

Red Cliff Band of Lake Superior Chippewa

Treaty Natural Resources Division Newsletter

Volume 11, Issue 1, Ziigwan Spring 2022



Ganawenjigaade

It is taken care of, protected . . .

We take care of, protect, keep it.

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ZIIGWAN

It is Spring

ISKIGAMIZIGE-GIIZIS

Maple Sugar Moon

WAABIGWANII-GIIZIS

Flower Moon

ODE'IMINI-GIIZIS

Time for Picking Strawberry Moon

NAADOOBII

s/he gathers sap

ODOONIBIINS

A Lake Herring

ISKIGAMIZIGAN

A sugar bush, a sugar camp

OMAGAKII

A Frog

ANIT

A fish spear

OBIIGOMAKAKII

A Toad

JIMAAN

A Canoe ; A Boat

WAABIZHESHI

A Marten

OGAA

A Walleye

ANIMIKIIKAA

There is thunder

ADIKAMEG

A Whitefish

BAASHKIKWA'AM

s/he makes thunder



Red Cliff



Treaty Natural Resources Division

The Treaty Natural Resources Division is dedicated to the preservation, protection, enhancement, and sustainable stewardship of the Red Cliff Tribal Nation's natural resources in maintaining balance between healthy environment, economic goals, and future subsistence of all tribal members; ensuring that our future generations continue to enjoy the benefits of those places that are of significant historical, cultural, and environmental importance.

The Red Cliff Treaty Natural Resources Division has been involved with the stewardship of natural resources of the Reservation. The Treaty Natural Resources Division is responsible for the oversight and stewardship of the natural resources within the boundary of, and in the ceded territory of the Red Cliff Band. The Tribe operates a transfer station, fish hatchery, conservation enforcement program, water resources program and other natural resource stewardship efforts are on-going.



Chase Meierotto is TNR's Division Administrator. Chase is looking forward to continuing the work of the TNR division along with the rest of the tribe to protect treaty rights and the natural resources for the coming generations.



Gabrielle VanBergen is the Deputy Administrator. Gabrielle plans and implements ecosystem restoration, green infrastructure, and invasive species management projects; conducts land repatriation and preservation efforts; assists with TNR planning and grant administration, and also serves as the Food Sovereignty director.

Red Cliff Treaty Natural Resources Division includes:

- Mino Bimaadiziiwin Gitigaanin (Red Cliff Tribal Farm)
- Red Cliff Fish Company
- Wildlife and Forestry Department
- Fish Hatchery Program
- Fisheries Department
- Environmental Department
- Tribal Conservation Department



Mino Bimaadiziiwin Gitigaanin



Mino Bimaadiziiwin Gitigaanin, or the Red Cliff Tribal Farm, grows a wide variety of vegetables, tends medicine beds, raises a flock of laying hens, cares for the apple orchards, runs an annual sugarbush, and composts fish remains from the Red Cliff Fish Company. These foods and medicines are distributed in a variety of ways to the community and tribal programs in order to increase our community's access to healthy foods. Mino Bimaadiziiwin Gitigaanin strives to support the community's food sovereignty goals and works with many different tribal programs to advance those goals.



Allissa Stutte is the Farm Manager / Food Systems Coordinator. Allissa organizes and oversees daily farm operations, along with supporting the larger food sovereignty goals of Red Cliff and planning for the continued growth of the farm in future years.



Shea Schachameyer is the Food Sovereignty Coordinator. This position supports the food sovereignty efforts of Mino Bimaadiziiwin Tribal Farm by helping with farm operations, increasing community outreach and engagement, and collaborating with other Tribal programs to further Red Cliff's food

Mino Bimaadiziiwin Gitigaan Update



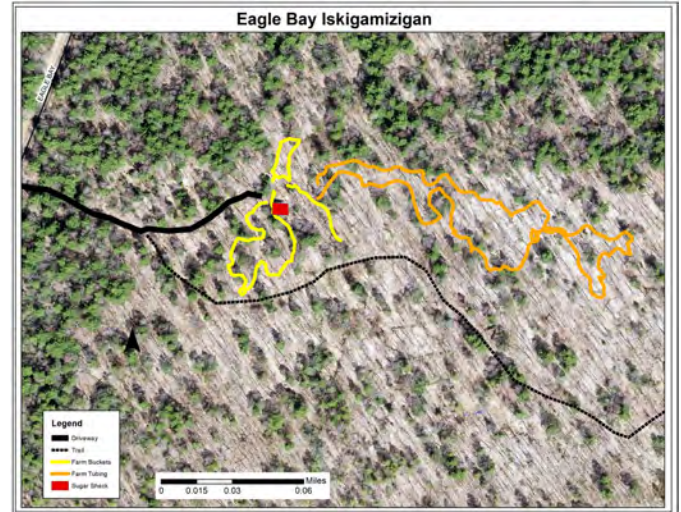
During iskgamizigan (sugarbush) season, the Farm stayed busy tapping trees, leading field trips with youth, helping to coordinate a Sugarbush Lending Program, and hosting a Sugar Camp for the community.

In mid-March, when the temperatures started to warm up above freezing during the day, and drop to below freezing at night, Farm staff with the help of many TNR staff tapped nearly two hundred maple trees. This year, the Farm tapped at the Eagle Bay Iskgamizigan, an 80 acre parcel that the Tribe repatriated this past winter. The previous owner had been operating a sugarbush on the land for some years and the Farm made use of the sugar shack as well as the tubing system that collects sap from approximately one hundred trees. Along with the tubing system, additional trees were tapped with buckets. Chi-miigwech to all who helped tap, collect, and boil sap this season!

Farm staff also led several field trips for classes from the Bayfield School District. During the field trips, students got to participate first-hand in this important cultural and subsistence practice through stories, sap collection, and learning about the process all the way from tree identification to boiling in an evaporator.

This was also the second year of the Iskgamizigan Lending Program. Over 200 taps were lent out to the community, along with equipment such as drill bits, materials for a DIY evaporator, and a comprehensive Sugaring How-To guide. This program is a collaboration between TNR, THPO, and the Education Department.

Community members also visited the Eagle Bay Iskgamizigan during the Farm's three-day Sugar Camp. Participants learned how to identify ininatig (sugar maple), how to tap, set up a DIY evaporator, and finish sap into syrup and sugar. The Farm is grateful to be sugarbushing at this location, and hopes to continue to grow these programs and share this resource with the community for years to come.



Indigenous Words of Maple Syrup courtesy of the Decolonial Atlas

Which words have you heard before?





Red Cliff Fish Company



The Red Cliff Fish Company is your local source for the best fish the Great Lakes have to offer. Entirely owned and operated by the Red Cliff Band of Lake Superior Chippewa, we're proud to share our catch with you, because fishing is more than what we do - it's at the center of who we are.



Daniel Grooms is the Business Manager for the Red Cliff Fish Company. Daniel is responsible for showcasing what Red Cliff Fish Company has to offer and to provide a quality product to not only Red Cliff but also to the surrounding area.



Nick DePerry is the Operations Manager for the Red Cliff Fish Company. Nick directs all production operations for the Company.



Vincent LaFernier is the Assistant Operations Manager for Red Cliff Fish Company. Vincent assists in leading production for the Company.

WE'RE HIRING! Please visit recliff-nsn.gov to apply

- Positions include:
-Business Assistant
-Laborer



Wildlife and Forestry Department



The wildlife and forestry program conducts monitoring and research involving a variety of wildlife species both on and off the Red Cliff Reservation. Staff also review pending changes in policies or regulations, proposed development projects, and actions like planned timber sales for potential impacts (both positive and negative) to our wildlife and forest resources.



Andy Edwards is the Wildlife Biologist. Andy also handles supervisory duties for the fisheries, hatchery, and wildlife/forestry staff.



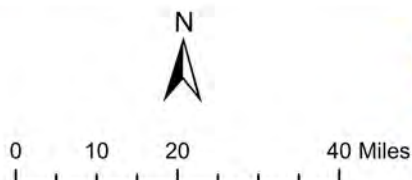
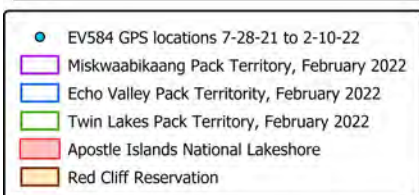
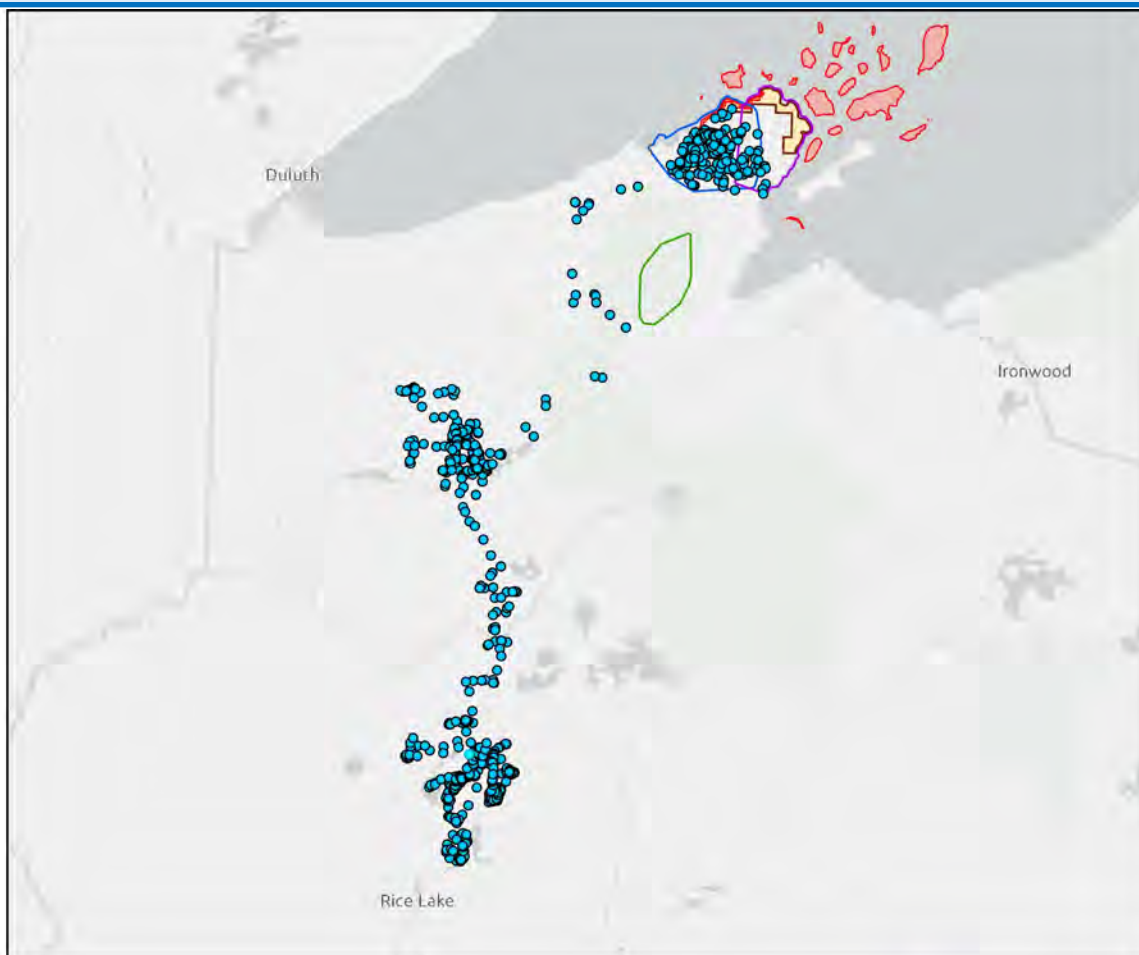
Ron Nordin Jr is the Wildlife and Forestry Technician. Ron's job duties include maintaining trail camera stations as well as live trapping and tracking our wildlife for a better understanding of their territories.

