



Miskwaagamiwi-zaaga'iganiig Aki-genawendamowaad

Red Lake Department of Natural Resources

Dagwaagin Spring 2024

IN THIS ISSUE

Ezhi-ayaag-gidakiiminaan
Environmental | 2

**Miskwaagamiwi-
zaaga'iganiig
Miti-gokewin**
Forestry | 3

Giigoonyikewin
Fisheries | 4

Ezhi-ganawenjigaadeg-Nibi
Water Resources | 6

Awesiinhya
Wildlife | 8

Ishkode
Fire | 10

Izhaadaa Agwajiing
Let's Go Outside | 12

RED LAKE DNR

15761 High School Drive
Red Lake, MN 56671

Phone: 218-679-3959

Fax: 218-679-2830

rldnr@redlakenation.org

Visit us on the web!

www.redlakednr.org



Like our Facebook Page
Red Lake DNR

Mazina'igan onji Odaakewigima Letter from Director

Boozhoo!

It's the beginning of spring and it feels like winter never came. Today is April 3rd and with fishing opener set to begin on May 4th, we will likely see open water by mid-April on Upper and Lower Red Lake; some of our small lakes are showing open water. Very little snow this winter could mean a long and busy fire season for our wildland firefighters, so please be responsible and wait until our land turns green before burning leaves and grass in your spring cleanup efforts. With a mild winter and temperature above normal, confused animals are coming out of their deep sleep early with bear (makwa) sightings in Redby in mid-March. Please give these animals that are coming out of hibernation or migrating back home respect and give them space so they can raise their young ones.

The Fisheries Program's netting assessments from 2023 are very encouraging and the walleye population remains very healthy. The walleye population has remained fairly stable since 2015 which has benefitted other fish species with yellow perch, goldeye, and black crappie becoming more common to catch. And, last year's harvest was the second highest since 2006!

The Wildlife Program was able to capture a young wolf (ma'iingan) this February and successfully deploy a collar on this wolf. These collars give the Wildlife Program important information about the wolf population. Current and upcoming surveys taking place include nest dragging to determine nesting success, and grouse drumming surveys for population assessments. On April 16th, we would like to hear your input at the Tribal CWD meeting being held at the Red Lake Tribal College. This meeting is open to all Red Lake Members who are 18+ years of age.

The Environmental and Air Quality Programs have been working to reduce pollution throughout Red Lake. One of the main

concerns facing Red Lake's Environmental Response Program (RLERP) is the problem of open dumping on Tribal Lands. Open/Illegal dumping and illegal burning of solid wastes and household hazardous wastes poses a serious, long lasting threat to the environment and the health of the community members. The Environmental Response Program has developed a phone app called Submit Environmental Concerns (SEC) that all tribal members can use to report areas of environmental contamination on our lands. This will be a very quick and easy way for all members to report their environmental concerns and get them assessed by our staff to improve the health and environment of the Red Lake Nation. The Air Program has new equipment that can monitor ground-level ozone which can be harmful to our health at high levels. A website is provided in the Environmental section of this newsletter if you are interested in learning more about ozone.

Our Water Resources Program will be very busy this spring. Stream monitoring has already taken place on rivers that influence the Lake, so if you see them on the side of the road, please slow down and move over. A partnership with the St. Croix Watershed Research Center to conduct algae studies has shown that levels are harmful during hot summer days. Please reach out to the DNR before using surface water for personal use.

Lastly, we will be holding Q&A events in each district to address your opinions regarding the operation of the dam at the outlet. Everyone is strongly encouraged to join in on these events to gather your input before the Army Corps of Engineers return for their public meetings. Please watch our DNR Facebook page for updates and announcements on when these meetings will occur.

Miigwetch!

Al Pemberton

Ezhi-ayaag-gidakiiminaan

Environmental

OZONE MONITORING

On March 1st the Air Program began monitoring for ground-level ozone, a pollutant that can be harmful to our health especially on hot sunny days when ozone can reach unhealthy levels. Ozone can cause the following health problems: coughing, throat irritation, and pain when taking a deep breath. It can also worsen bronchitis, emphysema, and asthma. Some of these effects have been found even in healthy people. However, people with asthma, children, older adults, and people who are active outdoors are most at risk. Children are at greatest risk from exposure because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high.

