In this Issue...

Employee of the Month 2
Anishinaabemowin 3
Non-native Phragmites Removal 4
Mine Update: Back Forty Faces Roadblock 5
Wildlife Spotlight - Sharp-tailed Grouse 6
Youth Wolf Event 11
Forestry Concerns - Oak Wilt Disease 12
Mino Bimaadiziwin Produce Boxes 13
High Tunnel Update 14
Film Screening at Legendary Waters 15
Wildlife Spotlight - Elk Update 16
ECC Sugarbush 19
Staff Biographies and Program Updates 20
Green Cleaning this Spring 30
Stormwater Runoff 32
Spearfishing 33
ATV Safety Tips and Laws 35
Springtime Bear Alert 36
Clayton Creek Sign / Spring Clean-Up 37
Annual Planting Celebration 38
Earth Day Community Clean-Up 39
Springtime Word Search 40
Employee of the Month
An office is only as good as its staff, and we at the Treaty Natural Resources Division think we have some of the best. The following team members were nominated for Employee of the Month in the last three months by their fellow co-workers. By: Chad Abel

January Employee of the Month
Lance Bresette, Fish Technician
We picked up Lance off of free agency a couple of years back, and he has been a team player of tremendous value ever since. He is sometimes nicknamed “Farmer Lance” for the amount of time he has lent to the tribal farm, and he has devoted many hours assisting with hatchery work as well. Recently he assumed a lead role in being the point of contact for recruitment, training, and reimbursements in our fledgling wildland fire program. He was nominated for EOTM in January for his work in getting the Division’s annual report submitted to BIA, and for all the other reasons mentioned above.

February Employee of the Month
Zach Peterson, Conservation Warden
Zach has been brought up through the Conservation Department. The Department sponsored his training to become a certified law enforcement officer, and since that time he has been mentored by Lucas, Mark Duffy and for a time by Kyle Cadotte as well. These investments have payed off well, and Zach has come into his own as the Conservation Law Enforcement Officer for the Division. He was nominated by his co-workers for his willingness to patrol on the ice during all the worst kinds of winter weather, and for the substantial growth he has shown in his career. Congrats to you Zach and keep up the good work!

March Employee of the Month
Reed Saam, Biological Technician
We were excited to get a guy like Reed with his education and background into our Fisheries Department a couple of years ago. Little did we know we were also getting an amiable guy with a very even disposition who fits in well with the other personalities in the office. He has done an excellent job as a role player, filling in for other staff moved on with their careers and in other capacities as needs have arisen. He was nominated for these contributions and for writing his first grant proposal, a research project on juvenile whitefish, in March.
ZIIGWAN
It is Spring
ISKIGAMIZIGE-GIIZIS
Maile Sugar Moon
WAABIGWANII-GIIZIS
Flower Moon
ODE’IMINI-GIIZIS
Time for Picking Strawberry Moon

AABAWAASIGE
The sun warms things up

BAASHKAABIGWANII
It blossoms, blooms

NINGIDE
It melts, thaws

INAABIWIN
Lightning

WAANZHIBIIYAA
It is a puddle

OZHIGA’IGE
s/he taps trees

AABAWAA
It is warm weather

ANIMIKIIKAA
There is thunder

Photo credit: Reed Saam
The Red Cliff Band of Lake Superior Chippewa is leading a project in cooperation with Strand Associates, the Greater Bayfield area, and the City of Washburn, to eliminate three large seed sources of non-native Phragmites australis subsp. australis (common reed) in Bayfield County, WI. The project includes removal of non-native Phragmites from constructed reed beds at the Red Cliff, Greater Bayfield, and Washburn wastewater treatment facilities (WWTF) where the reed is used to dewater biosolids. The less aggressive native subspecies (Phragmites australis subsp. americanus) will replace the non-native strain in the reed beds. The project, which runs from May through September 2018, affords protection to approximately 14,000 acres of coastal wetlands along with countless inland wetlands in the Chequamegon Bay region of Lake Superior.

The effort to eradicate non-native Phragmites began in earnest during 2013, when GLIFWC and Red Cliff Treaty Natural Resources staff discovered small populations of non-native Phragmites on the Bayfield Peninsula landscape. Upon closer inspection, it became apparent that nearly all populations were located within one mile of each WWTF located in Red Cliff, Bayfield, and Washburn. A 2016 genetic study led by Red Cliff confirmed the small external populations originated from seed and showed some genetic similarity to the reed bed Phragmites.

When the original reed bed installations occurred during the late 1990’s and early 2000’s, there was a widespread notion that Phragmites dispersal was almost exclusively through vegetative means such as rhizomes or stolons rather than by seed. Since the concrete reed beds entirely contain the rhizomes, there was no way for the Phragmites to escape from the facility. However, recent molecular studies including our genetic study of the Chequamegon Bay populations, shows that non-native Phragmites uses seed as its predominant dispersal mechanism. As a result, we now know the three large reed bed populations currently located at the WWTFs will greatly contribute to the spread of non-native Phragmites in the Chequamegon Bay region. Removing the current reed bed populations will eliminate the only known local seed source of non-native Phragmites and offer significant protection to regional ecosystems.
The controversial Back Forty mine is an 83-acre open pit sulfide mine from which copper, zinc, and gold would be mined. The mine site is located only 150 feet from the north bank of the Menominee River, which runs between Michigan and Wisconsin. The location of the proposed mine as well as its proximity to the Menominee River has prompted concerns from the Menominee Indian Tribe of Wisconsin as well as surrounding communities, who have been fighting the permitting process for years. Though not within current reservation boundaries (the Menominee reservation is in Wisconsin), the land is of great cultural and historical relevance to the Menominee Tribe, as it includes sacred burial grounds, raised garden, and ceremonial sites hundreds of years old.

