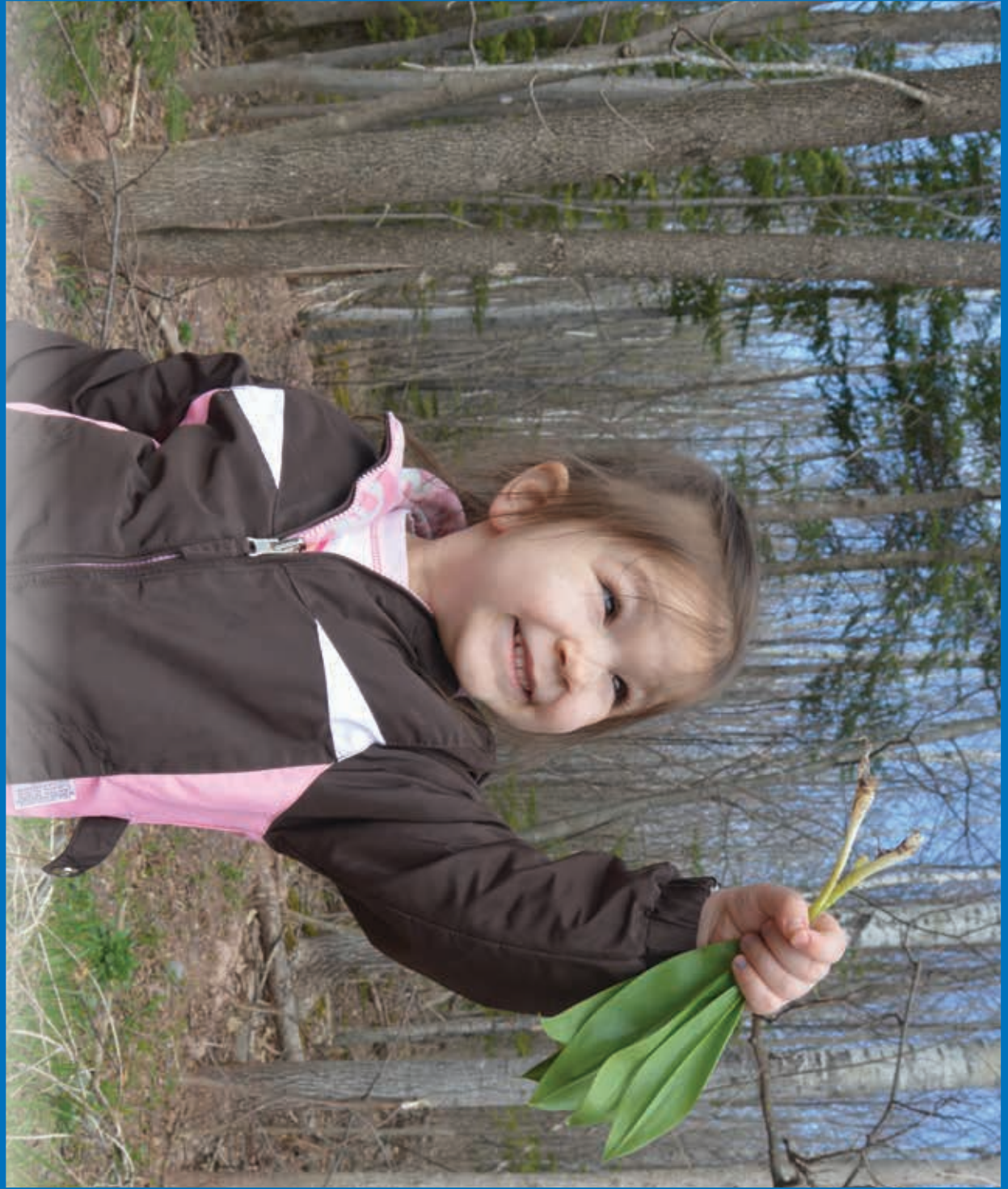
Listen and read along as Anishinabe speakers and storytellers share stories of cultural practices relating to natural resources and harvesting. www.glifwc-inwe.com/dibaajimowinan-stories.html In addition,



individual pdfs contain English translations that can be downloaded and printed. The product of a GLIFWC Ojibwemowin project, *Dibaajimowinan* includes stories from 14 speakers hailing from the United States and Canada. The text in each story does not adhere to a single dialectic standard and is transcribed according to the wishes of individual speakers. GLIFWC is indebted to all the speakers who protected the Ojibwe language and continued to speak it even under the threat of punishment.

Mazina'igam

A Chronicle of the Lake Superior Ojibwe



NIBIN 2020

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