The AirNow website (www.airnow.gov) provides daily air quality reports and now includes the Red Lake ground-level ozone monitoring site. These reports use the Air Quality Index (AQI) to tell you how clean or polluted the air is in your area. You can use the AQI to see if you are likely to be affected by current air quality and to decide if there are actions you should take (keep children indoors for playtime, etc.).

EnviroFlash is a free service that can alert you via email when local air quality is a concern. You can sign up at www.enviroflash.info.

The ozone monitoring season will last until the end of October.



FREE RADON TEST KIT

Radon is an odorless, invisible gas that is released from the soil and can enter homes through cracks in the building's foundation – and it is the second leading cause of lung cancer. To protect yourself and your loved ones, test your home with a free radon test kit. The only way to know if it is in your home is to test.

If you would like to pick up a free test kit, please stop by the Red Lake DNR office. Right now is a great time to test your home!



LARCH BEETLE MITIGATION PROJECTS

Tamarack has been going through a severe larch beetle outbreak throughout northern Minnesota for the past 20 years. Much of the mature tamarack stands have seen extensive larch beetle mortality on the Diminished reservation. Mortality in tamarack stands can create regeneration problems for a future forest. This is not so pronounced in mixed stands with other species of swamp conifer still available to replace lost tamarack. However, the lack of a seed source and small changes in water levels pose a serious problem for natural regeneration on a pure tamarack stand.

In the summer of 2023 the Red Lake DNR Forestry Department wrote a proposal to the BIA to provide funding for a Larch Beetle Mitigation Project. The aim of this project was to boost natural regeneration in dead and dying tamarack that have been affected by larch beetle. This can be accomplished by harvesting dead tamarack off proposed project areas and salvaging the wood as firewood. Live trees were left on site to provide a seed source to promote natural regeneration.

Several sites were identified in the fall of 2023 and two different contractors performed the harvests in the winter of 2023/2024. The removal of the dead trees exposes parts of the forest floor to enhance regeneration from the remaining live trees, and also enables direct seeding to be used as a potential regeneration method if needed in the future.

Both mitigation projects cover a total of 79 treated acres. At this time, it may not be economically feasible to combat the larch beetle outbreak on a landscape level, we feel this is a step in the right direction to ensure that tamarack is a part of the future forest for all to enjoy.