On January 22nd, two months before the EPA sent its objections to MDEQ, the Menominee Tribe filed a lawsuit against both the US Army Corps of Engineers and the EPA. They argue that because the Menominee River runs the border between two states, the river and its wetlands are interstate waters and the state of Michigan does not have the sole jurisdiction to issue a wetlands permit under the Clean Water Act.

The mining company, Canadian-based Aquila Resources, has already been approved for three permits, each issued by the MDEQ. These are the metallic mineral mining permit, the air permit, and the National Pollutant Discharge Elimination System (NPDES) permit. A wetlands permit is the last permit they require, and is the one that the EPA has expressed concern about. In their letter, EPA cited multiple inadequacies, including a lack of information about how historical and cultural resources will be protected, complete wetland mitigation details, details on discharge and water quality, and project and site layout descriptions. The letter states, “The applicant has not provided sufficient information to support the assertion that the proposed project would likely not impact potentially eligible or eligible resources. Historical and cultural resources should be addressed for the entire expanded project site.”

Now, Aquila Resources has 90 days to work with MDEQ and respond to the EPA. If they do not settle the issue, then the US Army Corps of Engineers will assume responsibility for the wetland permit, removing that power from the state of Michigan.

Wildlife Spotlight: Sharp-tailed Grouse

Red Cliff Wildlife & Forestry

Sharp-tailed Grouse Restoration in the Moquah Barrens

The sharp-tailed grouse, Aagask, (Tympanuchus phasianellus campestris) is one of ten species of North American grouse. Sharp-tails, also known as firebirds, historically inhabited a broad range, covering much of central and northern North America. They occupied expansive habitat types that are dominated by grasses and shrubs. Wisconsin’s sharp tailed grouse population has been in a state of decline for several decades. Currently there are only nine isolated populations known in Wisconsin, primarily due to habitat loss and fragmentation (Fandel and Hull 2011, Wise 1986). Over the last two years, the Red Cliff Band of Lake Superior Chippewa has been involved in a multi-state, multi-agency project led by the United States Forest Service-Washburn Ranger District, to translocate Sharp-Tailed Grouse to Moquah Barrens Management Area. In addition, Red Cliff has been and will continue to be involved with habitat restoration efforts in the Moquah Barrens Management Area. This includes brushing, timber harvest and prescribed fire. The Moquah Barrens Management Area is located on the Chequamegon-Nicolet National Forest and is the northernmost Pine Barrens within the Northwest Sands Corridor, which stretches from Bayfield County to Burnett County in northwestern Wisconsin. (Maps: WDNR)
Sharp-tailed Grouse—Restoration

Habitat Loss and Fragmentation

Over the last 200 years, there have been a myriad of landscape and land use changes throughout sharp-tailed grouse habitat. Sharp-tailed grouse habitat changes include the loss of native barrens, savanna, as well as grassland habitats, the shift to intensive agricultural practices, fire suppression, major changes in forest land ownership and management, and increased human development. Major changes in forest management have also resulted in fragmented habitat, with small harvest regeneration areas. These smaller blocks of habitat are not considered big enough to sustain populations of sharp-tails. (WDNR)

Did You Know?

- A lek is where sharp-tailed grouse display courtship behaviors. During the spring the males put on dancing displays in hopes of impressing the females. These leks are typically attended from March through July, with peak attendance occurring in mid-late April through early May.
- Estimates of habitat loss indicate that less than 1% of the original 2.3 million acres of Wisconsin pine barrens and oak savanna remains in this state.
- Less than 1% of native grasslands remain, and approximately 3% of moderate to high quality sedge meadow habitat remain.
- Anywhere from two to forty males can be seen displaying on a lek at a time!
- Having “stepping stones” of open habitat around 1,280 acres in size will improve sharp-tail movement between large tracts of habitat that act as core areas. Landowners can help create this matrix through consecutive timber harvesting and regeneration. (WDNR)

Above: Sharp-Tailed Grouse Habitat Loss from 1850-2000
This collaborative effort won the US Forest Service Eastern Region/Northeastern Area Honor Award for the “Sharp-tailed Grouse Restoration Project” in the “Sustaining Forests and Grasslands” category. This category recognizes Forest Service individuals, work units, partnerships, or groups that have demonstrated major, climate-smart achievements in restoring, sustaining, and/or enhancing the Nation’s forests and grasslands. In order to qualify, the nominated achievement must have demonstrated actions that resulted in effective and measurable outcomes that reduce climate change vulnerability, prevent or mitigate disturbance from fire, invasive species, insects, or disease outbreaks, extreme weather events and/or restore the resiliency of our forest and grassland ecosystems. Partners for the project include:

United States Forest Service
Red Cliff Band of Lake Superior Chippewa
Bad River Band of Lake Superior Chippewa
Wisconsin Sharp-Tailed Grouse Society Volunteers
Minnesota Sharp-Tailed Grouse Society Volunteers
Great Lakes Indian Fish and Wildlife Commission

Year One—2016 Overview
- This was the pilot year of the project, with a total of 14 trapping days.
- 101 birds were trapped, of which 29 received numbered white leg bands and were brought to WI (13 females and 16 males).
- 5 males were fitted with radio-transmitters, 3 of which were found dead (likely due to predation) later in the season.
- One collared male returned to his release site/lek in 2017.
- There was no capture or transfer mortality.
- All birds passed veterinary inspection prior to transport to Wisconsin.
- Habitat work was conducted by USFS and Bad River in Moquah Barrens.

