

# Treaty Natural Resource Division

*Red Cliff Band of Lake Superior Chippewa*



## Ganawenjigaade



Beachfront of Frog Bay Tribal National Park

Volume 1, Issue 2

Summer 2012

### Special points of interest:

- *Lake Superior Barrels Project*
- *Natural Resource Division Open House*
- *Sea Lamprey Control in Red Cliff creek*
- *Emerald Ash Borer (EAB)*
- *Tribal Historic Preservation: Past, Present, Future*
- *Fish Hatchery News*

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A big thank you goes out to **Tom Morris Jr.** who helped the fishery staff in retrieving all those walleye eggs. "He was there for us when we needed him", stated the hatchery crew. Thank you for your hard work and dedication to getting the job done.

Thank you to **Jason Schlender** for his assistance in defining

# Miigwech

an appropriate Ojibwe word for this quarterly newsletter. Thank you for your time and providing a suitable word for who we are:

Ganawenjigaade—It is taken care of, protected, kept (by someone), 'they' take care of, protect, keep it.

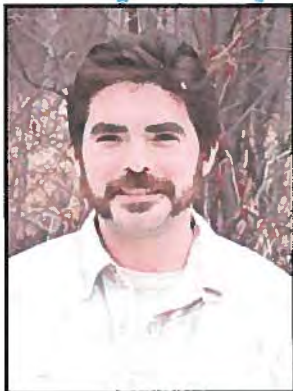
# Recycling... Did you know...??

- **544,000:** Trees saved if every household in the United States replaced just one roll of virgin fiber paper towels (70 sheets) with 100 percent recycled ones.
- **20 million:** Tons of electronic waste thrown away each year. One ton of scrap from discarded computers contains more gold than can be produced from 17 tons of gold ore.
- **9 cubic yards:** Amount of landfill space saved by recycling one ton of cardboard.
- **\$160 billion:** Value of the global recycling industry that employs over 1.5 million people.
- **79 million tons:** Amount of waste material diverted away from disposal in 2005 through recycling and composting.
- **5 percent:** Fraction of the energy it takes to recycle aluminum versus mining and refining new aluminum.
- **315 kg:** Amount of carbon dioxide not released into the atmosphere each time a metric ton of glass is used to create new glass products.
- **98 percent:** Percentage of glass bottles in Denmark that are refillable. 98 percent of those are returned by consumers for reuse.
- **51.5 percent:** Percentage of the paper consumed in the U.S. that was recovered for recycling in 2005.





# Employee of the Month



By Chad Abel

An office is only as good as its staff. And we hear at the Natural Resource Division think we have some of the best. The following team members were nominated for Employee of the Month during the spring quarter this year.

## **April Employee of the Month – Mike Defoe, Assistant Fisheries Biologist**

Mike has a can-do spirit. He often gets thrown a project last minute and is asked to take it across the finish line. In the past three months, Mike has been involved with lamprey control, beach E. coli testing, commercial fish population updates on Lake Superior, spring fishery assessments in Michigan, updating signage at our offices, and a plethora of purchase orders, check requests and equipment upgrades. We are appreciative of Mike for his willingness to get involved and help where needed.



## **May Employee of the Month – Tom Gary, Jr., Commercial Monitor**

As a Commercial Monitor, Tom has one of the most physically demanding jobs in our Division. Yet he regularly makes it out on the lake in all kinds of weather and never complains. His talent as a good mechanic also makes him an invaluable member of the Fisheries team. Recently he has assisted the Division even more by getting trained at the Transfer Station and filling in shifts when needed. We thank Tom for his commitment to our team, and congratulate him on the arrival of his newborn girl.



## **June Employee of the Month – Gary Defoe, Fish Technician**

Gary started as a seasonal employee last spring and proved his worth. He has a good work ethic and likes to see things get done right. He is willing to learn and expand his knowledge of the work we do in Fisheries. He has split his time this spring between commercial monitoring and stream restoration work, and he just recently received Hazwoper certification to fill a void within our Division. For his desire to expand his horizons and work toward becoming a professional in the Natural Resource field, we salute Gary.