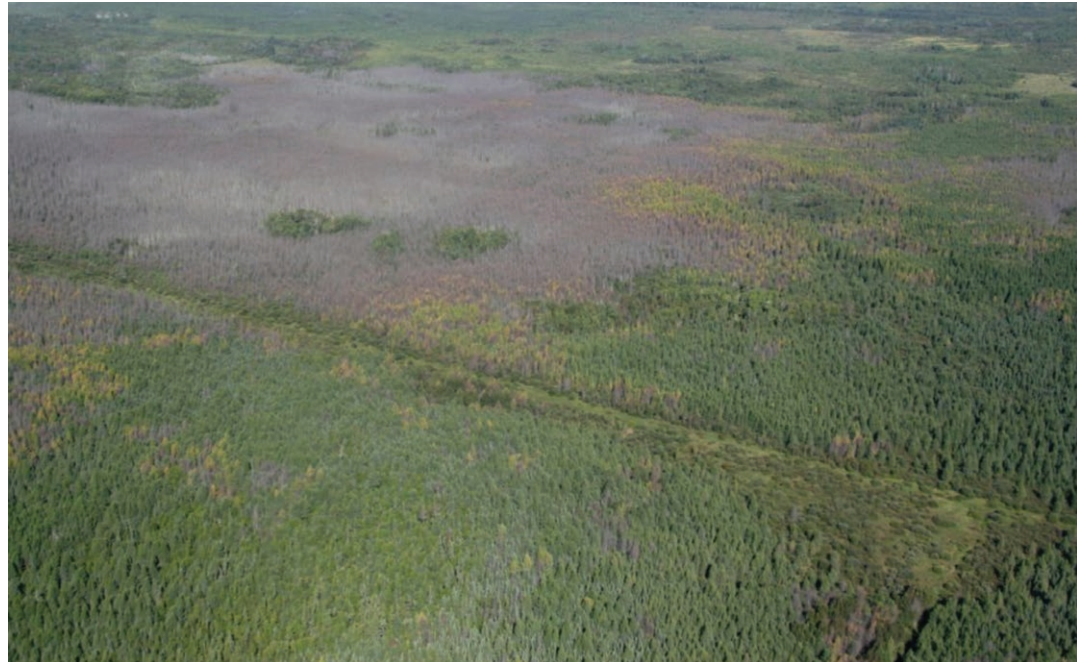


Figure 1. Past years dead tamarack with a ring of actively infected dead and dying tamarack indicated by the yellow and orange coloration



Figure 2. Dead tamarack with balsam fir regeneration

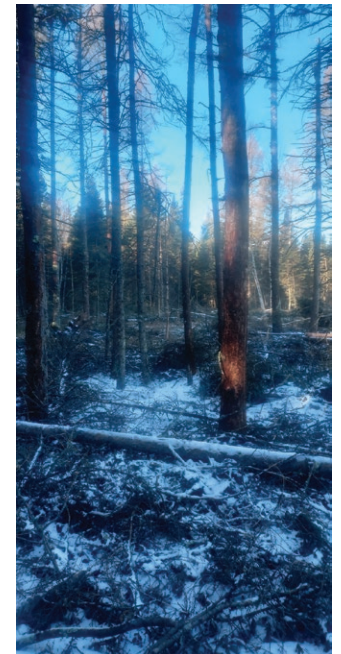


Figure 3. Treatment area with dead tree in foreground and live trees in background

RED LAKE WALLEYE POPULATION REMAINS STRONG FOR 2024

The 2023 walleye harvest on the reservation was approximately 793,740 pounds (Figure 1). This was the second highest harvest since reopening fishing in 2006. The average harvest between 2006 and 2023 is 550,000 pounds. The harvest of ice anglers was above average, because of the very late ice off, which led to impressive spring harvest of over 250,538 pounds on the reservation last year. The ice will likely go off earlier this year, but anglers have still had good success this winter. We had a perfect spring last year once the ice did go off. Warm temperatures and very little wind which help anglers catch fish in May and June. The net crews were able to supplement the walleye catch during the summer and fall and we had a very good harvest season last year. The walleye catch was split out 50% turned in by the anglers and 50% turned in by the net crews. In summary we harvested about 79% of the million pounds of walleye that we were targeting for the 2023 harvest season. Since reopening the fishery in 2006 we have harvested over 10 million pounds of walleye and the lake remains healthy. Fall test netting results were very encouraging this year and the walleye population remains very healthy (Figure 2.). The walleye population has remained relatively stable

since 2015. The 2019 year class is very strong and is currently supporting the commercial harvest. These fish are 15 to 16 inches in size and anglers were seeing a lot of these this winter. We also have several other strong year classes present and we are seeing many young fish being produced. The 2022 year classes was one of the strongest we have ever seen and these fish are in the 9 to 10 inch range. Many of these fish were being caught by anglers. The overall health of the Lake is coming back into balance since the collapse of the walleye fishery in the late 1990's. The other fish species are benefiting from this and include yellow perch, goldeye, and black crappie. We should see an increase in the walleye population in the next few years with the recruitment of these young fish to commercial catch.

Ice fishing was good this year but it has been a tough year because of ice conditions and the warm temperatures. The lack of cold weather caused the ice to remain unsafe until after the 1st of the year. Even after freeze up the temperatures remained warm and less than 2 feet of ice formed this year compared to normal years when the ice is usually over 3 feet thick by late February. The continued warm temperatures in early March forced us to restrict cars and trucks from going on the ice. Hopefully the temps will cool down and extend the ice season until the season closure on March 30th. Please be safe on the ice, as ice conditions can rapidly deteriorate in the spring.