Year Two—2017 Overview
- This was the second year of the project, with 10 total trapping days.
- Trapping occurred on fifteen approved leks/dancing grounds.
- Most leks are on private land.
- Five Red Cliff staff participated in trapping efforts with 2-3 trappers per site.
- Over 200 birds were trapped, but only 67 (22 females and 45 males) received leg bands and were translocated.
- All birds passed a veterinary inspection, and there were no capture/transfer mortalities.
- 10 birds (5 males and 5 females) received radio collars.
- Longest distance traveled by a translocated bird was about 17-20 miles.
- A nest of 10 eggs from a translocated female was located 16 miles from her release site.
- All of the translocated birds with numbered leg bands had feathers collected for genetics.
The third and final round of trapping is set to take place this April and May. Trapping will again be concentrated in Northern Minnesota, mainly in Karlstad, Roseau and Baudette. Trapping was more efficient in Year Two of the project and will likely get better in Year Three with an increased amount of experienced trappers and the inclusion of remote triggered traps. The trapping team is limited as to the amount of birds that can be trapped off of each lek, and the leks typically have more males than females. In addition, the males have proven much easier to trap and many males end up being released. These new traps should help target females and avoid repeatedly trapping males that are ineligible for translocation.

Post-Release Monitoring of Collared and Banded Sharp-tails

The number of radio-collared birds will be increased in 2018. The plan is for 20 birds (10 males and 10 females) to be fitted for transmitters prior to release, in an effort to help determine survival, locate nest sites and document new leks and dispersal corridors. Through a cooperative agreement, Red Cliff hired a seasonal wildlife technician in 2017, who was stationed at the USFS office in Washburn, to monitor radio-collared birds post-release via telemetry. Red Cliff will hire a wildlife technician to fill this role again in 2018. The technician will be tasked with locating radio collared birds from all 3 trapping seasons, in addition to searching for nests and documenting lek attendance.

Did You Know?

- Sharp-tailed grouse have many natural predators including humans, red foxes, coyotes, red-tailed hawks, northern goshawks, peregrine falcons, great horned owls, and northern harriers. They are even at risk of nest raiding from skunks, ground squirrels, raccoons, American crows, common ravens and weasels.
- Electronic call boxes are used to help attract birds to a lek.
- Traps used include bow net, as well as box traps with fence leads set up in various configurations.

Plans and Goals for 2018

- Trap and translocate 102 birds (65 females and 37 males).
- Continue collecting genetic samples from birds prior to translocation.
- Collect feather samples from leks in the Moquah Barrens to determine if native and translocated birds are breeding.
- Increased participation by Red Cliff staff in trapping, transporting and post-release monitoring.
- Monitor historic leks and search for new leks to see if translocation leads to these sites being occupied.
- Incorporate DNR telemetry flights to help monitor dispersal beyond the Moquah Barrens.

*For more information, contact Red Cliff Wildlife Biologist Jeremy St.Arnold 715-779-3795
Grouse Identification
Sharp-tailed Grouse vs. Ruffed Grouse

Due to the rarity of sharp-tailed grouse in this area, identification can be difficult, as can distinguishing between its relative, the more common ruffed grouse. Below is a guide from the Cornell Lab of Ornithology to help with Identification. Educational signs are posted in the Moquah Barrens to help avoid misidentification for hunters and wildlife viewers.

Sharp-tailed Grouse

- A social grouse that sometimes perches in trees.
- V-shaped marks on belly.
- Normally has a short crest on the head, but can be slicked down to show a rounded profile.
- White facial stripes behind eye and along cheek.
- Wings are rather long and rounded in flight, with a short pointed tail, that is white at the base.
- About the size of a crow, weighing about 1.3-2.2 lbs.
- Occur in a mix of prairie and open woodland.
- A female may visit a lek up to 10 or more times, and may sample multiple leks.

Ruffed Grouse

- Ruffed grouse can be found foraging on the forest floor for seeds and insects.
- Displaying males make a deep drumming sound by beating their wings while standing on a log.
- In spring, you can often see lone birds.
- In summer, look for females with broods of chicks.
- In winter, ruffed grouse like to form flocks and often eat buds of deciduous trees.
- Ruffed grouse usually occupy mixed deciduous and coniferous forest interiors with scattered clearings.
- Ruffed grouse also live along forested streams and in areas that are regenerating from fire or logging.
- Crow sized, but typically smaller than sharp-tailed grouse, average around 1-1.5 lbs.
On February 9th, 2018, Red Cliff Wildlife and Forestry Staff participated in a youth event with Kathy Noteboom’s 5th Grade Class. The event began with a presentation in the classroom about local wolf packs, wolf biology and ecology, and tracking and monitoring methods. Then students got to go into the field and try out the tracking methods themselves. Students got hands-on experience with radio telemetry and although they weren’t able to locate the collared wolf from the local pack, they played a find-the-collar game to simulate tracking collared wild animals. Students also learned to identify tracks in the snow of various local wildlife including: wolves, white-tailed deer, squirrels, rabbits, foxes, and coyotes.
Oak Wilt Disease threatens oak trees in this area.

Watch the WI DNR’s new video about this devastating fungal disease at:

dnr.wi.gov/

Keyword: “oak wilt”

Oak wilt kills trees in the red oak group (red, black and northern pin oaks), and also harms trees in the white oak group (white, bur and swamp white oaks).

Help protect oak trees from oak wilt—don’t prune or otherwise “wound” oaks from April through July.

WDNR Flyer

Oak wilt has been found in the Town of Lenroot, just a few miles south of the Bayfield County line near Cable. Please contact Red Cliff Wildlife and Forestry if you have questions, comments or concerns; or especially if you spot any oak trees that look like they may have oak wilt disease: Jeremy.st.arnold@redcliff-nsn.gov 715-779-3795
Mino Bimaadiziiwin Offers Produce Boxes to Low-Income Red Cliff Families

Mino Bimaadiziiwin Farm of Red Cliff has been planning for a productive spring season. While there’s still two feet of snow in parts of the garden, the first spring starts are growing inside, and the crop plan is getting its finishing touches for the upcoming May planting. One of the big things we’re planning for the growing season is our CSA produce share.