Update on Ma'iingan (wolf) and other predator monitoring project

As we reported in the winter newsletter, wildlife staff had a great year in 2021 and placed GPS collars on 4 yearling and adult wolves, 2 *Gidagaa-bizhiw* (bobcat), and 6 *Wiisagi-ma'iingan* (coyote). We also placed expandable VHF radio collars on 2 wolf pups in each of the Miskwaabikaang and Echo Valley packs. We have been using satellite technology (for the GPS collars), ground telemetry (VHF collars), snow tracking, and trail cameras to monitor these collared animals as best as possible.

One of the wolves we GPS collared was a yearling male in the Echo Valley pack. In mid-December he began a dispersal movement that over the first 3 days initially took him west to the Port Wing area, then down to the Iron River and Ino areas and then to Barnes. After a couple weeks in the Barnes area it then headed south again, nearly to Rice Lake. From mid-January through late February that wolf remained in the region between Stone and Rice Lakes. Unfortunately, on February 25th, we received a mortality notice from the collar indicating that the collar, and probably the wolf as well, hadn't moved in 8 hours. Upon investigation the young male's carcass was discovered about a mile from the nearest plowed road, but appears to have been a victim of a gunshot. The site and evidence was documented and the animal was retrieved with notification to tribal, state, and federal law enforcement officials. As of this time, no leads have been forthcoming. The map below shows his locations from when he was collared on July 28, 2021 through February 10, 2022, about two weeks before he was killed.

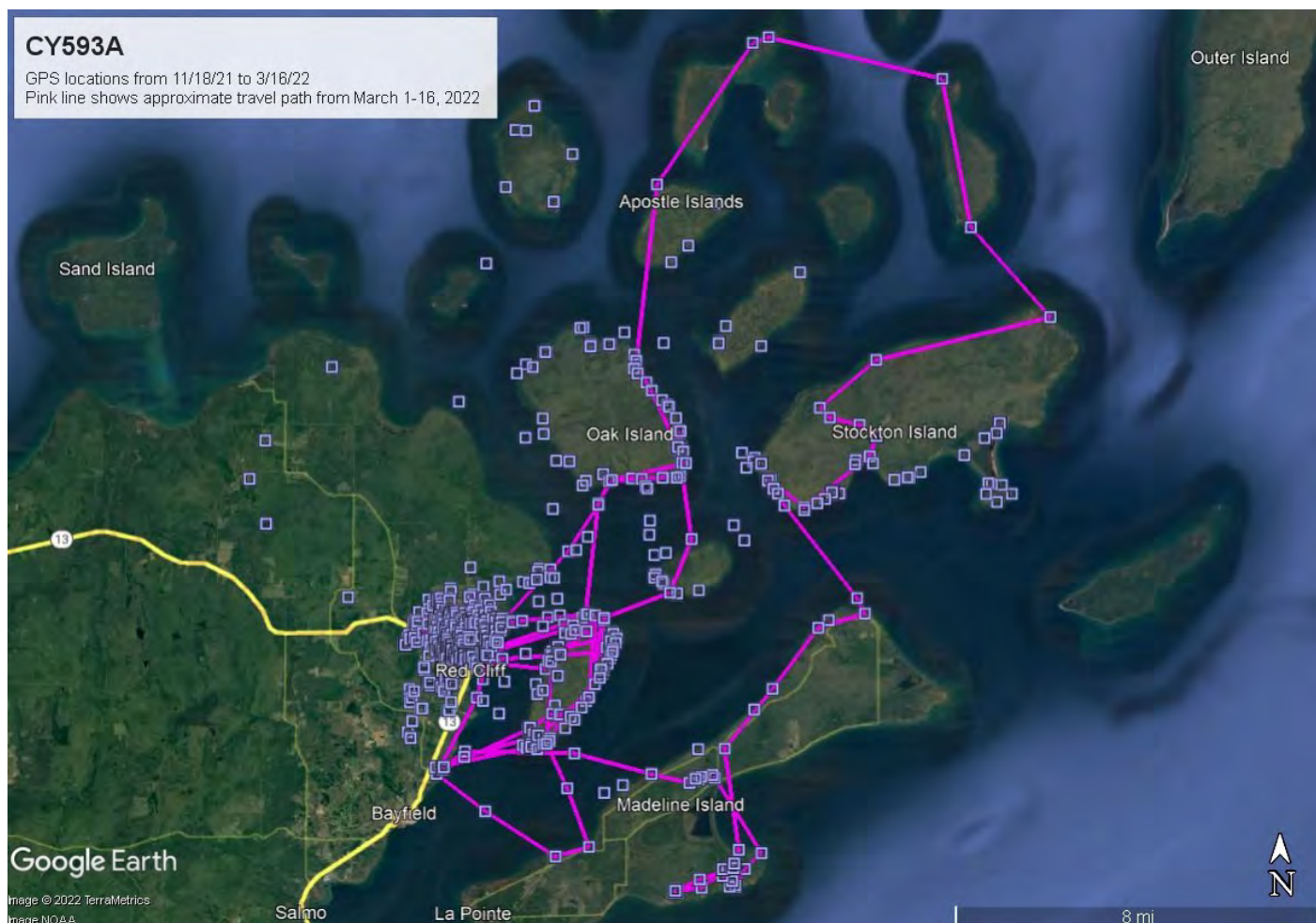
The other three GPS collared wolves (all female) remain on the air at this time. We expect that in the next 4-6 weeks we will begin to see some localization that might help identify denning areas for the three different packs that the 3 females belong to. If we do indeed find evidence of denning behaviour, we will try to locate dens to document pup production about 6 weeks beyond the point at which we think they might have been born. If successful in locating pups we will PIT tag (microchip) all that we handle and deploy up to the 6 remaining expandable VHF radio collars that we have on hand.



Update on Ma'iingan and other predator monitoring project (continued).

The VHF collars that we placed on the four pups in the spring of 2021 were very useful and worked as we had hoped. The collars did expand out as the animals grew and were very helpful in our efforts to document pup survival in the first 6+ months of life. Both pups from the Miskwaabikaang pack were still alive as recently as mid-February, although we don't know for sure how many pups were produced by the pack, as we only located two 6-7 week old pups along a trail (not at a den site). Regardless, it is encouraging that we saw 100% survival for those two pups. In the Echo Valley pack, at least one of the collared pups was still alive and carrying a working collar at the end of January. The other collared pup has not been heard since mid-December, so it may have died, or perhaps the collar dropped off as expected, but in an area where we can't hear its signal. When we collared the Echo Valley pups in 2021, a trail camera left at the den indicated there were 4 pups alive at that time. Based on our collars, at least 50% survival occurred into December.

Using all of the collar information along with snow tracking and trail cameras, we believe there are at least 5 animals in the Miskwaabikaang pack as of the beginning of March 2022 (GPS collared female almost 2 years old, the 2 collared pups from 2021, and two other uncollared adults that we suspect are the breeding pair). In early February while tracking the animals, we found evidence of breeding activity, so we are hopeful that pups will again be produced in 2022. We are less certain on the number of animals in the Echo Valley pack, although we believe there are at least 3 animals (2 confirmed as of early March). The breeding female is wearing a GPS collar and has pulled off pups every year since 2014, so if there is a male of breeding status left in the area, we expect (and hope) that she will again produce pups.



Two of the 6 coyotes that we collared remain on the air, the remainder have succumbed to natural causes (1 killed and eaten by wolves from the Miskwaabikaang Pack) and legal hunting. Both remaining coyotes are males, and over the last month or so they have ranged widely, likely due to breeding season movements. However, one of the coyotes seems to have an affinity for the Apostle Islands, and with the consistent ice cover we have had, he has repeatedly traveled from the mainland to the islands and back. As of March 16, 2022 he has visited 11 of the 22 islands. The map above shows CY593A's locations since being collared on November 18, 2021 by the Hatchery Office and the line shows his approximate travel path the first two weeks of March.

Both of the bobcats wearing GPS collars are still alive and moving about. The adult cat made a made one trip over the ice to Oak Island where it remained for a few days, but has since come back to the mainland. For the most part both animals have remained on the mainland, and during the winter months have typically not been far from the Lake Superior shoreline.

Below: Wildlife Technician Ron Nordin with the Waabizheshi (marten) that was collared and released.



Left: Collared marten just prior to release.

Below: Collared marten being released.



We are also excited to report that on March 10, 2022 wildlife staff were able to capture, GPS collar, and successfully release a male Waabizheshi (marten) near Eagle Bay. This is our first step, and first success, in attempting to use collar technology to better understand where this species is roaming around the Reservation and adjacent ceded territory. Based on trail camera work, we believe there are at least two different marten regularly traversing Red Cliff lands. With a little luck we should get about 5 months of locations (at 2 GPS fixes/day) from the marten collar. The collar also transmits a VHF (radio) signal as well, which is needed to find the animals so we can approach within a close enough range for the stored GPS locations to be transferred to a remote data logger. Although we are early in the process, we were able to locate the marten one afternoon holed up under the snow and some downed timber about five days after release. Along the way we also found a spot where the marten had killed and consumed a red squirrel.



Left: Photo of the subnivean (beneath the snow) area where the collared marten was relocated 4 days after release. The marten was in a tunnel system among some downed trees beneath the 3+ feet of snow.