Cooperation has been an important part of the successful management of this World Class Walleye fishery. Please protect, respect, and enjoy the Red Lake Walleye so future generations can enjoy this fishery as we have. Share your experience and take a kid fishing this year.

Good Luck and stay safe!

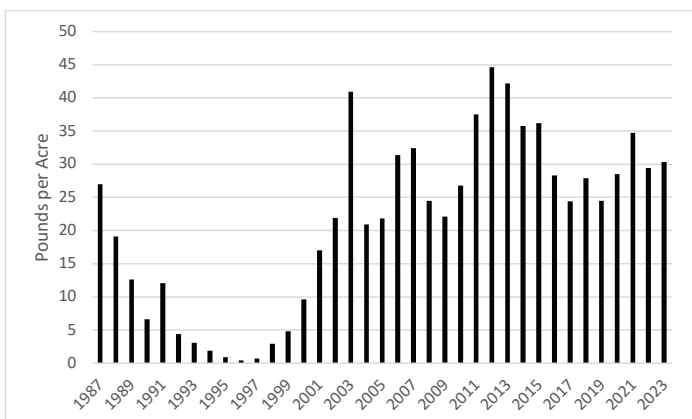


Figure 1. Annual walleye harvest from the Red Lake Reservation 2006-2023.

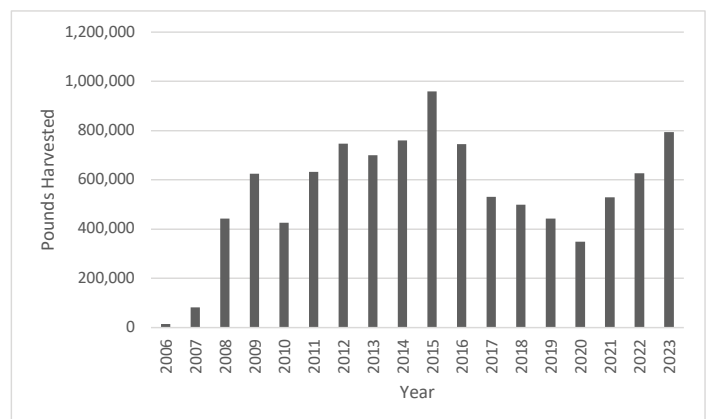


Figure 2. Estimated walleye biomass in the Red Lakes, 1987-2023.



RESERVATION WALLEYE FISHING REGULATIONS

Upper and Lower Red Lake and Tributaries

SEASON

- The summer fishing season will be Saturday May 4th, 2024 at 12:01 A.M.
- Ice fishing continues until the last Saturday in March.

BAG LIMIT

- Personal Use = 10 walleyes a day, 30 walleyes in possession.
- Commercial = 150 walleyes a day, must be turned into the Fisheries.

SIZE LIMIT

- Personal Use = Walleye smaller than 22 inches may be kept, walleyes between 22 and 28 inches must be released, and only one walleye over 28 inches may be kept daily.
- Commercial = Only walleyes between 13 and 22 inches will be accepted at the Fisheries. This may change based on markets by the Fisheries manager.
- There is no size limit on walleyes caught below the Red Lake Dam in the Red Lake River west to the reservation boundary, but bag limits still apply.

ADDITIONAL REGULATIONS

- Only Red Lake Band members may fish on the reservation waters of Upper and Lower Red Lake and its tributaries.
- The Red Lake River below the Dam does not close to fishing.
- Hook and Line is the only legal way of fishing.
- Fish must be transported to a residence before they are filleted.
- One proper fitting life vest is required for each person in any type of watercraft, including but not limited to boats, canoes, inflatables, jet skis and kayaks.



***Protect, Respect and Enjoy
the Red Lake Walleye Into the Future!***

Ezhi-Ganawenjigaadeg-Nibi

Water Resources

Figure 1. Typical algal bloom. Bloom pictured is from Lake of the Woods.