Last year’s Community Supported Agriculture (CSA) produce share boxes were a big hit for the participants who signed up. Each week, the participants would show up to a pre-determined location and get a full box of farm veggies and fruits. For example, on August 31st the boxes contained cherry tomatoes, potatoes, zucchini, green beans, hominy corn, apples, wild blackberries, green peppers, peppermint for tea, and slicer tomatoes. Reviews of this program came back quite positive and we’re excited to expand it from 12 shares in 2017 to 25 shares for 2018.

Mino Bimaadiziiwin in cooperation with the Good Health and Wellness in Indian Country (GHWIC) is offering 13 additional shares geared towards low income Red Cliff families. These shares will run weekly from July to October and include a rotating selection of produce grown right here in Red Cliff. Each week’s offerings will vary depending on what’s in season: strawberries in July, tomatoes in August, and apples and pears in the fall months. Most of the costs will be covered by GHWIC with the only costs to low income participants being a set of only two $25 payments, in exchange for 16 weeks of produce. That is only $3.13/week for an estimated $20-25 worth of produce/week or a total savings of $310 over the 16 weeks!

Criteria for signing up for this reduced-cost produce are simple:

- Families must have at least one child of school age or younger
- At least one parent or guardian in family must be a tribal member
- Families must be eligible for food share (food stamps) and/or food distribution (comods)

Any interested families can call the farm at 715-779-3782 or email nathanael.secor@redcliff-nsn.gov to sign up or for further information. If there is more interest than available slots, then families will be selected via lottery and others will go on waitlist. Deadline to sign up is Friday, May 18th at 4:30pm. Lottery selection will occur the following day during the Annual Planting Celebration.
Over the past few weeks, TNR staff have been working to construct a new high tunnel at the Red Cliff farm. This 30 x 70 Zimmerman high tunnel will greatly increase the productive space earlier in the spring and later into the fall. This tunnel will be used to grow heat-loving crops such as tomatoes, cucumbers, and basil through the summer months as well as cool season lettuce and spinach in the spring and fall. Construction started with assembling the trusses (bottom right photo), then installing them onto the sidewall posts (bottom left). Now, the final pieces are being added, and soon the structure will be covered in plastic and ready for planting. In the seasons ahead the staff plans on equipping this tunnel with gutters and catchment tanks so they can gravity feed the crops with rainwater.
On Thursday, March 28th, the Environmental Department hosted a screening of the film “First Daughter and the Black Snake” at the Legendary Waters Event Center. The film follows Winona LaDuke, her family, and community as they fight pipelines that threaten sacred wild rice waters. It was a packed room, with over 100 in attendance. After the film screening, Winona along with film director Keri Pickett answered questions and provided an update about the current resistance against Enbridge’s Line 3 which is proposed to transport tar sands from Alberta, Canada to Superior, Wisconsin. Miigwech to all who attended!

For more information on Line 3 or other pipelines in ceded territories, contact Alissa Stutte at the Environmental Department, alissa.stutte@redcliff-nsn.gov or (715) 779-3650
March 13th, 2018: The Wisconsin DNR announced that it will hold the state's first managed elk hunt this fall, after more than 22 years of elk reintroduction efforts. The hunt will take place in the Clam Lake Elk Range only. The season will be open from October 13th-November 11th and December 13-21st. Only Wisconsin residents are eligible to purchase an elk tag. The application fee is $10, the permit is $49, and applications will be available starting May 1 through the Go WILD system at GoWild.wi.gov. Before receiving a carcass tag, all drawing winners will be required to complete an elk hunter education course prior to the start of the season. The elk harvest quota of 10 bulls set for 2018 was determined by Wisconsin’s Elk Advisory Committee, which includes WDNR biologists and researchers, Rocky Mountain Elk Foundation; Wisconsin Wildlife Federation; Jackson County Forest and Parks; Wisconsin Conservation Congress; U.S. Forest Service; Wisconsin Bowhunters Association; Great Lakes Indian Fish & Wildlife Commission; U.W. Stevens Point, and Ho-Chunk Nation. Out of the 10 tags that will be issued, 5 will go to the 6 Chippewa Tribes of Wisconsin. It is not known at this time how the Tribal tags will be awarded.

Elk Hunt Notes
- Season will be open from October 13 - November 11 and December 13-21, 2018.
- Only bull elk may be harvested.
- Areas where Kentucky elk were released between 2015-2017 will be off limits to hunting until the population increases to levels identified in the elk management plan.;
- 4 tags will be issued through a random drawing.
- 1 tag will be awarded via a raffle by the Rocky Mountain Elk Foundation, which has contributed 1.6 million dollars to the elk restoration effort. Those interested in purchasing raffle tickets may do so at RMEF.org/Wisconsin.
- Harvest tags may be transferred to a Wisconsin resident youth hunter 17 years or younger.
- Additional information for the elk hunt will be available in the 2018 elk hunting regulations brochure.

Contact information
For information on elk, contact:
Kevin Wallenfang
Deer and Elk Ecologist
Bureau of Wildlife Management
608-261-7589
Background & Current Elk Population

Elk were extirpated from Wisconsin in the late 1800’s due to overhunting and habitat loss. In the 1930's there was an attempt to bring elk back to the state, but it was ultimately deemed a failure when the last four of those elk were reportedly killed in 1948. During February 1995, 25 elk were trapped in Michigan, held in a quarantine facility, and then released in the Chequamegon-Nicolet National Forest near Clam Lake on May 17, 1995. The long term goal is 1,400 elk for the Clam Lake Range and 390 for the Black River Range. As of spring 2017, approximately 190 elk made up the main herd near Clam Lake and a second smaller herd located near Butternut. Although they currently occupy approximately 90 square miles of the designated elk range, the herd has grown at an average rate of 13 percent annually. However, growth rates have varied from as high as 30 percent to as low as negative-16 percent since 1995. Primary causes of mortality include predation by wolves and bear and vehicle collisions. Primary habitat used by the elk consists of aspen and pine forests interspersed with forest openings, lowland conifers and water bodies. (WDNR)

2018 Elk Calf Searches
Volunteers have the opportunity to work alongside DNR staff to search for calves so biologists can collar, take measurements, and track them throughout life to help inform future elk management. Volunteers must be fit and able to travel through dense wooded cover, in remote areas of the northern or western Wisconsin forests. Days available will be between May 19th and June 24th. Days fill up fast, so don’t delay. Those who wish to volunteer for the central elk herd near Black River Falls, contact Steve Meurett (steve.meurett@wisconsin.gov). If you’d prefer to work closer to home in the northwoods, contact Josh Spiegel or Laine Stowell (Laine.Stowell@wisconsin.gov).