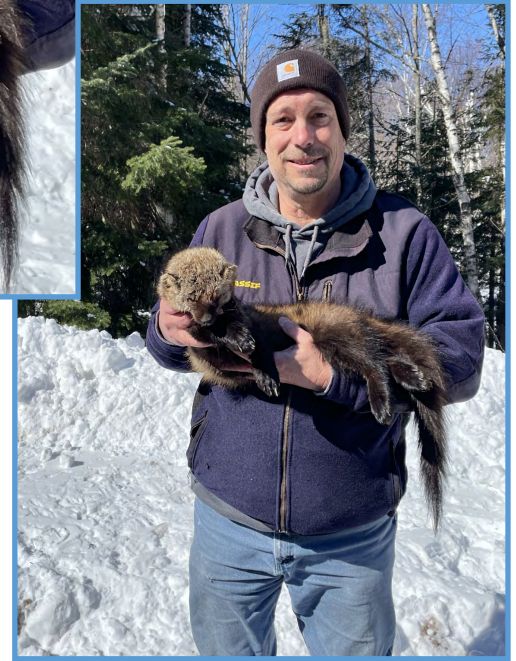
Right: Some fresh Waabizheshi tracks near the spot where the animal was denned for the day.



Below: Ron placing a GPS collar on the Ojiig (fisher).



Below: Andy with the collared Ojiig.



Above: Closer look at the female Ojiig.

March 10th was a great day—first we captured the marten—and then later that morning we were surprised and ecstatic to also have a female Ojiig (fisher) in another live trap. This animal was also near Eagle Bay and not far from the lakeshore. The fisher was given a GPS/VHF collar and released. Again, if the collar works as advertised, we could end up with as many of 18 months of locations (3 GPS fixes/day). Over the last couple of years, our trail camera work has provided observations of several different fisher on trail cameras. During the first week we have used telemetry to confirm that the fisher has been traveling, with locations near the junction of Blueberry Road and Raspberry Shores road and most recently between the east leg of County Highway K and Peterson Hill road.



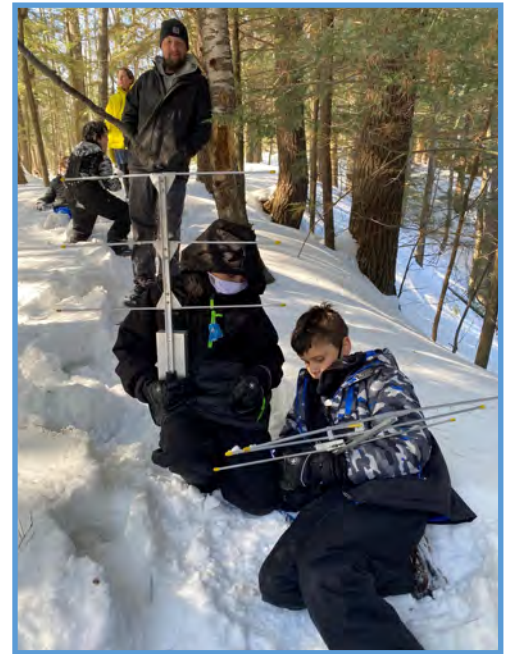
Left and Right: Ojiig being released after collaring.



We enjoy our jobs and our role as stewards of Red Cliff's wildlife residents. We are always learning and also are happy to take time to share some of that knowledge we acquire with others—particularly young folks. In January, Andy provided a virtual presentation to the Bayfield 5th grade students about the work we do and knowledge we have gained in our ma'iingan and other predator monitoring project. The students were planning to reach out to our local and state congressional representatives to let them know what they thought should be the path forward for stewardship of ma'iingan—and asked us to provide some background on our work and wolf biology and numbers locally.

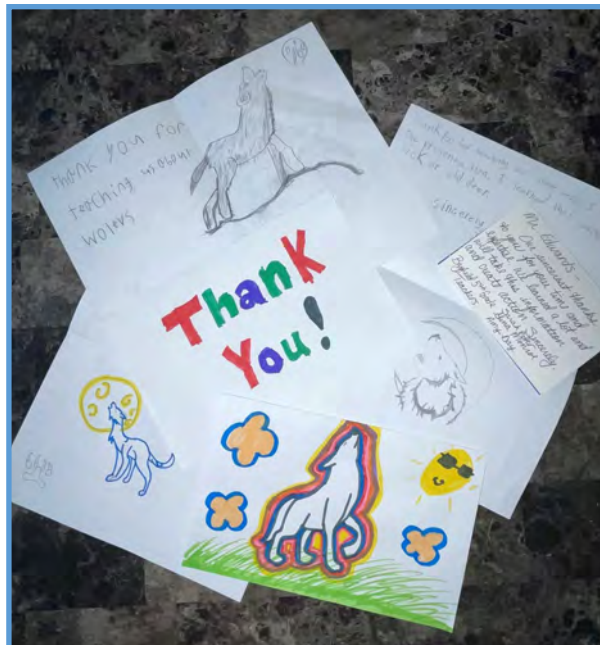
In early March, with the return of students to school, declining COVID concerns, and warmer weather, Ron was able to spend a few hours outside with the 5th grade students and teach them a bit about our research trapping methods and give them a chance to do some telemetry of their own!

We certainly have fun with these types of events and appreciate the students expressing their thanks for the time and knowledge we were able to share with them. There are also some talented young artists out there!



Photos AND artwork courtesy of the Bayfield 5th grade class and staff!

Miigwech!



Emerald Ash Borer Reaches the City of Bayfield

NOTICE from Wisconsin's Department of Agriculture, Trade, and Consumer Protection (DATCP):

"The emerald ash borer (EAB) has been detected for the first time in the city of Bayfield, Bayfield County, WI. An infested tree was identified in a Bayfield park managed by a non-profit organization.

A single infested white ash was reported to DNR and DATCP staff by a local park volunteer upon return from a visit to southeastern Wisconsin where she learned about EAB after observing an abundance of dying ash trees. DNR forest health specialist Paul Cigan collected several larvae from the infested tree March 3. Additional suspect infested trees are within view of the park, but have not been confirmed. The larval sample was officially confirmed EAB by a USDA-APHIS identifier on March 11, 2022.

There are no regulatory changes as a result of this detection since EAB was federally deregulated January 14, 2021 and Wisconsin instituted a state-wide quarantine in 2018. With this detection, 63 of Wisconsin's 72 counties have now detected EAB since it was first found in the state in 2008.

DATCP, DNR, UW Extension and tribal partners continue to track EAB's spread, sharing detection information through online maps available to Wisconsin's citizens, private businesses, and governmental entities to aid in EAB readiness planning, pest management and biological control activities. With over 50 new city/town/village detections already reported statewide in 2022, map updates continue to occur on a biweekly basis. To see where EAB has been found in Wisconsin or to report new municipal detections, please visit [WI EAB online detections map](#) or [PDF map](#). Please note, the Bayfield County detection will not be viewable on the interactive map until Thursday (3/17)."

What is Emerald Ash Borer?

Emerald Ash Borer (EAB) is an exotic beetle that was first discovered in the United States in 2002, likely hitch-hiking in the wood of packaging materials from its native range of Asia.

How does EAB affect Ash trees?

EAB inflicts the most damage to baapaagimaak (black ash) and aagimaak (white ash) trees in its larval stage, when the larvae tunnel underneath and feed on the inner bark, disrupting the flow of nutrients and water. Adult EAB feed on the tree's leaves, but this causes little damage. The effects of larval feeding causes the tree canopy to thin, branches to die back, and eventually leads to the death of the tree. Trees infested with EAB usually die within 3-5 years, but heavy infestations can cause trees to die even sooner. Once EAB has reached an area, it is likely that nearly all ash trees larger than saplings will



be damaged and/or die. Very young ash trees may outlast a quick moving infestation that quickly kills off the available larger trees causing the EAB to also decline and die out at least for a period of time.

What are other impacts?

Cultural Impacts

Anishinaabe people have shared a traditional relationship with ash trees for generations, such as for basket weaving, flute and lacrosse stick making, and medicinal remedies. Ash trees are an irreplaceable cultural component and EAB threatens these traditional uses.

Environmental Impacts

The loss of ash trees has a significant cascading affect in the ecosystem including: additional invasive species takeover on the forest floor due to increased sunlight, food and habitat loss to other species, soil nutrient changes, increased flooding and water temperatures

How does EAB spread?

EAB can travel short distances by flying from tree to tree, but has to hitch a ride to travel farther distances. It is most commonly spread via people moving firewood, nursery stock, or logs.

What can you do?

Learn, share, & respectfully practice traditions

Learn & watch for signs and symptoms such as:

- D-shaped holes in ash tree trunks
- S-shaped channels in the underside of bark on cut logs
- Cream colored larvae with pincher like appendages at the end of their abdomen
- Adult beetles that are metallic green and are 3/8-1/2 inch long, with flattened stomachs and round backs
- Ash tree canopy dieback
- New sprouting coming from the bottom of ash trees
- Splits in ash tree trunks
- Woodpecker feeding on ash trees (usually in the upper canopy first and then later on the main trunk)

Report suspected infestations to Red Cliff Forestry staff at 715-779-3750

Don't move firewood

Underplant ash trees on your property with other native tree species such as basswood, maple, and cedar to provide succession in the event your ash tree(s) are infected

What is Red Cliff doing?

The Red Cliff Band of Lake Superior Chippewa's Treaty Natural Resources Division has been conducting annual surveying for EAB with purple prism traps since 2013 and no detections have been made on the Reservation. Surveying will continue in 2022 and notice will be given if/when a detection is made. Red Cliff TNR staff will continue to monitor for EAB and provide Tribal Council with recommendations to consider for proactive management measures in advance of any infestation.



Fish Hatchery Program



The Red Cliff Tribal Fish Hatchery raises Coaster Brook Trout in the hatchery and Walleye in the outdoor ponds. Walleye are raised to bolster populations in inland lakes where tribal members spear in the spring. All walleye are raised to extended growth size, meaning the walleye usually range from 5 – 9 inches when released in the fall. Raising walleye to extended growth size substantially increases survival after release. The Red Cliff Hatchery maintains brood stock of coaster brook trout in its hatchery. The purpose of the coaster brook trout program is to restore the species to historical levels in nearshore areas of Lake Superior.



Lance Bresette is the Hatchery Specialist. Lance oversees the hatchery and walleye ponds and makes sure the fish are happy and well taken care of.



Francis “Fran” Cadotte is the Hatchery Technician. Fran’s duties are cleaning tanks and feeding fish daily, clipping fins, conducting sample counts monthly, ordering fish food, stocking fish and keeping the fish as happy as possible.

Red Cliff Fish Hatchery

Lance Bresette-TNR

It is almost that time of the year where everyone should be getting their anit (spears) sharpened, jiimaan (boats) ready and lights shining bright. If biboon (winter) ever decides to let up it will be the period to harvest ogaa (walleye) in no time. Making certain your anit are sharp, jiimaan are water ready, and lights are bright will all ensure you have successful harvest.



Walleye stocking in Upper St. Croix lake



Ogaa from 2020



A net full of Ogaa (walleye) from 2021

This year we will be collecting Walleye eggs from lake Namekagon and Middle Eau Claire Lake. We will be using our shocking boat to collect Walleye eggs on both lakes. It is our goal to collect enough eggs to have another successful walleye season.