STUDYING HARMFUL ALGAL BLOOMS AT RED LAKE

Algae are a diverse group of primary producing organisms present in aquatic ecosystems. They produce around 70% of the oxygen in the atmosphere and are the foundation of both aquatic (freshwater) and marine (salt water) food webs. In short, they are necessary for all other life, from fish to deer to humans (all consumers) to survive. However, on occasion some species of algae can produce toxins that may be harmful to pets, wildlife, and even humans who drink the water containing them. Additionally, when algae reproduce in large numbers, commonly referred to as an algal bloom, they can cause additional environmental problems. These algal blooms typically turn lakes green and make them unsuitable for swimming (Figure 1). These conditions can also result in very low oxygen in the lake causing sensitive species of fish to die.

What makes an algal bloom a harmful algal bloom (HAB)?

If an algal bloom is severe enough to cause harm to humans or the environment, we typically refer to it as a harmful algal bloom or HAB. Sometimes this is caused by one species or multiple species of algae that produce toxins as a byproduct. Many species of algae can release toxins, but most are part of a group called cyanobacteria

or blue-green algae (Figure 2). The non-toxic variety of algal bloom can be caused by many more types of algae and all are characterized by a massive numbers of algae turning the water green, blue-green, orange, or yellow. Algal blooms will also often have a particularly earthy smell associated with them. This is caused by the decomposition of algae.

Cyanotoxins at Red Lake Reservation

Cyanobacteria are natural and have been part of the ecosystem here as long as there has been water in this area. However, until recent research was conducted in partnership with the St. Croix Watershed Research Station, we didn't have a clear understanding of toxin levels in Red Lake. In 2023, monitoring work was conducted to determine toxin levels in Upper and Lower Red Lake. Our findings indicate that during algal blooms in late summer, there are commonly two toxins found in the lake at levels that would be of concern if the lake were a drinking water source. While the concentrations remain far below the levels of concern for primary recreation (swimming, boating, fishing), we still want to keep a watchful eye on them in the future. The Water Resources Program is working to develop a rapid detection program so that in the event of an algal bloom, we can post warnings and keep the public informed. We are

also implementing an algal monitoring program to assess how the algal community changes through time. We don't know how things like climate change, land use changes, and zebra mussels will affect the algal community, but we want to stay one step ahead of HABs to protect tribal members and their relatives.

What can you do to avoid HABs?

A few things can help you avoid risk from HABs:

- If the water is green, orange, yellow, or any other kind of yuck, stay out!
- Absolutely do not let children or pets play in algal filled water. Children and pets are far more likely to ingest the water and are even more sensitive to algal toxins.

- Do let Red Lake DNR Water Resources know if you think you see a bloom. We will sample the water and assess it for toxins as well as post it to protect the community.
- Don't drink the water. Water that is safe to swim in is not necessarily safe to drink. Note that filtering and boiling can actually make the water more dangerous. It lyses (opens up) the algal cells and releases even more toxins.