Elk Reintroduction: Recent & Current Efforts

- **2017**- An estimated 35 calves were born to resident elk in the spring. Including recruitment, released KY elk and factoring in observed and projected losses, WDNR estimated between 186 and 198 elk in Wisconsin’s northern elk herd in the Clam Lake Elk Range.
- **July 2017**– 31 elk were released near Winter, WI in the Flambeau River State Forest; first elk released in this Clam Lake elk range in over 20 years.
- Note: Once trapping ceases each year, the elk are quarantined for a minimum of 120 days, spending that time in both Kentucky and Wisconsin, while they are tested for a variety of diseases. When all health requirements are fulfilled, the elk are then released.
- **In the summers of 2015 and 2016**, 73 elk were released in Jackson County, near Black River Falls.
- **Beginning in early January, 2018**, a team of elk trappers from Wisconsin and Kentucky hope to capture up to 50 Kentucky elk for release into the Flambeau River State Forest. Each captured elk will be fitted with a GPS collar.
The Clam Lake elk range was recently expanded by 506 square miles so the CNF-GDD currently consists of 1221 square miles (781,440 acres) in portions of Ashland, Bayfield, Price, Rusk and Sawyer counties in north central Wisconsin. State Highway 77 and county highways GG and M converge near the center of the GDD at the community of Clam Lake. The GDD is mostly under National Forest ownership (81 percent or 370,656 acres). The remaining 19 percent (86,944 acres) is privately owned, with relatively little in agricultural production.

The Black River Elk Range (BRER) is approximately 320 sq. miles and located in the Central Forest region of eastern Jackson County. (WDNR 2018)
Tribal Wardens & Treaty Natural Resources staff lend a hand teaching a cultural activity at Early Childhood Center

By Tony Gilane

Despite the weather a good time was had by all at the Early Childhood Center (ECC) sugarbush camp in March 2018. Red Cliff Tribal wardens Mark Duffy and Lucas Cadotte led groups of ECC children in tapping maple trees at Little Sand Bay National Lakeshore. Warden Lucas Cadotte along with the children gave the tree a hug, this was their method of thanking the tree and trying to coax the sap to run.

Also assisting in this activity were employees from the Red Cliff Treaty Natural Resources Division. Water Resource Technician Tanner Bresette is a regular participant in the activities at the sugarbush. The ECC staff participants were comprised of the usual gang under the direction of Cindy Garrity and John Helms. All four classrooms (Ma’ingan, Migizi, Mashkodbezhiiki and Makwa) participated in tapping the maple trees and collecting sap. The weather has been a bit too cold for collecting and has been less than ideal overall, so the boiling and reducing portion has not occurred to date. Stay tuned for details on future sugarbush activities!
Boozhoo! I am tasked with managing the farm adjacent to the clinic. This job includes pruning and harvesting the orchard spaces, running the 1 acre vegetable garden, caring for the farm's chickens and rabbits, as well as running different community programs. Much of our produce and eggs go to the Red Cliff Early Childhood Center as well as the tribe's casino restaurant and other local customers. This upcoming season, farm staff will be erecting a 70'x30' high tunnel to better enable the farm to grow heat-loving crops. Also in 2018, Mino Bimaadiziiwin Farm will be hosting its second Community Supported Agriculture (CSA) produce share. Each participant who signs up will receive a weekly box of produce during the growing season from July to October. Low income scholarships are available for those who apply. More information to follow in upcoming weeks. Nathanael can be reached at 715-779-3782 or nathanael.secor@redcliff-nsn.gov
Mijen Armstrong

Farm Technician

Mijen Armstrong, a local Red Cliff Tribal Member and recent UW Madison graduate has also returned this year to work at Mino Bimaadiziiwin. Mijen first came to the farm last year as a Treaty Natural Resources youth intern and then applied for the Farm Technician position that ran from June-Sept this year. Now, Mijen has stepped into a new role at the farm as the Tribal AmeriCorps Program service member. We’re thankful to have Mijen in all of these roles as he’s been a great asset to the farm.
Jeremy St. Arnold
Wildlife & Forestry Biologist

Boozhoo. My name is Jeremy St. Arnold and I am from Washburn, where I have lived most of my life. I graduated from Washburn High School in 2003 and after working several odd jobs and serving 6 years in the Wisconsin National Guard, I went on to attend the University of Wisconsin Stevens Point, graduating in December 2013 with degrees in Biology and Wildlife Research & Management. I have really enjoyed working for the Tribe and have met some amazing people and worked on some exciting projects. My favorite projects that I have participated in so far have been: wolf trapping, marten/fisher trapping, and the sharp-tailed grouse restoration project. I have also enjoyed getting the opportunity to bring many different classes and youth groups into the field to teach them about natural resources.