Fisheries Department



The Fisheries Department at the Red Cliff Treaty Natural Resources Division conduct fish assessments in the Wisconsin and Michigan waters of Gichigami and the streams on Reservation, monitor commercial fishing activities on Gichigami, issue licenses and fish harvest tags, and summarize the information we collect into reports. Fisheries staff also serve on several committees, working groups, and collaboratives where many agencies around Lake Superior work together to solve problems of mutual concern.



Ian Harding is the Fish Biologist . Ian helps conduct fish assessments in the Wisconsin and Michigan waters of Gichigami, on reservation streams, and develops reports from those assessments.



Reed Saam is a Fisheries Technician. Reed helps monitor commercial fisherman and conducts fisheries surveys on Lake Superior and on reservation streams.



Michelle “Shelly” Gurnoe is the Office Manager. Shelly issues commercial and home use licenses, data entry of commercial and home use fishing reports, and has various office related responsibilities.

Boozhoo! With the weather warming up and ice melting the TNR fisheries department is gearing up for another assessment season on Gichigami (Lake Superior). Gichigami still has thick ice in many areas so we have some time before we can launch the R/V Bagosendam. While we wait, we busy ourselves by mending nets, interpreting giigoonh (fish) ages, and other activities.



Satellite view of Lake Superior 3/14/2022. From: <https://coastwatch.glerl.noaa.gov/modis>

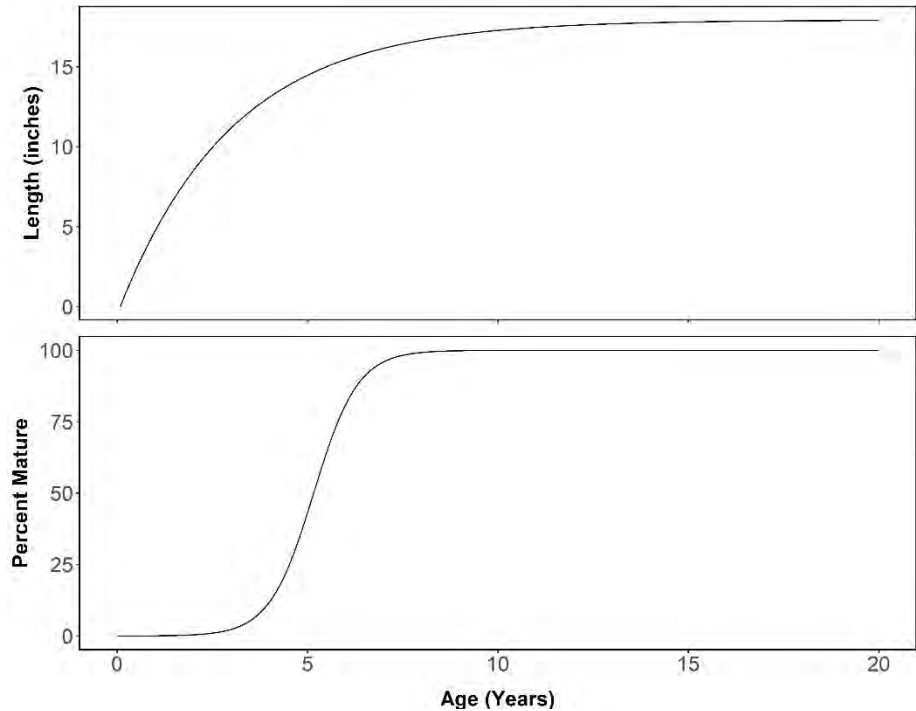


R/V Bagosendam.

Giigoonh in northern climates, like trees, have annual growth cycles and these growth cycles can be observed in their structures. For giigoonh, growth cycles are recorded in their bony structures such as scales, vertebrae, jaw bones, fin rays, or otoliths (ear stones). When the markings of the growth cycles occur on an annual basis they are referred to as “annuli.” We count the annuli on bony structures we collect from namegos (lake trout), adikameg (lake whitefish), odoonibiins (lake herring), and other giigoonh to estimate how old they are. With

this information and other data, we can calculate the birth year of fish (we refer to fish of the same species born in the same year as a “cohort” or “year-class”), how fast they grow, when they mature, and how many fish survive from one year to the next. This information helps us assess the health of giigoonh populations. For example, the figures below show the growth and maturity rates for female adikameg recently caught in the Apostle Islands. On average, it takes female adikameg 9 years to reach 17 inches and about half of the age-5 females are mature.

The growth rate of adikameg in the Apostle Islands used to be greater but has declined over time. One possible reason for the slower growth is the number of adikameg in the Apostle Islands. Growth rates were higher when there were fewer adikameg. Now there are more adikameg in the Apostle Islands and more mouths to feed, so individual fish get less food and grow more slowly.

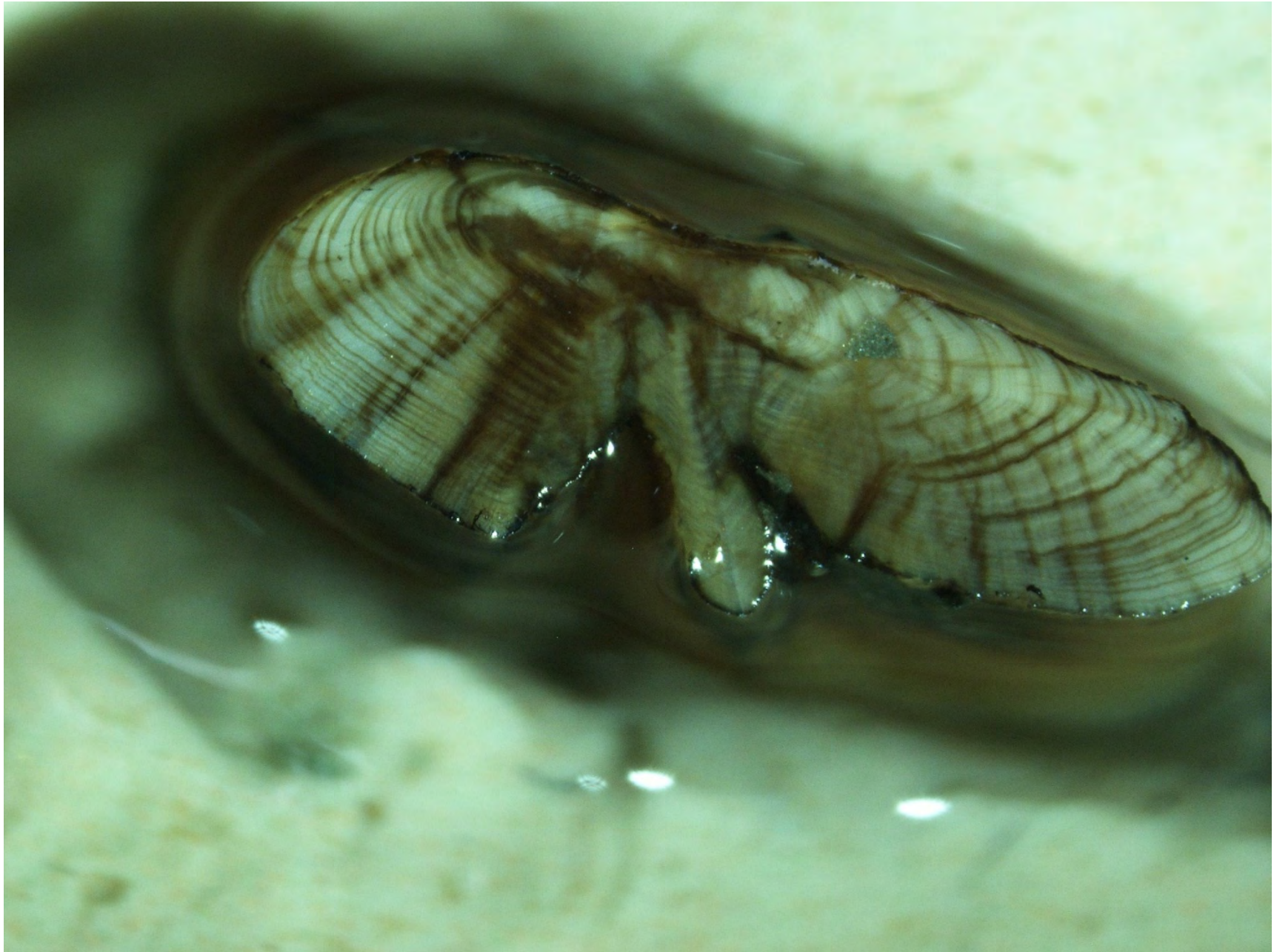


Average length (top graph) and maturity (bottom graph) at age of female adikameg caught during 2018 and 2019 in the Apostle Islands.