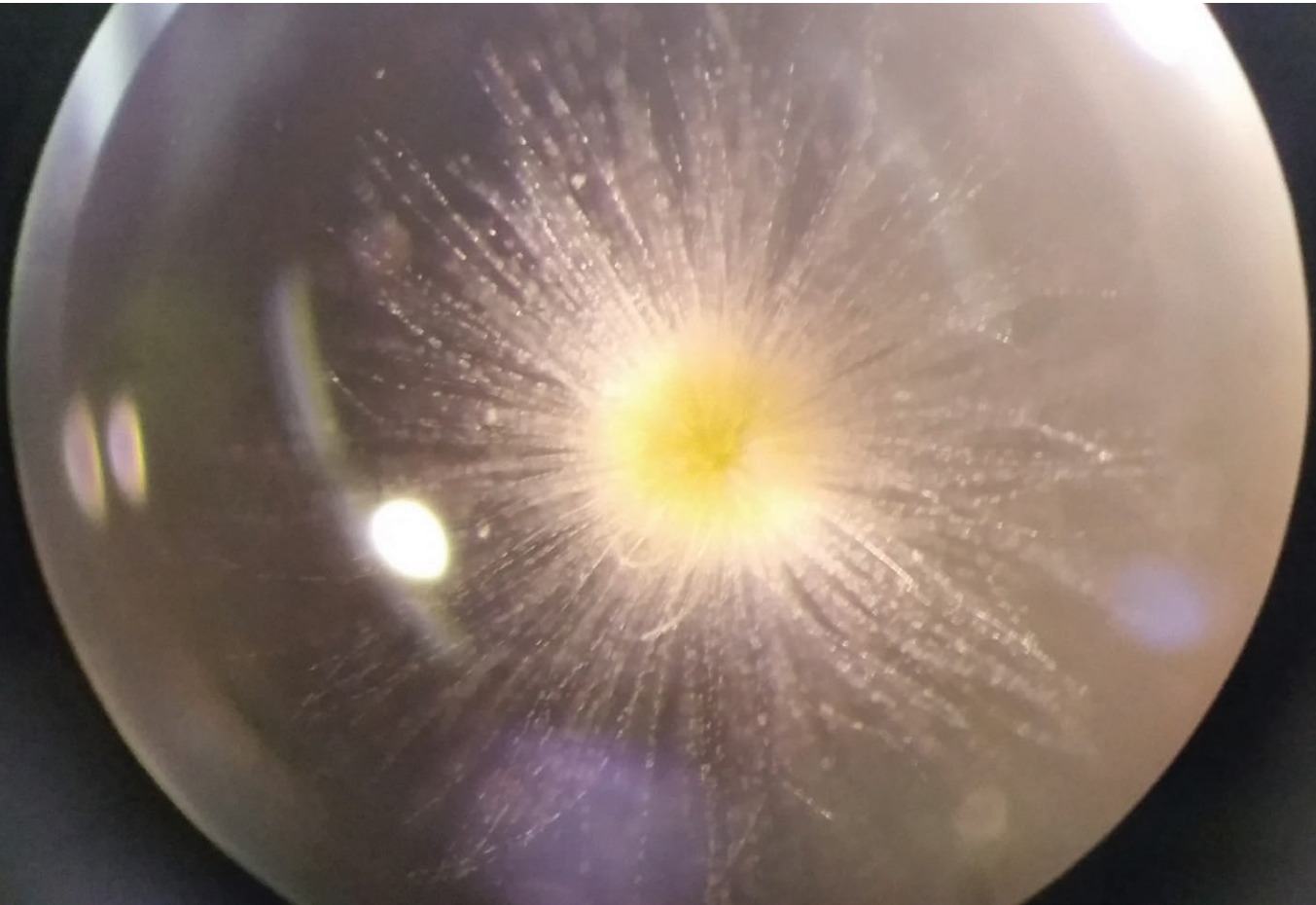


Figure 2. *Gloeotrichia*, a large colonial cyanobacteria. The image is from a cyanobacterial bloom on Emerald Lake that resulted in orange tinted soupy water.