Ron Nordin Jr.
Wildlife & Forestry Technician

Boozhoo. My name is Ron Nordin Jr. and I am a Red Cliff Tribal member. I graduated from Bayfield High School in 2001. I first worked for the Tribe as an invasive species technician in 2015, but started working as the wildlife and forestry technician for Red Cliff in May 2016. One of my favorite things about this job so far has been the wolf research and monitoring. One of the most exciting days was when we were in between 5 wolves at the same time, 2 in front of us and 3 behind! As the wildlife and forestry technician, one of my favorite duties is setting up trail camera stations. We have experimented with many different camera set ups and different bait/scent combinations and have been able to capture some truly amazing photos and videos.
Wildlife & Forestry Program Overview

**Current/Future Projects**
- Wolf Research and Monitoring: Trapping, Tracking, Telemetry, Trail Camera Stations, Mapping, Collecting Genetic Samples
- Marten & Fisher Research and Monitoring: Trapping, Tracking, Telemetry, Trail Camera Stations, Collecting Genetic Samples, Prey Availability Assessment
- Moquah Barrens Sharp-tailed Grouse Restoration Project: Trapping, Transporting, Telemetry, Searching for Nests
- Forest Inventory: Counting, Measuring, Tree ID, Compiling Data
  - Assisting with Prescribed Burns
  - Install Wood Duck Boxes and Additional Bat Boxes

**Other Current/Past Duties**
- Grant Writing and Reporting
- Nuisance Beaver Trapping
  - Trail Building: Frog Bay Trails and Clinic Trail
- Following Up on Wildlife Complaints/Rare Wildlife Sightings
- Selecting Stands for Timber Harvest and Prescribed Fire
- Writing Plans: Wolf Protection Plan, Wildlife & Forestry Stewardship Plan
- Presentations and Events for Tribal Members, Classes, Youth Groups, General Public
  - Writing Newsletter Articles
  - Assisting with Fisheries Assessments
  - Assisting at Tribal Farm
  - Picking up Road Kill
- Sending in Potentially Diseased Wildlife for Testing
  - Collaborate with Other Agencies
- Install and Monitor Bluebird boxes and bat boxes
  - Install Raptor Platform @ WWTP
Shelly Gurnoe
Office Manager

Hi – my name is Michelle Gurnoe (you most likely know me as Shelly – Lots of people are surprised that my name is Michelle!!) I have worked for the Fisheries/Hatchery (now known as the Treaty Natural Resources Division) for 2/3 of my life. I am not saying how many years that is because I will be giving away my age!!! I will give you a hint – my first office was down at the boathouse - which is where Legendary Waters is now. I have no idea of how many co-workers I have had through the years (if you are reading this you were most likely one of them). I am the Office Manager up at the Hatchery …my primary focus though is Fisheries. Issuing commercial and home use licenses, data entry of commercial and home use fishing reports, assessment data, whatever needs to be done, etc. I love my job (most of the time ☺) and am truly honored to be working for you – the Red Cliff Band of Lake Superior Chippewa!!! I plan on being here for a few more years - so if you go by this way…stop and say “Hi”.

Reed Saam
Biological Technician

I am originally from Ann Arbor Michigan and completed my undergraduate degree at Northern Michigan University in environmental science with a concentration in water resources. I’ve been interested in aquatic ecology for most of my life and I appreciate the opportunity I have to work in this field. I’ve been working for Red Cliff Natural Resources department since September of 2015 as the biological technician - fisheries. My primary job duties entail monitoring commercial fisherman and conducting fisheries assessments on Lake Superior as well as on the reservation streams. In addition to these duties I am also a certified wildland firefighter and have been on a wildland fire detail in Missouri as well as participating in numerous local prescribed burns.
Lance Bressette

Commercial Fisheries Monitor

I am the Tribal commercial fishing monitor for Red Cliff TNR. I have been in this position since June of 2015. Before working with the tribe I worked at the Northern aquaculture demonstration facility for five years. My main job with the tribe is to ride along or go on the ice with the big boat fisherman and monitor their catch. Taking counts on the catch, measuring and checking the fish for lamprey wounds. I assist with all the fish assessments that we do and repair/sew the nets. I help spawn all the brood stock fish. I am also a type 2 wildland firefighter.
My name is Todd Norwood and I am the Project Coordinator with the Treaty Natural Resources Division at Red Cliff. Prior to starting as the Project Coordinator in early 2016, I worked in the Treaty Natural Resources Wildlife & Forestry program. My current position includes extensive work on a Phragmites (highly invasive plant) project that performed a genetic study of escaped plants in the Chequamegon Bay region, and most recently a large-scale eradication effort. I am also actively involved in projects addressing natural resource concerns funded under the Environmental Quality Incentives Program of the Natural Resources Conservation Service. These projects vary widely in scope but often focus on correcting erosion that contributes to water quality degradation or improving wildlife habitat. Lastly, I am a Red Cliff representative on the Wisconsin Tribal Conservation Advisory Council, which provides a conservation forum and advocacy for the 11 Wisconsin tribes.

Erin Schlager is the GIS (Geographic Information Systems) Manager for the Treaty Natural Resources Division. She makes maps, collects and organizes spatial data, and is also working to improve the PAC application system. Erin graduated from Northland in 2010 and spent three years going to school in Maine before coming back home to work as a seasonal technician for Red Cliff in 2016. If you have comments, concerns, and suggestions about PAC or GIS, please feel free to reach out to her. She also likes to talk a lot about travelling. Erin would love to hear from you!
Alex Nerad
Indigenous Arts and Science Coordinator

Boozhoo
My name is Alexander Nerad. I am the new Indigenous Arts and Sciences Coordinator. I am originally from the Chicago suburbs, but I have worked and lived all over the US. I attended Prescott College in Prescott Arizona and Western Governor’s University in Salt Lake City. I have degrees in History and Special Education and I have Elementary and Special Education teacher’s certifications. In the past I have worked as a teacher, trail builder, wildland firefighter and web designer. I have also recently founded a start up that focuses on providing high quality high school credit recovery for students who struggle with reading and math. In my position I plan to help Red Cliff students gain experience with STEM fields and Ecological Restoration practices. In my position I hope to help the youth of Red Cliff prepare for the future while preserving the past.
Chase Meierotto  
Hatchery Manager