# CONGRATULATIONS!!



## RED CLIFF BAND OF LAKE SUPERIOR CHIPPEWA LAKE SUPERIOR BARRELS PROJECT

FUNDED BY: US DEPARTMENT OF DEFENSE—  
NATIVE AMERICAN LANDS ENVIRONMENTAL  
MITIGATION PROGRAM

### PROJECT BASICS

- The Red Cliff Band of Lake Superior Chippewa is conducting an investigation of approximately 1,500 55-gallon barrels dumped in Lake Superior by the US Army between 1959 and 1962.
- The barrels are from the Twin Cities Army Ammunition Plant and contain munitions parts and general production line debris.
- In 2012, Red Cliff plans to recover 70 randomly-selected barrels from the lake bottom and investigate the barrel contents.
- Red Cliff also plans to collect water and sediment samples from around the barrels to determine if any contaminants may have leaked into the environment.
- Samples collected from the barrels will help scientists evaluate whether or not the barrels may pose a risk to human health or the environment.
- The results of this investigation will be used to determine what further actions, if any, should be taken.



NATIVE AMERICAN LANDS  
ENVIRONMENTAL MITIGATION PROGRAM







## RED CLIFF BAND OF LAKE SUPERIOR CHIPPEWA LAKE SUPERIOR BARRELS PROJECT

FUNDED BY: US DEPARTMENT OF DEFENSE—  
NATIVE AMERICAN LANDS ENVIRONMENTAL  
MITIGATION PROGRAM

### PATH FORWARD

Jan-May  
2012

- Finalize Work Plan Set
- Coordinate Field Work with USACE, Coast Guard, and Contractors

June-July  
2012

- Conduct Barrel Recovery
- Conduct Barrel Sorting
- Collect and Submit Barrel Samples for Analysis
- Collect and Submit Background Samples for Analysis

Aug 2012-  
Mar 2013

- Validate Analytical Data
- Conduct Human Health Risk Assessment
- Conduct Ecological Risk Assessment
- Prepare Remedial Investigation Report
- Prepare Feasibility Study Report



NATIVE AMERICAN LANDS  
ENVIRONMENTAL MITIGATION PROGRAM



## NATURAL RESOURCE DIVISION

# OPEN HOUSE

When: Wednesday, July 25th 4:30—7:30 PM

Where: Red Cliff Tribal Fish Hatchery

COME TO OUR DIVISION'S  
OPEN HOUSE TO HEAR ABOUT  
OUR ACCOMPLISHMENTS  
OVER THE LAST YEAR AND  
PLANS FOR THE UPCOMING  
YEAR!!

FISH FRY

RAFFLE ITEMS AND  
DOOR PRIZES

COMMUNITY SURVEYS

GAMES

HATCHERY TOURS

INFORMATIONAL BOOTHS AND SLIDESHOWS

YOU WILL HAVE THE CHANCE TO PROVIDE YOUR OPINION ON FUTURE  
MANAGEMENT OF THE TRIBE'S NATURAL RESOURCES. BRING YOUR  
FAMILY FOR A FUN AND INFORMATIVE EVENING!

# STREAM RESTORATION PROJECT



“Boozhoo,

My name is Edward Boyd Jr. I started working with Red Cliff Fisheries and Natural Resources at the end of May 2012. My position as a field technician has an emphasis on restoration of Red Cliff Creek for better fish habitat. Some of the details of the position include chain sawing, clearing brush and beaver dams from Tribal creeks, completing fish surveys of creeks, and erosion control using deadfall trees for better bank stabilization. I have a great group of co-workers that are very helpful, understanding,

and prepared for the daily activities of the position. I’m an avid outdoorsman so this job is an excellent fit, allowing me to work in the amazing Northern Wisconsin weather. I would like to thank the Red Cliff Tribe for the opportunity to learn and grow on such a great project.

Miigwetch,  
Edward Boyd Jr.”



“Boozhoo,

My name is Billy Gordon and I’ve recently started working for Red Cliff Natural Resources as a field technician on a stream restoration project. I originally applied for this job with the intent of helping Lake Superior with its many creeks and stream systems. After about a month into the position, I can say it’s been a pleasure working with other employees of Natural Resources and Fisheries while also restoring creeks that currently are not highly

productive for brook trout. It’s been great!”