GRAY WOLF INVENTORY AND MONITORING UPDATE

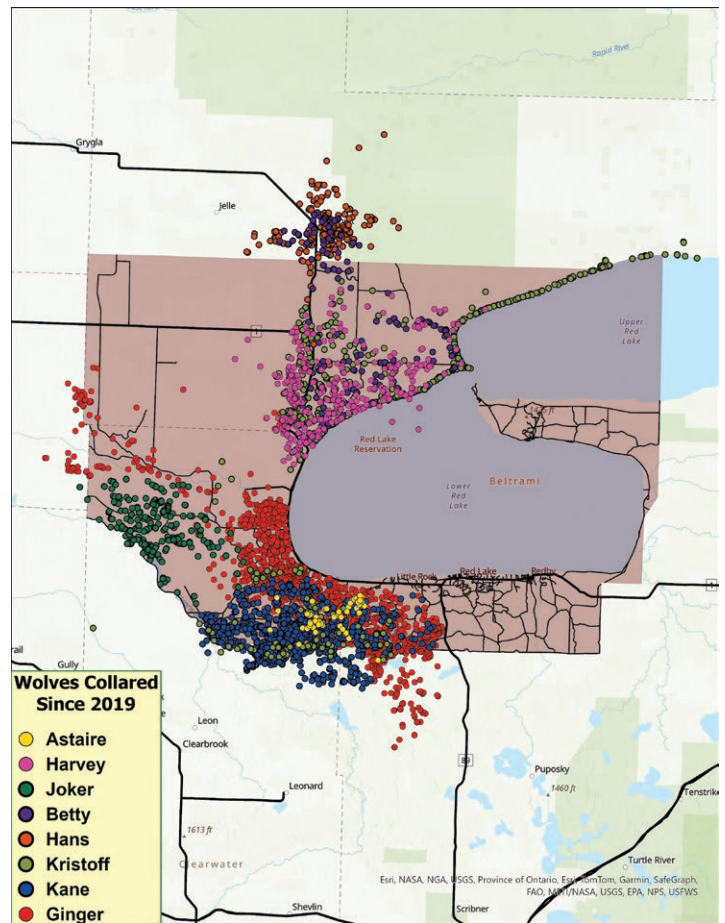
The Wildlife Program’s wolf collaring project, started in 2012, continues to provide valuable data about the wolves using Red Lake lands. The amount of time collars remain on individual wolves varied from a few weeks (on pups) up to almost three years. During that time, the collars were programmed to take a location every four hours. The location points helped to map pack territories and sizes, possible den sites, determine travel corridors, note dispersal and seasonal movements, and habitat use. During the winter months, the collars enabled researchers to locate individuals from the air to obtain pack counts.

To capture wolves, the wildlife program uses padded leg-hold traps placed along travel routes during the warm weather season, and by utilizing cable restraints placed on trails established as wolves come into bait stations during the winter season. All captures receive a yellow ear tag in the appropriate ear (right for females, left for males) so that, if captured on trail cameras, they can be easily identified.

Since 2012, 43 individuals in 12 pack areas have been collared on the Diminished Reservation (36), Ceded Lands (6), and the Northwest Angle (1), including 23 males and 20 females. Preliminary territory sizes vary with habitat, but wolves covered areas as small as 60 sq. mi. to over 4,000 sq. mi. with an average of about 250 sq. mi.

More recently, the focus of trapping efforts has been to try to get collared wolves in areas with no previously recorded locations. Although this led to fewer wolves being captured/collared, the ones that were captured were in new territories and the data collected has been invaluable.

In the last two years, we have been following a female (Ginger) originally collared in 2021 and then re-collared in 2022. She is believed to be a breeding female in her pack. The male (Kristoff) collared in 2022, relocated



from the Narrows pack area to the Butcher Knife area. He succumbed to impacts from malnutrition and poor body condition in January 2023.

In February, we deployed a collar on a young wolf. He is still moving around and looks to be doing very well. With the early spring and lack of snow, we will be ceasing our efforts to collar more wolves until the roads dry and we can begin summer trapping activities.



LEAVE WILDLIFE WILD



With spring weather here and wildlife getting more active, the Red Lake DNR – Wildlife Department is urging people to leave fawns, ducklings and other young wildlife alone. Also, try to stay away from known den or nesting sites as the parents may be nearby and will get stressed if humans get too close.

Leave wildlife alone for your own protection as well. Animals can and do carry many different diseases that can harm humans, including rabies and West Nile virus. They may be carrying deer ticks which transmit Lyme's Disease. Scared wildlife may also bite or scratch

defensively if they are picked up or cornered. Teeth and claws are very sharp and even superficial scratches and minor bites can become infected. Capturing young animals may severely injure them since their bones are fragile and still growing. In addition, many young animals die of stress and shock from being grabbed and handled. Remember that wild animals do not make good pets!

Don't believe the tale that babies touched by humans will be rejected by their parents. In almost all cases, the parents will continue to care for their young. However, leaving fawns, ducklings and other young wildlife alone still gives them their best chance of survival.

If you do find a wild animal that has obvious signs of illness or injury, such as: not being afraid or odd behavior, bleeding, panting, shivering or broken limbs, it may be in need of care. Please leave the animal where it is and contact the RL Wildlife Department at 679-3959.