Boozhoo! My name is Chase Meierotto and I am the hatchery manager for the tribe. I am a tribal member that grew up in the surrounding area living in Washburn. After high school I went to the University of Wisconsin Madison graduating with a degree in Zoology. After graduating I was very fortunate to be able to come back to my home community and find a job within my field of study. I was originally hired, by the tribe, as an assistant biologist and later became the Hatchery Manager. As the manager of the hatchery I am tasked with running the hatchery operations and other related projects. I also server as one of the supervisors in the TNR division overseeing the hatchery offices and working close with the rest of the TNR staff. If anyone is interested in the happening up at the hatchery please feel free to stop in and ask for a tour or an update on any of the various projects that are taking place.

Francis Cadotte  
Hatchery Technician

My name is Fran Cadotte. My position with the Treaty Natural Resources Division is Hatchery Technician. I have been in this position for approximately 9 years. My duties include feeding fish – this has to be done every day so I spend a lot of weekends up here-, cleaning tanks, spawning coaster brook trout and putting eggs in heath trays for them to hatch. After they hatch dead eggs must be picked out (a very tedious chore!!). After hatching, the fish are put into tanks to grow. The fish must be sampled (take lengths and weights) to determine how well they are growing and to estimate the number of fish we have. When the time comes we stock the fish into Lake Superior. In the spring of the year we go and collect eggs from walleye that are speared by Tribal spearfishermen. One night a year youth come to the lake we are at and participate in the process. The eggs are then brought to the hatchery to hatch. When it is time to stock them we first drain the ponds, collect the fish and clip them (to know what year class they are). When this is done we bring the fish back to the lake where they came from.
Fish Hatchery Program Overview

Currently the Red Cliff Tribal Fish Hatchery works with coaster brook trout and walleye. These fish are important to the tribe as both fish are native to the area and provide harvesters and their families. The hatchery recently released the 2017 class of fish to make way for the 2018 class. The 2018 fish are just about all hatched and will be growing for the next year until they are released. One of the large projects for this year is the reworking of the walleye ponds located behind the hatchery. These ponds are being upgraded to better suit the needs of the walleye the hatchery raises. Be on the look out for progress updates throughout the summer. Below are some photos of the early development of the fish and some of the previous years stocking efforts.

Current/Future Projects

• Coaster Brook Trout Stocking efforts in Lake Superior
• Walleye Stocking in ceded territory lakes
• Developing a new line of Broodstock (Tobin Harbor BKT)
• Building upgrades to be more energy efficient (LED bulbs Variable Frequency Drives for water demand water monitoring equipment)
• Walleye pond upgrades (pond liners, fencing, outlet structures, catch basin, and many more)
• Solar panel installation
• Brood Building insulation
• Broodstock building beaver deceiver installation
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

**Toilet Bowl Cleaner**

| 1/4 cup baking soda |
| 1 cup vinegar |

**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

Stop by or call the Environmental Office with questions or for more recipes!
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
Springtime and warmer temperatures means spear fishing activities will soon begin. Spear fishing begins after the ice leaves inland lakes usually around mid-April. Below is a brief history of spear fishing and a summary of spear fishing regulations.

Ceded Territory Spearing Regulations and History

The year two-thousand and eighteen will mark the thirty-fourth consecutive spring that spear fishing was conducted by the Chippewa tribes in the off-reservation waters of northern Wisconsin. An average of 450 tribal members from Lac Courte Oreilles, Lac du Flambeau, Mole Lake, Bad River, St. Croix and Red Cliff spear each year.

Spearing has been a tribal tradition for many tribes but the legality of off-reservation spearing came into the public beginning in 1973 when the Lac Courte Oreilles Band of Chippewa filed suit against the State of Wisconsin. The tribe claimed that the States laws conflicted with tribal hunting, fishing, and gathering activities guaranteed in the Treaties of 1837 and 1842. The suit was dismissed by the Federal District Court initially but in the Seventh Circuit Court of Appeals it was reversed. The State of Wisconsin petitioned the United States Supreme Court to review the Seventh Circuit Courts decision but the petition was denied. On August 21, 1987, Federal Judge Barbara Crab reaffirmed the standard principles brought about by other treaty rights cases throughout the country. She held that the State may regulate in the interest of conservation and that such regulations are necessary, however, the tribes may enact a system of regulations resulting from another decision on May 9, 1990. Throughout this whole process there were many protests against treaty rights with the worst protests happening while tribal members exercised their rights.

Basic Spearfishing Regulations

No member shall spear without first possessing a valid spearing permit issued by GLIFWC and a valid tribal identification card.

Equipment Regulations:
Spears must have: (a) a minimum of three barbed tines which are a minimum of 4-1/2” inches long; (b) each tine having a barb extending perpendicular which is greater than 1/8” inch.
NOTE: While spearfishing (open water) no member shall possess any other harvesting devices, other than a spear.

Bag Limits; Possession Limits:
No member while fishing off-reservation may have in their possession fish in excess of the bag or possession limit.