# RED CLIFF TRIBAL CONSERVATION WARDENS



Pictured are Red Cliff Tribal Conservation Wardens Lucas Cadotte and Mark Duffy cleaning walleye at the University of Wisconsin Stevens Point Northern Aquaculture Demonstration Facility in Red Cliff. On April 10, 2012, the UWSP-NADF donated approximately 150 walleye which yielded approximately 551bs. of walleye fillets to the Red Cliff Elderly Nutrition Program. The fillets were then distributed to Red Cliff elders. Thank you to the UWSP-NADF Facility Manager Greg Fischer and his staff, Kendall Holmes, Nate Martin and Lance Bresette for their generous contribution.



# Sea Lamprey Control in Red Cliff Creek



## Red Cliff Natural Resource Department

### Taking the Suckers Down



An adult male sea lamprey (*Petromyzon marinus*) captured in Red Cliff creek during the summer field season.

Sea lamprey are an invasive species that thrive in the great lakes. They were introduced in the early part of the 1900's. With the development of the Welland Canal, parasitic lamprey were allowed to enter the rest of the great lakes through the locks and channels that were created for shipping.



Sea lamprey captured in Red Cliff creek. A measurement of length, weight and sex-

Sea lamprey feed on important fish species in the lake by using their sucker-like mouths to attach to fish and feed off of the blood and other bodily fluids.

Sea lamprey are generally between 12—20 inches long and eel-like. They are members of an ancient family of “jawless fishes” that were around before the time of the dinosaurs. Their mouths are circular with circular rows of teeth as seen in the picture above left.

Sea lamprey spawn up rivers and streams during the late spring to



A fyke net set up in Red Cliff creek during the trapping season. Used to capture sea lamprey.

early summer months of the year. One sea lamprey has the potential to lay 100,000 eggs. There are native lamprey found in the same waters but they are not parasitic like sea lamprey.

Some extermination techniques include lampricides (poison), electric barriers, and mechanical barriers such as the fyke net shown in the above image.



Sea lamprey attached to a lake trout. You can notice the circular scar above the index finger from a recent attack.



# THE AMAZING ALLURE OF A PURPLE PRISM

Each year in late spring when enough days of sun and warmth have accumulated in the earth and trees, purple prisms begin to emerge for their annual spring and summer seasonal display. Their vibrant purple color is easily distinguished and can readily be seen along roadsides throughout Wisconsin. But, it's not just their colorful display that is so attractive. It's also their scent; an irresistible fragrance that can be detected miles away by those in tune with it. Quite possibly the species most attracted to both the color and scent of purple prisms is a small yet attractive metallic green beetle.



Awakened from its winter slumber by the warmth and scents of late spring and early summer, the little green beetle emerges from its over-winter cavern built within firewood, split prior to winters cold, but unburned as a result of a mild northern winter. Hungry from months of no food and undergoing a transitional phase changing it from larvae to adult,

the beetle flies to a nearby ash tree in search of nourishment. For a number of days the beetle regains its strength, eating ash leaves and resting among its branches. Despite the beetle's incessant hunger, the tree is not fazed by its presence; this ash is healthy and has plenty of leaves to offer. With its hunger satisfied and strength recovered, the green beetle notices a scent mingling with the early summer breeze. It takes flight in search of the intriguing aroma. Certainly one to not fly very far (two or three miles is certainly this little beetle's limit), and as luck would have it, the source of the mysteriously attractive scent was only a short half-mile flight.



There it was, in all its glory, the source of the intoxicating aroma and the whole reason for the beetle's flight. A large purple prism display in an ash tree! Surely the scent and the presence of a purple prism must mean this ash tree is already stressed and perfect for laying eggs upon. The declining tree will provide perfect habitat for the beetle's hatching larvae to burrow into and feed upon for the following year. With the tree already in a weakened state, the beetle's young won't have to fight the tree's response to this new invader, insuring a successful brood of new metallic green beetles. At the sight of the purple prism the beetle adjusts its course mid-flight for the great purple prism display.

Wait! What's happening? The beetle did everything its instinct told it to. It landed on the purple prism certain to lay a successful clutch of eggs, but suddenly she can't move, stuck in a mess of sticky glue. The purple prism had been a trap and now her presence is known to all.