CWD
CHRONIC WASTING DISEASE
COMMUNITY MEETING

LEARN AND TALK ABOUT CWD
WE WILL DISCUSS WHAT CWD IS, HOW IT IS
SPREAD AND HOW YOU CAN HELP PROTECT
OUR DEER HERD
GIVE YOUR OPINION ON OUR FUTURE CWD
MANAGEMENT PLAN

TUES, APRIL 16, 2024 | NOON
RED LAKE TRIBAL COLLEGE

ALL ADULTS ARE WELCOME!

CONTACT RLDNR WILDLIFE WITH QUESTIONS
218 679 1436

PREPARE FOR INCREASED BEAR ACTIVITY

Bears are coming out of their dens and will be hungry. They may be more active around homes and communities until natural foods are available. Bears become habituated to areas and homes that are constant food sources for them. They may become aggressive and have to be relocated or in some circumstances they may need to be put down.

Some precautions you can take:

- Clean up any garbage around your home and vehicles.
- Do not leave dog food outside.
- Put your bird feeders away until natural crops become available.
- Do not leave garbage on the ground by the compactors.

Please Contact Red Lake Conservation at 679-3313 with any questions or concerns.



SPRING WILDFIRE SEASON ONE OF THE EARLIEST ON RECORD

A very mild winter with little snow cover is leading to an early Spring Wildfire Season. The lack of snow this winter along with very mild temperatures bring the potential for very high to extreme fire conditions this spring. The fuels such as grass, leaves and downed tree branches are extremely dry for early March. Already the Red Lake Wildfire Program firefighters have responded to several fires in late February and early March. The fuels program has also started their RX burns earlier than usual. The goal of these prescribed burns is to ultimately lower the risk of more dangerous fires by reducing fuel loads.

The current forecast predicts below normal precipitation with above normal temperatures. If current dry weather patterns continue, the spring Wildfire Season will be a busy one for our firefighters. These conditions can lead to fires that start easily and can become large and dangerous.

The Red Lake Wildfire program is responsible for protecting reservation lands from wildfires that threaten the forest resource on the Red Lake Reservation. The Red

Lake Wildland Firefighters are currently preparing for the spring wildfire season with refresher training, new firefighter training and preparing equipment.

The Red Lake Wildfire Prevention Program urges all tribal members to be careful with their use of fire this spring. Please continue to come into the office and obtain a burning permit before doing any burning. This spring there may be days when the fire conditions will not allow for any burning. The Wildfire Prevention program will make announcements on those days for restricted burning. If fire danger reaches very high or extreme conditions, permits will not be issued.

We ask the Red Lake Tribal members to help the firefighters this spring by being careful with fire and remember “Only you can prevent wildfires”.

The Fire Center hosted a basic wildland firefighter class (S-130/S-190/L-180), March 18th-22nd. Pictured are the student’s that completed and received certificates for the course.





HWY 1 RX Burn 2/23/24 – Fuels Management Program



**PLEASE HELP US
PREVENT
WILD FIRES**





PRST STD
US POSTAGE
PAID
BEMIDJI, MN
PERMIT NO. 30

RED LAKE DNR
15761 High School Drive
Red Lake, MN 56671
www.redlakednr.org

POSTAL CUSTOMER
ECRWSS EDDM

Izhaadaa Agwajiing

Let's Go Outside

Boozhoo relatives! As our new trailhead building is nearing completion we will be opening it for public use later this spring into the summer. Our goal with the Izhaadaa Agwajiing program is to provide outdoor recreational opportunities to the community and their families. We are continually expanding what we offer, for this summer we will have operating hours to be announced for the new building. Community members will have access to mountain bikes,

archery equipment, canoes and kayaks and fishing gear. We are also continually expanding our trail system connected to the building to provide a safe and scenic hiking experience for families who want to get out and enjoy the natural beauty of our homeland. We will also be announcing more upcoming events for the community via our Facebook page. Stay tuned for updates as we develop our program, we look forward to seeing all of our relatives out on the trails this summer!