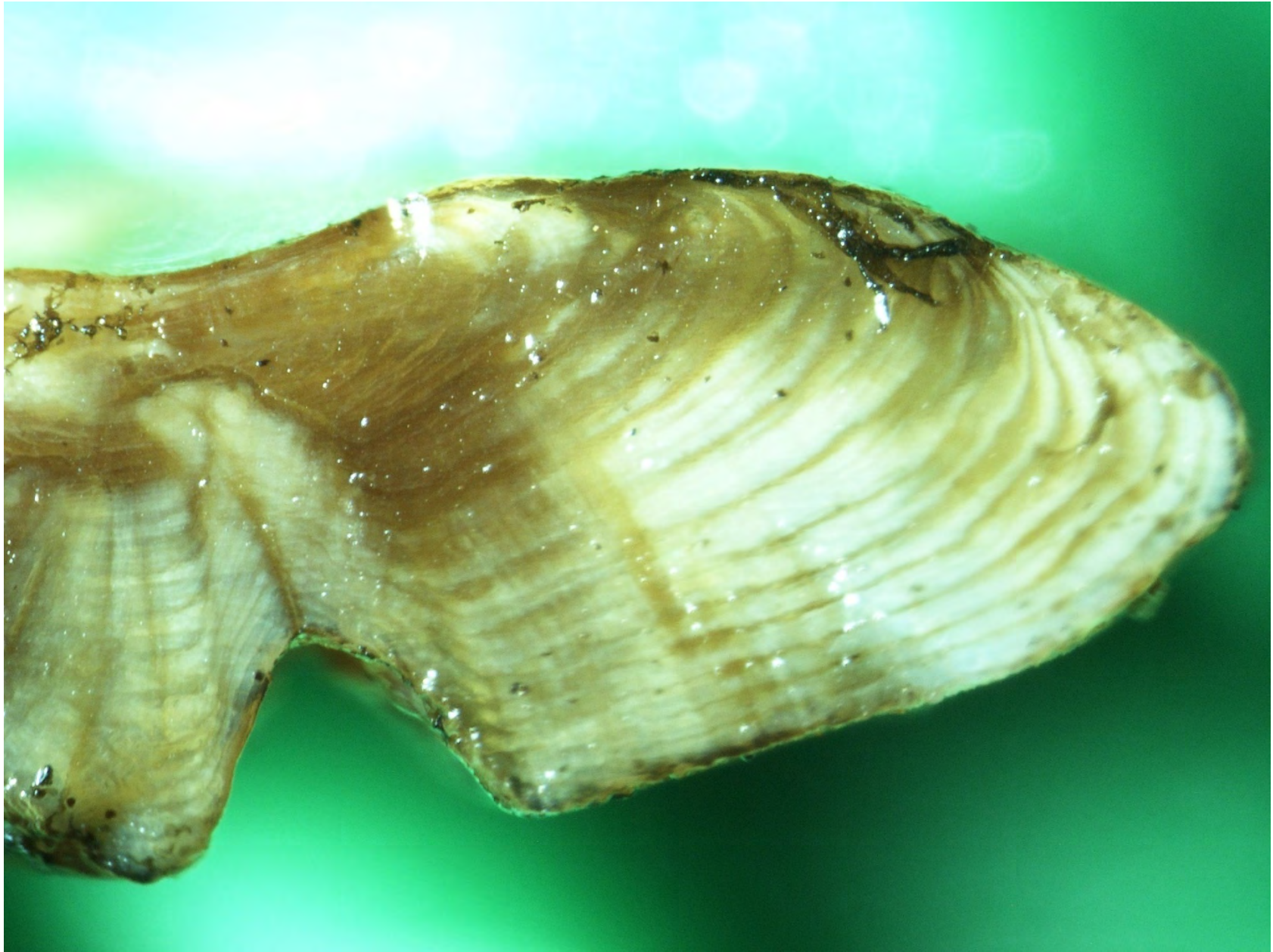


The process of estimating a giigoonh's age begins with collecting a bony structure. The choice of bony structure depends on the species of giigoonh and if it was harvested or to be released. The structures are then dried, and a cross-section is cut and viewed through a microscope. How old do you think the giigoonh are in the pictures below?

Fisheries staff taking a jawbone from a namegos at the Red Cliff Fish company (top), equipment used by fisheries staff to interpret giigoonh ages (bottom left), and an otolith from a 22-inch namegos with a dime for reference (bottom right).



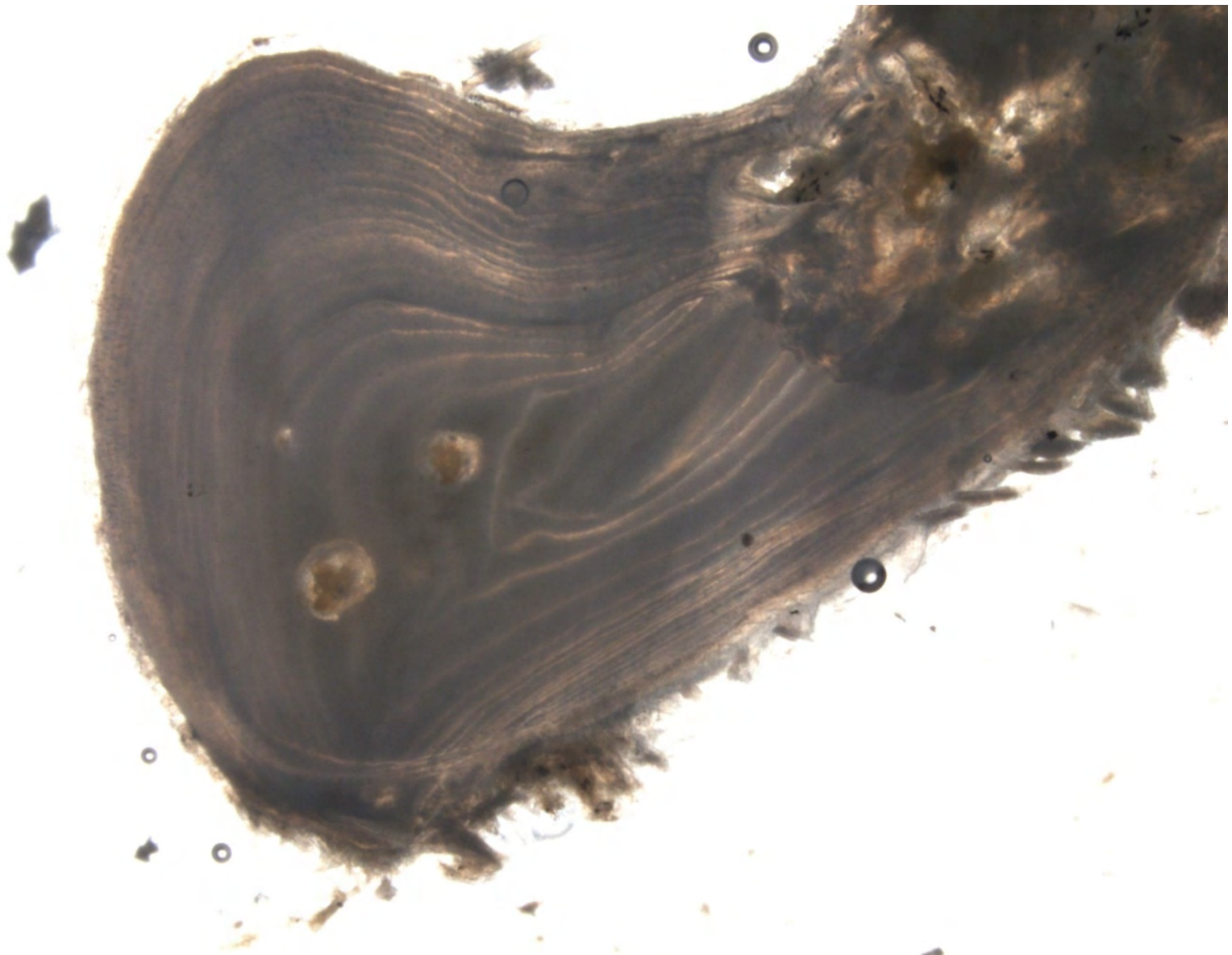
Otolith from a 20-inch adikameg caught 6/28/2021.



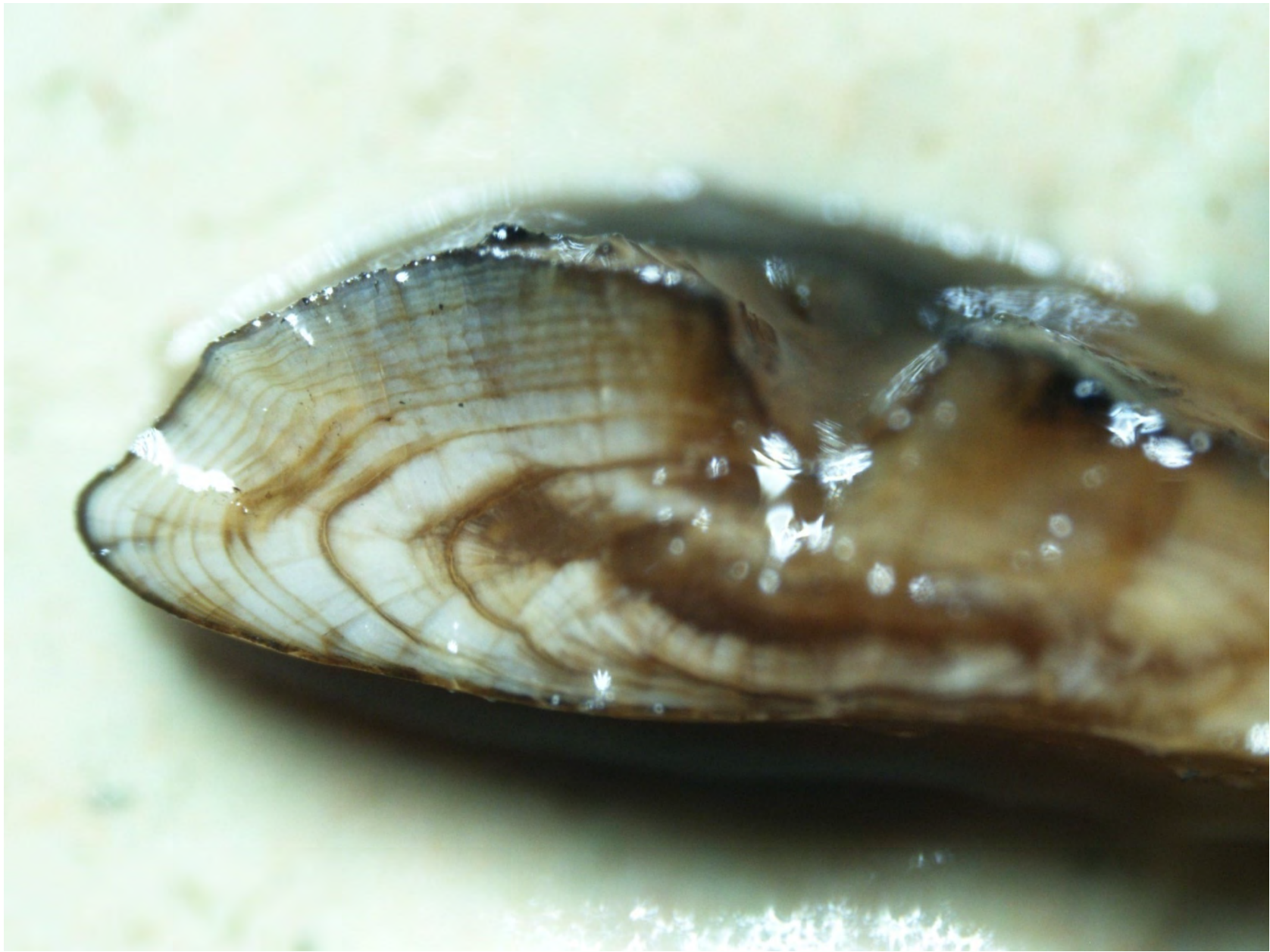
Otolith from a 17-inch adikameg caught 7/19/2018.



Jawbone from 26-inch namegos caught 12/17/2020.



Jawbone from a 39-inch namegos caught 3/1/2019.



Otolith from a 16-inch odoonibiins caught 11/12/2020.



Otolith from a 14-inch odoonibiins caught 11/12/2019.



Environmental Department



The Department houses a variety of programs, which in turn administer services that directly benefit the Red Cliff community. The programs include: water, air, environmental justice, solid and hazardous waste (Transfer Station), environmental response, manoomin (wild rice) stewardship, and previously the Native American Lands Environmental Mitigation Program. Examples of projects include: Lake Superior Barrels Project, riparian buffer restoration, water quality monitoring, air quality monitoring, pet waste stations, hazardous waste disposal events, annual spring clean-up, reseeded of the wild rice, legacy dump sites, raised garden beds, environmental outreach and education, tire collection events, rain barrel workshops, permits, and coordination with a variety of programs within the Tribe to promote sustainable practices.