- Walleye-(by permit only) – a) one fish may be any size  b) one fish between 20” – 24”  c) all other up to 20”
- Muskellunge-(bag limit by permit only) – a) first fish may be any size   b) after first fish, at least ½ of catch must be at least 32”
- Northern Pike - bag limit – 10 per person/day
- Largemouth and Smallmouth Bass - bag limit – 10 per person/day
Miscellaneous Regulations:

- Battery cover: No member shall operate any motorboat equipped with a storage battery in the waters of the ceded territory unless the battery is: a) provided with suitable supports and secured against shifting with the motion of the boat  b) equipped with a nonconductive shielding means to prevent accidental shorting of battery terminals
- Personal flotation devices: No member shall operate or use a boat unless one PFD is on board for each person and that PFD is in serviceable condition
- Lighting Equipment: All boats are required to have lighting equipment and be on from sunset to sunrise: a) one lamp aft (rear) showing a bright white light all around the horizon (Must be visible for 2 miles on a dark clear night)  b) one combined lamp in the fore part (front) of the motorboat and lower than the white light aft, showing green to starboard (left) and red to port (right) and so fixed that each side of the combined lamp throws a light from directly ahead to 2 points abaft the beam on its retrospective side. (Must be visible for one mile on a dark clear night)
  - Exception for motorboat operated for spearing purposes: The lighting requirements shall not apply to a member operating or using a motorboat while actively fishing with a spear provided that the member is using a light in the front part of the boat as part of such fishing and is operating the boat at a slow-no wake speed
- Assist by non-members: Those persons who may assist a member: member’s spouse, forebears (includes only parents and grandparents), children, grandchildren and siblings (includes person who have one or both parents in common). NOTE: assist is limited to operation of spearing boat only!
- Waste of Natural Resources: No member shall unreasonably waste, injure or destroy or impair natural resources while engaging in the exercise of off-reservation treaty rights
- Throwing refuse in waters: No member shall deposit, place or throw into any off-reservation waters any cans, bottles, debris, refuse or any other solid waste materials
- Sharing of tags/permits: No member shall lend, share, give , sell, barter or trade, or offer to lend, share, give, sell, barter or trade to any person any identification document, permit or tag issued by the tribe

MAKE SURE TO CHECK FISH NUMBERS DAILY BEFORE SPEARING BY CALLING THE RED CLIFF WARDENS AFTER 12PM THE DAY YOU ARE GOING TO SPEAR

If you have any questions about spear fishing or any other regulations related to treaty protected harvest activities you can visit the Great Lake Indian Fish and Wildlife Commission website at GLIFWC.org or contact the Red Cliff Wardens at 715-779-3732.
ATV SAFETY TIPS AND LAWS ATV USERS SHOULD KNOW

An ATV is NOT a Toy
An All-Terrain Vehicle (ATV) is a powerful, motorized vehicle. It can weigh up to 600 lbs. and reach speeds of more than 60 mph. Even the best drivers often lose control of their ATV. A collision or a vehicle rollover can happen quickly. Before allowing any young person on an ATV, think twice...because you only live once.

Who is at risk?
The highest risk age group by far is males under the age of 16. Often these youngsters are riding without protective equipment and with more than one person on the ATV. Risk taking and goofing around while riding is common. Young people represent nearly 40% of all ATV-related injuries and deaths.

Why are young people injured so often?
• No helmet use
• Carrying one or more passengers
• Lack of mature judgment
• Lack of adequate strength and coordination
• ATV too big for their size/age

Safety Tips for All ATV Riders
1. Do not carry passengers. ATVs are designed for one person.
2. Wear a helmet with eye protection.
3. Wear non-skid, closed toe shoes.
4. Wear long pants and a long-sleeve shirt.
5. Never use a 3-wheeler. They are unsafe and no longer manufactured.
6. Attend an ATV driver's safety course.

What is the LAW?
• ATV use is permitted on all roads within reservation boundaries and within the Township of Russell except State Highway 13. State Highway 13 is closed to ATV and snowmobile use ALWAYS.
• Children under the age of 12 are NOT permitted to operate ATVs on the roadway unless it is for agricultural purposes and they are under direct supervision of an adult.
• Youth ages 12-16 may operate ATVs on the roadway only if they have completed an approved ATV safety course. Youth must carry proof of their completion with them at all times while operating.
• If you are under the age of 18 you must wear a helmet and eye protection at all times.
• You must obey all traffic laws plus additional restrictions like lowering your speed to 10mph or less in residential areas. You also must have functioning headlamp and tail lamp illuminated at all times, even during daytime hours.
• Your ATV must be registered. This service is provided by the Red Cliff Wardens at no cost.
• This is just a summary; additional restrictions on ATV use may apply. If you would like more information on ATV regulations, registration or information on how to obtain ATV safety certification, please call the Red Cliff Wardens at 715-779-3732.

ENFORCEMENT!
Red Cliff Law Enforcement will be stepping up enforcement of ATV regulations. If you are found to be in violation you will be cited. It is also important to note any parent/guardian can be held liable for permitting any minor to use an ATV in violation of Red Cliff Code.
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 UPDGARDING 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.
The Division recently designed a trail sign for the Clayton Creek Trail, constructed last year. Look for the sign at both ends of the trail this spring!

SAVE THE DATE!
SPRING CLEAN UP
May 21st – May 25th, 2018
You Are Invited to the Annual
Mino Bimaadiziwin Planting Celebration
Saturday, May 19, 2018 9:00 — 2:00

Come participate in:
Garden Blessing @ 9:00
Planting Spring Crops
Children’s Activities
Free Seeds
Planting Fruit Trees
Fish Fry to Follow!

All Are Welcome! ~ ~ 36735 Aiken Road, Red Cliff WI
Questions? Call Mino Bimaadiziwin Farm at 715-779-3782
To celebrate this day the Environmental Department will be conducting a community roadside clean-up on:

Join us on April 20th, 2018!

More details to come!

Questions: Please contact 715-779-3650!
ZHIIWAAGAMIZIGAN - Maple syrup

Aniinaatig - Sugar maple tree

ZiiNziBaakwa - Maple sugar

ZiiNziBaakWadaaBoo - Maple sap

Ziigwan - It is spring

Springtime Word Search

Birds
Blossom
Buds
Flowers
Green
Grow
Harvest
Melting
Puddle
Rain
Sap
Season
Season
Seeds
Spring
Streams
Sugarbush
Sunshine
Syrup
Thaw
Thunderstorm
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