Emerald Ash Borer (EAB) traps, known as purple prism traps, are set each spring as part of an effort at the federal level to identify new populations of EAB. Since the beetle can't fly far on its own the majority of infestations are a result of human-aided dispersal. Firewood movement is likely the number one contributor to new infestations. You may notice purple prism traps around the region and within the Reservation. To date, EAB has not been detected near Red Cliff with the closest infestation in the Keweenaw Peninsula of Michigan. Adult beetles generally don't harm ash trees; however, the burrowing beetle larvae eat tissue just inside the bark of ash trees, eventually killing the host tree. There are a number of native metallic borer beetles that look similar to EAB and are not harmful. If you have questions or concerns regarding EAB, please call Todd Norwood (Forestry & Wildlife) @ 715-779-3795.



# TRIBAL HISTORIC PRESERVATION OFFICE

## "PAST, PRESENT, FUTURE"

**P** The THPO program hosted a community event in May for the noted native author, Theresa Schenck, (Blackfoot/Ojibwe). Ms Schenck, a faculty member of the American Indian Studies Dept at UW, is noted as an Ojibwe historian and spoke about her recent publication, "All My Relations", which focused on the 1837 Treaty.

**A** She commented on her next book which looks at the cultural and spiritual conflicts between 19<sup>th</sup> century Christians and Ojibwe spirituality. Her review and research into the National Archives provided access to tribal historical documents of different Lake Superior Bands and she shared documents on the LaPointe Band history. They included: 1878 LaPointe Band census; an early census of tribal members living on Madeline Island and records of Chief Buffalo's family. Fortunately they came in both electronic and paper files.

**S** Her presentation and discussion with community generated a lot of interest among those attending, who shared stories and documents. The THPO program is inviting her back again for another community event later this year.

**T** Currently this quarter, THPO has several activities occurring. They include; the opportunity for a community member to learn about the Native American Graves Protection and Repatriation Act, a federal law passed in 1990. On July 31 / August 1, a NAGPRA training session is scheduled at Lac Du Flambeau. Attendees will learn to better monitor the NAGPRA process and facilitate the repatriation of cultural items. The training fees will be paid but attendees must provide for their travel costs. Contact our offices to sign up.

**P** Another item is; Madeline Island Traditional NAGPRA workshop, sponsored by Bad River Tribe in August. They are inviting members of the Lake Superior tribes to participate in discussions on repatriation issues, which is increasing as museums and institutions complete inventories on native items being held. Our goal is to affect the recovery of human remains, artifacts, funerary objects and other items currently held in the institutional collections.

**R** Another effort is to recruit Tribal members for involvement and participation with tribal cultural and historical resources, informational gathering and sharing of family or local histories, the oral histories and their preservation and protection. We are also encouraging the formation of a Red Cliff Historical Society. If community members are interested as an advisory committee, again contact our offices.

**E** Tribal Code of Laws, Chapter 20: a revision. The current code for Historic Preservation was enacted several years and is due for a major review / revision. Chapter 20 is proposed to be re-named as: **PROTECTION AND MANAGEMENT OF ARCHAEOLOGICAL, HISTORICAL, AND CULTURAL PROPERTIES AND CULTURAL RESOURCES**; and begin with these Findings:

**F** The spirit and direction of the Tribe are founded upon and reflected in its cultural heritage;

**U** The cultural heritage of the Tribe should be preserved as a living part of our community life and development in order to give a sense of orientation to the Ojibwe people;

**T** Cultural properties of the Tribe are being lost or substantially altered, often inadvertently, with increasing frequency;

**U** The preservation of this irreplaceable cultural heritage is in the interest of the Tribe and its people so that its vital legacy of cultural, educational, aesthetic, inspirational, and economic and energy benefits will be maintained and enriched for future generations of Ojibwe;

**R** In the face of ever increasing economic development, sanitation, roads and public health developments, the present Tribal government and non-Tribal government programs to preserve the Tribes cultural resources are inadequate to insure future generations a genuine opportunity to appreciate

**E** and enjoy the rich heritage of the Ojibwe;

Increased knowledge of our cultural resources, the establishment of better means of identifying and administering them, and fostering their preservation will improve the planning of federal, Tribal, state and other projects and will assist economic growth and development and expeditious project implementation;

Although the major role in cultural resource preservation has been borne by the federal and state government, and both must continue to play a role, it is nevertheless essential that the Tribe expands and accelerate its cultural resource preservation programs and activities.