Linda Nguyen is the Environmental Director. Linda supports the development and maintains oversight of core environmental programs, develops proposals for environmental grants, and fosters compliance with federal environmental statutes by developing and managing appropriate tribal programs, ordinances, and permits, and solid/hazardous waste disposal services.



Allie Rakowski is the Water Resources Program Manager. She analyzes the water quality data collected from streams and rivers on reservation. She also issues water quality warnings or advisories at popular swimming areas if E.coli counts reach unsafe levels.



Noah Saperstein is the Environmental Justice Specialist. Noah reviews documents related to mines and pipelines. Noah also supports food sovereignty initiatives.



Dan Duffy is the Transfer Station Manager. He helps the community keep clean by keeping the Transfer Station open.



Jessica Jacobson is the Wetland Specialist. Jessica will be developing and implementing a wetland monitoring program to increase understanding of the extent and quality of tribal wetlands.

Come Join Our Team!

Air Quality Program Manager: Vacant

Environmental Health Specialist: Vacant

ENVIRONMENTAL DEPARTMENT IS HIRING!

ENVIRONMENTAL HEALTH SPECIALIST

\$21.00-\$23.00/hour

AIR QUALITY PROGRAM MANAGER

\$17.00-\$20.00/hour

For more information on job duties and responsibilities, required knowledge, and qualifications, please visit redcliff-nsn.gov and click on Job Listings.

Still have questions? Contact the
Environmental Department at
715-779-3650



SAVE THE DATES:

EARTH DAY ROADSIDE CLEANUP

APRIL 22ND, 2022

TRANSFER STATION OPEN HOUSE

MAY 13TH, 2022

RED CLIFF SPRING CLEAN UP WEEK

MAY 23RD - 28TH, 2022

Call Red Cliff Environmental Department with questions or comments - (715)779-3650.
More details to come. Miigwech!

New Wetland Program in the Environmental Department

The Red Cliff Environmental Department has received a grant from the U.S. EPA to create a wetland program in Red Cliff. The primary purpose of the wetland program is to protect and restore wetlands as well as all the benefits wetlands provide to the animals, water, and the community in Red Cliff.

What are wetlands and why have a wetland program?

Wetlands include many kinds of wet habitats, often encompassing the space where land transitions to water, and are defined as areas where water covers or saturates the land either permanently or

for some period enough to support plants and soils typical of wetlands. Wetlands are exceptionally important for wildlife and plant habitat, water quality and people. A wide variety of plants grow in wetlands including foods, medicines, and many rare and threatened species. Wetlands offer habitat for wildlife like birds, fish, frogs, insects, and mammals. In addition to supporting plants and animals, wetlands help maintain clean water and provide flood protection and shoreline erosion control.



Little Sand Bay wetland in the fall 2015

Goals of the Wetland Program

The funding will help to create a plan for the new program and begin monitoring of the wetlands in Red Cliff starting 2022. Monitoring is the process of gathering information to learn more about the wetlands. Some of the questions monitoring will help answer are below:

Where are wetlands located in Red Cliff? We have some sense where a lot of the wetlands are in Red Cliff, but this is based on interpreted photos which, while valuable, can overlook or misrepresent the size of some wetlands.

What are the different types of wetlands in Red Cliff? Wetlands exist in many different varieties and can support a range of plants and animals. Besides the value of simply knowing which kinds of wetlands are in Red Cliff, categorizing wetlands will help to compare them more easily.

What is the condition of wetlands in Red Cliff? We want to learn more about the health of the wetlands in Red Cliff, what may be influencing wetland health, and the resulting impacts. This involves recording the character of wetlands, which may include information about the wetland's water quality and soils, and the plants and animals who live in wetlands.

With more information about the location, type, and condition of wetlands, the program can better protect wetlands and eventually observe and examine any changes to wetlands in Red Cliff.

Look more updates from the wetland program in future newsletters and contact Jessica at Jessica.jacobson@redcliff-nsn.gov or 715-779-3650 Ext. 4314 with any questions.

Water Quality Advisory Signs

The Red Cliff Environmental Department has new water quality signs that will be posted at many of the beaches and mouth of rivers and streams. These signs will indicate whether it is safe to swim, if there is a swimming advisory, or when no swimming is highly recommended based on E.coli levels. E.coli is a type of bacteria that normally lives in your intestines. Most types of E.coli are harmless. However, when high levels of E.coli are present in water, it is a strong indication of sewage or animal waste contamination. Sewage or animal waste contamination can cause diarrhea, nausea, headaches, or fatigue, and in very rare cases can lead to severe illness. So keep a look out for the new signs this summer! Water quality

levels will be indicated by a movable water droplet.



- ← **E.coli levels are below the threshold. There are no health warnings**
- ← **Be aware that E.coli levels are above the threshold value**
- ← **E.coli levels are very high or have been high for several weeks. It is highly recommended you do not swim or wade.**

For questions, call the Red Cliff Environmental Department at (715) 779-3650

Stormwater Runoff

What is running off your yard, driveway, and street and into our streams and Lake Superior?

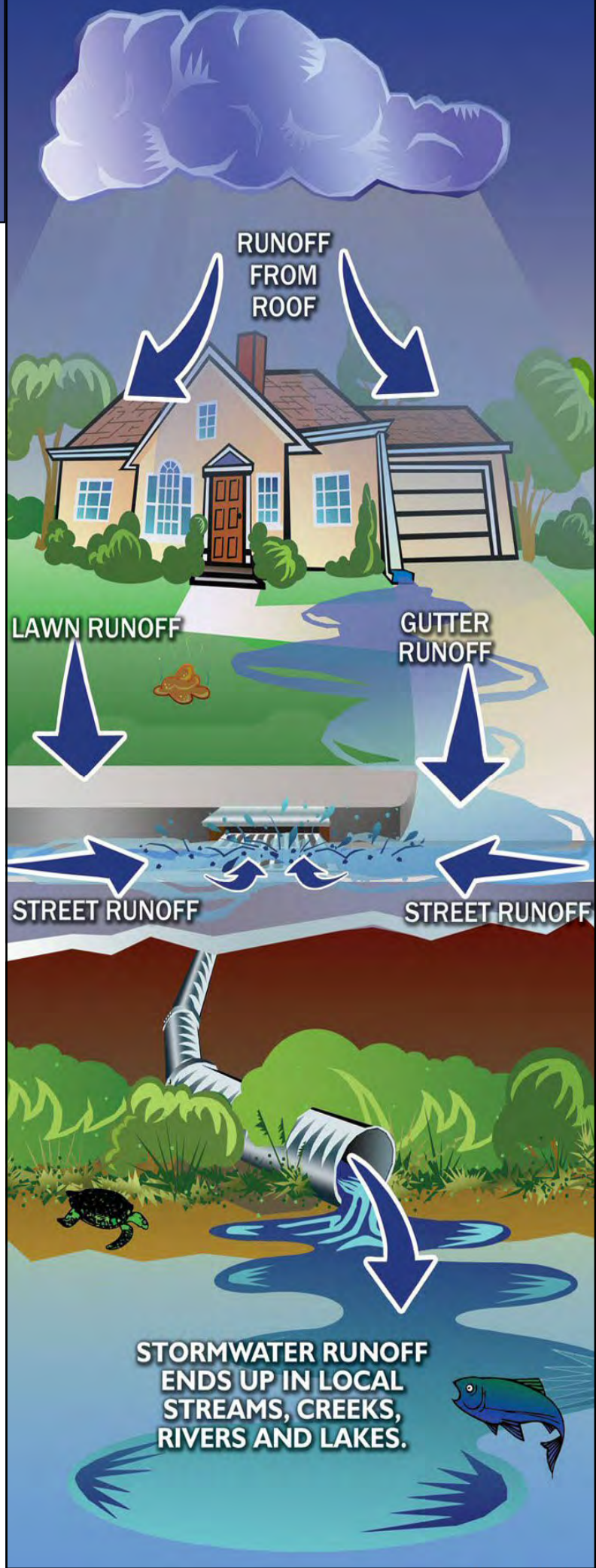
Residential areas tend to have high amounts of impervious surfaces (areas where water cannot get into the ground due to solid structures such as rooftops, driveways, roads, etc.). High amounts of impervious surfaces allow water to run off the land at a faster rate and in turn, the water is able to carry more pollutants into nearby streams and to Lake Superior. Water also moves more rapidly, causing erosion problems and depositing sediment into streams, which damages water quality and fish habitat.

Some common pollutants coming from our yards and streets include:

- ◇ Heavy metals (from cars and shingles)
- ◇ Road salt and sand
- ◇ Toxic substances such as antifreeze from cars
- ◇ Oil/grease/gasoline
- ◇ Debris such as garbage
- ◇ Pesticides/fertilizers from treated lawns/gardens
- ◇ Viruses, bacteria, and nutrients from pet waste
- ◇ Thermal pollution (water warms up from dark surfaces such as blacktop)

All of this non-point source pollution can have very negative impacts on the environment, including:

- ◇ Harm fish and wildlife
- ◇ Kill native plants
- ◇ Foul drinking water
- ◇ Make recreational and swimming areas unpleasant



Remember to



this spring!

Cleaning products are everywhere in our homes and offices: on dishes, countertops, furniture, clothes, floors, windows, and even floating through the air.

But most of the conventional cleaning products we all grew up with can have negative health and environmental impacts.

Health Effects

- ◇ Skin and lung irritation
- ◇ Watery eyes, sneezing
- ◇ Headaches
- ◇ Chemical burns
- ◇ Hormone disruption (& possible birth defects)
- ◇ Some products can cause cancer in the long term.

Environmental Effects

- ◇ Toxic to fish and wildlife
- ◇ Can cause excess algae growth
- ◇ Many products are oil based: contributing to the overuse of oil
- ◇ Oil based bottles are usually non-recyclable



Check out these cheap, easy, and toxic free cleaning recipes to try at home!

All Purpose Cleaner

4 cups water

1/4 cup vinegar

2 tsp borax

2 drops essential oil of your choice

Disinfectant

2 tsp borax

4 Tbsp

3 cups hot water

For stronger cleaner power, add 1

tsp castile soap

Window/Glass Cleaner

2 cups water

1/4 cup isopropyl alcohol

2 drops essential oil of your choice

Mold & Mildew

Use white vinegar or lemon juice

Tub and Tile Cleaner

Rub in baking soda with a damp sponge and rinse. For tougher jobs: rub down with vinegar first.

Floor Cleaner/Polish

Linoleum: 1 cup vinegar, 1/4 C borax, few drops baby oil, 1 gallon hot water

Wood: apply a thin coat of 1 part vegetable oil and 1 part vinegar

Brick/Stone Tile: 1 cup vinegar and 1 gallon water, rinse with fresh water

Drain Cleaner

1/2 cup salt with a gallon water, heat and pour down drain

Toilet Bowl Cleaner

1/4 cup baking soda

1 cup vinegar



Stop by or call the Environmental Office with questions or for more recipes!



Gi-Ganawemaanaan Nibi: We Are Protecting the Water

April 2022

Nibi Akawe Mashkiki, water is the first medicine. **Nibi Bimaadiziwin**, water is life. Any threat to water is a threat to all life, the Anishinaabeg, **giigoonh** (fish), **mashkiki** (medicines) and all of our other **indinawemaaganag** (relatives). As industry continues to try to destroy the **aki** (land) and **nibi** (water) people continue to resist.

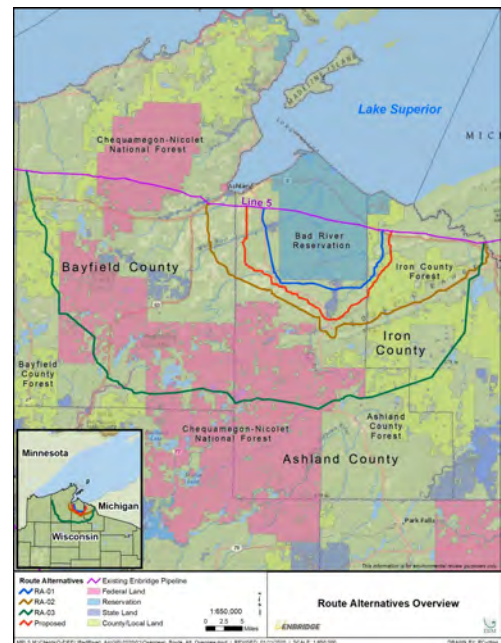
Line 5 1836 Territory Updates:

- Enbridge continues to operate Line 5 in the Straits of Mackinac even though the State of Michigan revoked the pipeline's Right of Way.
- The Army Corps of Engineer will conduct an in depth environmental review for the proposed Line 5 Tunnel under the Straits of Mackinac. This review is expected to be completed by June 2024. After that, the Army Corps of Engineers could either deny the permits or begin drafting permits. Construction is estimated to take 5-7 years.



Line 5 1842 Territory Updates:

- Bad River continues to be entrenched in a legal battle with Enbridge to remove Line 5 from their reservation. Enbridge is making every effort to ensure oil flows under the Bad River. Enbridge is trying to conduct on-reservation maintenance and build the proposed Reroute.
- Since December, there have been close to a dozen virtual events on the threat Line 5 poses to Lake Superior and in/around Bad River. Many of these events included speakers from Red Cliff and Bad River sharing how the pipeline threatens treaty rights and traditional ways.
- The Wisconsin DNR released a draft Environmental Impact Statement (EIS) in December 2021. This document is supposed to be used to decide if the project can be permitted. To do so, the draft EIS should determine how the proposed project could impact the environment and Lake Superior. Tribes, environmental groups, and community members have determined the document to be inadequate.
- The Army Corps of Engineers is in an early phase of the permitting project. They recently accepted comments to help them figure out what topics should be included in their environmental review.
- The portion of Line 5 that crosses the Chequamegon National Forest has been unpermitted since in 2013. Enbridge applied to renew their expired permit in 2017. GLIFWC created a website that shows how Line 5 has impacted the Chequamegon Nicolet National Forest and ceded territory to help the Forest Service better understand tribal concerns with Line 5. To view this website, go to: <https://tinyurl.com/L5storymap>



Gi-Ganawemaanaan Nibi: We Are Protecting the Water

April 2022

Other Enbridge Updates:

- The latest article in *The Intercept's* investigative series on Enbridge revealed that Enbridge has an initiative called Opposition Driven Operational Threats (ODOT). ODOT assigned risk levels to different areas which took into account “indigenous opposition”. Red Lake, Leech Lake, and Bad River were marked as threats. Winona LaDuke and Honor the Earth were also named as threats by ODOT. The documents related to ODOT are not public, but the article did not state that Red Cliff is considered a “threat”.
- Enbridge recently reported that their pipeline system in the Great Lakes will only be profitable until 2040.

Line 3 Expansion Updates:

- Enbridge completed their newest pipeline. The Line 3 Expansion (now named Line 93) transports 760,000 barrel per day of tar sands.
- In January 2021, Enbridge deviated from their permitted construction plan installed sheet metal deeper than planned. This ruptured an aquifer releasing approximately 100,000 gallons of water per day. It took Enbridge nearly one year to repair the breached aquifer and led to a \$3.32 million fine from the Minnesota Department of Natural Resources. The Minnesota Pollution Control Agency is still investigating almost thirty incidents where drilling mud mixed with chemicals was released into wetlands and waterways. Several of these incidents occurred near the headwaters of the Mississippi River. (pictured to the right)
- The White Earth Nation is suing the Minnesota Department of Natural Resources (MN DNR) on behalf of Manoomin in White Earth Tribal Court in relation to the issuance of Water Appropriation Permits for the Line 3 project. This is the first Rights of Nature case to go to trial.
- The construction of Line 3 Expansion has raised many concerns for communities facing proposed Enbridge projects. Enbridge’s actions and negligence have highlighted the harm and violence that pipeline construction causes to the earth.

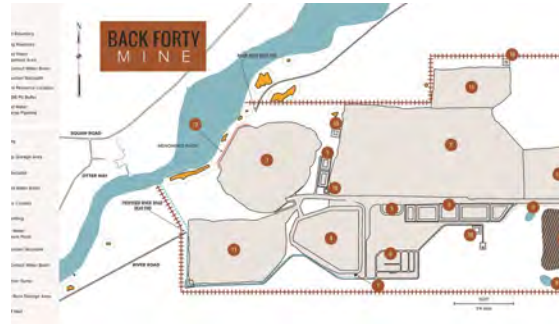


Gi-Ganawemaanaan Nibi: We Are Protecting the Water

April 2022

Back 40 Mine's Updates:

- Aquila Resources has been purchased by Gold Resources (GORO). GORO has not submitted any new permit applications, but claims they are designing a fully underground mine.
- Michigan is still in the process of adding Menominee burial sites and ancient gardens along the Menominee River to National Register of Historic Places. Portions of this site are adjacent to and within the property owned by the mine company.



Copperwood Mine Updates:

- The Copperwood Mine is Highland Copper's proposed copper mine near the shores of Anishinaabe Gichigami.
- Michigan regulators are planning to reissue a water discharge permit (NPDES) for the proposed Copperwood Mine. This permit would allow the project to release up to 500,000 gallons of water per day from mining operations into the West Branch of Namebinag Creek, which flows into Lake Superior. An additional 4.2 million gallons of water would be discharged annually from waste water lagoons.
- The only other component of the project that is awaiting permits is the Water Intake Structure. This would pump 500,000 gallons of water per day from Lake Superior to be used in the mining process.



Kristle KLR Updates:

- Kristle Majchrzak, owner of Kristle KLR, would like to bottle artesian water from a well in Herbster, bottle it in Superior, and sell it in the Twin Cities.
- Kristle Majchrzak's Conditional Use Permit application was denied by Bayfield County's Planning and Zoning Committee. Kristle Majchrzak appealed this decision to the Bayfield County Board of Adjustment who upheld the Planning and Zoning Committee's decision.
- Kristle KLR has filed an appeal against Bayfield County and Bayfield County Board of Adjustment in Wisconsin Circuit Court.



Gi-Ganawemaanaan Nibi: We Are Protecting the Water

April 2022

Twin Mine's Update:

- The Biden administration cancelled the company's federal mineral leases because they were improperly renewed by the Trump administration. The lease renewals had previously been denied by the Obama administration. The state and federal permitting processes cannot continue without these mineral leases.



Talon Metal Mine's Update:

- Talon Metals is a proposed nickel mine that would be between Mille Lacs and Fond du Lac. This proposed mine has been touted as an environmentally friendly project that would supply nickel for electric vehicles such as Tesla.



- The proposed mine is still in the planning phases and many details have not been figured out.

Want to get involved and protect the Nibi?

Opportunities to Comment to the Federal or State Agencies:

- The U.S. Forest Service is **still** accepting public comments regarding Chequamegon-Nicolet National Forest's expired Line 5 Special Use Permit, for details go to: <https://www.fs.usda.gov/project/?project=44889>
- The WDNR is accepting public comments on the draft Environmental Impact Statement until April 15th, 2022. For more details, go to: <https://dnr.wisconsin.gov/topic/EIA/Enbridge.html>
- To get updates on Michigan's process for the proposed Line 5 Tunnel or to submit comments, go to: <https://www.michigan.gov/line5/>

Want to join the Frontlines?

- Need help figuring out the best way for you to get involved in the fight against Line 5? Reach out to Red Cliff's Environmental Justice Specialist! Contact info below.

For more information about any these projects, please contact our Environmental Justice Specialist at noah.saperstein@redcliff-nsn.gov or (715) 779 3650 ext. 4315

ATTENTION VISITORS:

To ensure public health and safety, the Red Cliff Environmental Department is limiting visitors to the office. If you need any of the following permits:

- Burn Permit
- Small Harvest Permit
- Wood Cutting Permit
- Environmental Change Permit
- Environmental Activities Permit



Please call 715-779-3650 (ext. 4310 or ext. 4314) or 715-209-3955 or email linda.nguyen@redcliff-nsn.gov . Permits will be issued over the phone or by email. Miigwech for your patience at this time.



When Burning is Allowed?



The following chart shows:

- When you need a burn permit
- What you can burn
- When you can burn

Permit Required	WHAT CAN BE BURNED	Low	Moderate	High	Very High	Extreme
YES	Grass, Brush, Wood	Burn		Do Not Burn		
NO	3x3x3' Ring for Cooking/Warming	Burn			Do Not Burn	
NO	3x3x3' Ring for Ceremonial	Burn				

Ceremonial fires will be allowed during high to extreme conditions, but shall be in compliance according to Red Cliff Tribal Council Resolution 4-16-2015 A, which includes having a fire keeper monitoring the fire at all times.

The current fire danger can be viewed at :

<http://dnr.wi.gov/topic/forestfire/restrictions.html>

Or call:

1-888-WIS-BURN (947-2876)

If you have any questions or would like a burn permit, please contact the

Red Cliff Environmental Department at 715-779-3650.

If you come across a fire that needs to be reported, please contact:

Red Cliff Tribal Wardens at 715-779-3732 or

Bayfield County Dispatch at 715-373-6120.

Environmental Department Permits FAQ

The following information is provided to answer general questions about *non-project related* permits issued by the Red Cliff Environmental Department. These permits do not grant authorization to trespass. Permit holders must retain their copy of the permit while engaging in the permitted activity. If there are any questions, please contact the Department at 715-779-3650 or visit our location at 37295 Community Road!

Burn Permit

A Burn Permit authorizes the permit holder to burn grass, brush, and untreated and unpainted wood if weather conditions do not pose a fire hazard and during designated times. Conditions are outlined on the permit upon issuance. You can find current fire conditions by visiting <https://dnr.wi.gov/topic/forestfire/restrictions.html> or by viewing the Smokey Bear signs, located outside the Environmental Department and at the intersection of Highway 13 and Blueberry Road.

Duration: This permit is valid for seven (7) days and is required at all times of the year.

Charge: There is no fee for this permit.

Small Harvest Permit

A Small Harvest Permit authorizes the permit holder to harvest designated amounts of the forest products listed below. Harvest of amounts less than those listed do not require a permit.

-Birch Bark for more than twenty (20) trees and in compliance with RCCL 11.7.3.

-Conifer Boughs in the amount of more than one hundred (100) pounds and in compliance with RCCL 11.7.5.

-Lodge Poles in the amount of more than sixty (60) trees and in compliance with RCCL 11.7.6.

-Ginseng harvest requires a permit for any amount, but not more than ten (10) plants may be harvested per season (September 1st – October 31st) and in compliance with RCCL 11.8.2.

-Leeks in any amount used for commercial purposes and in compliance with RCCL 11.8.3. Harvest of leeks for personal use does not require a permit.

Duration: This permit is valid until the end of the calendar year for which the permit was originally issued.

Charge: There is no fee for this permit.

Wood Cutting Permit

A Wood Cutting Permit authorizes the permit holder to collect standing dead trees for firewood on trust lands and harvest of living trees within designated woodcutting lots up to the amount of five (5) logger's cords. These zones are outlined on the permit. Any person seeking to cut more than permissible amounts must receive advance approval from the Red Cliff Tribal Council. This permit does not allow for sale of firewood or other wood products.

Duration: This permit is valid until the end of the calendar year for which the permit was originally issued.

Charge: There is no fee for this permit.



Tribal Conservation Department



The Red Cliff Tribal Conservation Department provides a variety of services to the community and its members including: Issuance of permits for all on and off reservation treaty based harvest activities. Provide regulatory information and educational resources to the public on treaty based harvest activities. Monitor tribally licensed commercial fishing and fish marketing activities through enforcement of Tribal Commercial Fishing regulations. Patrol, monitor and protect the Red Cliff Area, public and its resources through enforcement of trapping, hunting, fishing regulations, ATV/Snowmobile enforcement, trespass codes, animal control regulations, nuisance wildlife concerns and environmental regulations.



Mark Duffy is the Chief Warden. Mark oversees all aspects of the Conservation Department.



Lucas Cadotte is the Assistant Chief Warden in the Conservation Department. Lucas assists with all the day to day operations of the department. Lucas also works with the Environmental Department with enforcement of the tribes environmental regulations.



Zach Peterson is a Deputy Warden in the Conservation Department. One of Zach's main job duties is enforcing the Tribe's commercial fishing regulations.

ICE DANGER AND ICE SAFETY



Before going out onto a frozen lake, pond or river, it's important to take safety precautions to reduce the risk of falling through the ice. Knowing how to judge ice conditions will also help you make more informed decisions while fishing or recreating on frozen lakes.

Springtime can be an especially dangerous time to venture out on a frozen lake. The springtime's warming temperatures can create rapidly changing and unpredictable ice conditions. Remember there is no such thing as ice that is completely safe. Here are some important tips to follow before you decide to venture out.

Carefully Check Ice Conditions

- **Remember** you take a risk anytime you go out onto the ice.
- **Ice thickness is not consistent.** Water currents, particularly around narrow spots, bridges, inlets and outlets, are always suspect for thin ice.
- **When ice fishing**, it is always a good idea to drill test holes as you progress out onto a lake to help judge the thickness and character of the ice.
- **Beware of ice around partially submerged objects**, such as trees, logs brush, embankments or dam structures.
- **Don't judge ice strictly by appearance.**
- **Stay away from cracks, seams, pressure ridges, slushy areas and darker areas that signify thinner ice.**
- **Be aware of ice that forms at the edges of lakes.** Ice melts at the edges first in spring.

Carefully Check Ice Conditions

- **Never go out onto the ice alone.** A buddy should be able to rescue you or go for help if you fall through.
- **When changing locations on the ice always walk at least 10 yards apart from your buddy.** If one person falls through the ice, the other can go for help.
- **Before you leave shore**, inform someone of your destination and expected time of return.
- **Always wear a life jacket or personal flotation device (PFD)**, over an ordinary snowmobile suit or layered winter clothing. Life jackets can provide excellent flotation and protection from hypothermia. Specialized coats that float or dry suits are also highly recommended.
- **Assemble a personal safety kit**, no larger than the size of a man's wallet, and carry it on your body. The kit should include a lighter, waterproof matches, magnesium fire starter, pocketknife, compass and whistle.
- **In addition to the above safety equipment**, carry ice picks, a rope and cellular phone. These items could save your life.
- **Always keep your pet on a leash.** If a pet falls through the ice, do not attempt to rescue your pet. Go for help.

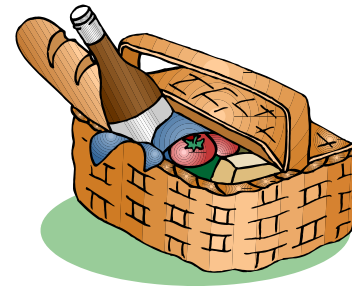
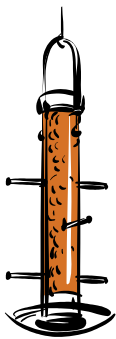
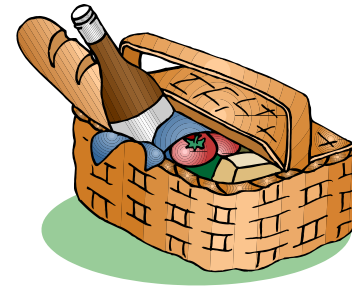
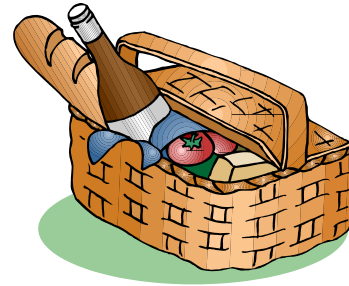
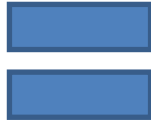
What to Do if You Fall Through the Ice

- If you **cannot** get out of the cold water by yourself, take the appropriate actions to extend your survival time while waiting to be rescued.
- **Stay calm.** Do not attempt to swim; swimming will cause our body to lose heat much faster than if you stay as still as possible.
- **Use a whistle to attract help. Act slowly and deliberately to conserve heat** and move slowly back to where you entered the water. Expect a progressive decrease in your strength and ability to move. Make the harder moves to attempt to get out of the beginning while you can.
- **If you are wearing a snowmobile helmet and your face is in the water**, remove the helmet as quickly as possible because it can fill with water and cause you to drown. Hold onto it to keep afloat.
- **Once on the ice, try to push yourself forward on your stomach** or roll on your side to keep the weight distributed over a greater surface area. Do not stand up until you have moved onto the ground or an area of solid ice.

If you would like more information on ice safety, contact the Red Cliff Wardens at 715-779-3732. If you have an ice emergency DIAL 911.



SPRING TIME IS HERE AND WE'LL
BE BACK IN RESIDENTIAL AREAS
SOON, **REMEMBER...**



DUMPSTERS, HOUSEHOLD GARBAGE AND BIRD FEEDERS WILL ATTRACT BEARS. TO AVOID ATTRACTING UNWANTED WILDLIFE CONSIDER TAKING DOWN BIRD FEEDERS IN THE SPRING AND EARLY SUMMER MONTHS. GO TO THE DUMP OFTEN. DO NOT STORE HOUSEHOLD GARBAGE OUTSIDE. IF YOU HAVE A DUMPSTER, A BEAR WILL FIND IT. MAKE SURE YOU SECURE THE LID USING BOARDS, STRAPS OR OTHER MEANS. CONSIDER REMOVING OR NOT USING YOUR DUMPSTER IN THE SPRING AND EARLY SUMMER OR UPDGRADING TO A BEAR PROOF DUMPSTER WITH A METAL LID. HOMEOWNERS/RENTERS WILL BE RESPONSIBLE FOR CLEANING UP ANY LITTER CAUSED BY NUISANCE WILDLIFE. IF YOU HAVE QUESTIONS OR WOULD LIKE MORE TIPS ON HOW TO AVOID CONTACT WITH NUISANCE WILDLIFE. CONTACT THE RED CLIFF WARDENS AT 715-779-3732.

ISKIGAMIZIGE-GIIZIS

Maple Sugar Moon

WAABIGWANII-GIIZIS

Flower Moon

ODE'IMINI-GIIZI

Time for Picking Strawberry Moon



Ziigwan Word Search

H D E R O L R F X M N J S M E Z T I B A
R H L E W T G P D D B I T G F Q H L D K
U N R V Q V N V V P A M Z R M S X Y Q G
U T A N I M I K I I K A A M E I U I P R
I S K I G A M I Z I G A N H L X F I U L
B T D Q M X M R O O M N Z G K U F K E L
G B J O K Q H X V T A I R C J J P A W L
G H J Y Z K H W J V B J Z C O A D K F A
M F V S U C S Z I A V H C G I L Y A C P
V S E M X F K I A Q D R A X L H F M T A
G I M W S S B W D K C A G A J U C O B X
W W I N P O S N I I B I N O O D O G V X
C F N K O F Y D V T I Q A M G T Z I P B
P K H D A H Y U H C C V Q N B N A I J Q
N M A J H G Y K E V J E K K I G B B T D
U A V G O V A T M W J L C M A T D O A C
N C J K A Z Q M C R H V Z B U N H K E Z
Y M C T J O D F O D R H S G S B C W Z N
C B T U I U L R M S F N R I J Z V V O D
D Q R Q U S M Y S B U J A Q P H M E H B

NAADOOBII

(S/HE GATHERS SAP)

ISKIGAMIZIGAN

(A sugar bush)

ANIT

(A FISH SPEAR)

JII MAN

(A CANOE; A BOAT)

OGAA

(A WALLEYE)

ADIKAMEG

(A WHITEFISH)

ODOONIBIINS

(A LAKE HERRING)

OMAGAKII

(A FROG)

OBIIGOMAKAKII

(A TOAD)

WAABIZHESHI

(A MARTEN)

ANIMIKI KAA

(THERE IS THUNDER)

BAASHKIKWA'AM

(S/HE MAKES THUNDER)



RED CLIFF BAND OF LAKE SUPERIOR CHIPPEWA

Treaty Natural Resources Division



- | | |
|-------------------------|--------------|
| Fisheries | 715-779-3750 |
| Environmental | 715-779-3650 |
| Natural Resources | 715-779-3795 |
| Transfer Station | 715-779-0171 |
| Conservation Wardens | 715-779-3732 |
| Mino Bimaadiziiwin Farm | 715-779-3782 |