# RED CLIFF TRIBAL FISH HATCHERY NEWS

Written by: *Chase Meierotto*

**Recap of Hatchery News in the Last Newsletter:** The hatchery was granted funding for a new recirculating water system that will help to reduce the water consumption substantially. The spawning of Brook Trout had just commenced and sac fry were being moved to the raceways. The walleye spearing season was just around the corner and preparation of the walleye rearing room was just getting finished.

## Current Hatchery News:

The Tribal Fish Hatchery has recently released 8,000 Coaster Brook Trout along the reservation shoreline. The Coasters ranged from one year old up to two years old. A total of 6,000 two year olds were released at the Legendary Waters Boat Launch. Of those 6,000 released, roughly 2,300 were tagged with a floy tag. It would be greatly appreciated by the hatchery and fisheries staff if anyone who catches one of these tagged trout calls with the tag number as well as the length of the fish. This information will significantly help with the data on our stocking efforts. These two year old fish were also marked with a RP fin clip (RP Stands for Right Pectoral). This will be the fin closest to the head of the fish on the right side. While the two year olds had a RP clip, the one year olds had a LP clip. This is the fin closest to the head but on the left side of the fish. These fish were released at the Little Sand Bay Boat Launch and were not tagged. Due to the size of the one year old fish, they were not tagged and only clipped.

As a note to our readers, it would be greatly appreciated if any Coaster Brook Trout is caught in this area that we receive a call stating so. Some of the information that we are looking for include: if there is a fin clip or not, a general location of where the fish was caught, the length of the fish, and if there were any tags in the fish. All of this information helps us to better understand these fish and also helps us in our restoration efforts.

On a more current subject, this year's current stock of Coasters is doing well. A recent sample count has revealed that after a successful spawning season, the hatchery has hatched out 161,425 Coaster Brook Trout fry. The count has also revealed that the fish are in good health and doing well. On Average the fish weigh in at 37.4 (g) and have a length of 45.2 (mm) or 1.8 in.

The hatchery has also been busy giving tours to local youth as well as the occasional tourist. During the Bayfield Schools "Water Week," the hatchery gave tours to roughly 55-85 students and chaperones. The hatchery also welcomed in a group of youth from Fond du Lac. About 40 students joined in for a tour of the facility. The hatchery also held its annual ECC fishing day. While none of the kids caught fish this year, there is always a chance next year.

We would also like to update everyone on the current status of our recirculation project. As stated in the recap, and in the last newsletter, the hatchery has received funding to replace our current system with a new recirculating system. We have begun to contact different design teams and they are coming up with a design that best suit our needs. We are pleased with what we have seen and are anxious to keep working on getting a design that will best fit our needs.

## Other Hatchery News:

The walleye spearing season has come and gone and this year's egg collection was completed. With the strange weather, it seemed that the walleye had not made up their mind as to whether or not they wanted to cooperate. However, some eggs were harvested. Walleye that have hatched are now in the three one-acre ponds behind the hatchery and are roughly three inches long. At this length the fish will be looking for a new food source. They are at a length where the small bugs found in the pond may not satisfy their appetite. Therefore, about 10 gallons of pinhead minnows have been stocked in each of the three ponds. Our fingers are crossed in hopes that we will have a good turnout with our newly dredged ponds. However, we are always at the mercy of Mother Nature. The hatchery staff would also like to extend a huge thank you out to Tom Morris Jr., Brian Bresette, and Mark Duffy. These gentlemen went out of their way to get us the walleye that we needed in order to collect eggs. Without their help we may have never gotten the fish that we needed. So again THANK YOU!







## **RED CLIFF NATURAL RESOURCES DEPARTMENT**

### **Red Cliff Band of Lake Superior Chippewas**

88385 Pike Road, Highway 13  
Bayfield, WI 54814  
(715) 779-3750 – Fax (715) 779-3763

## **RED CLIFF FISHERIES DEPARTMENT**

### **TENTATIVE ASSESSMENT SCHEDULE**

#### **SPRING – LT (MI-2)**

2 – LIFTS EARLY (MARCH,26-APRIL,6)  
2 – LIFTS LATE (APRIL,30-JUNE,1)

#### **SISCOWET – FAT (MI-2)**

3-LIFTS (JUNE,4-23)

#### **SUMMER – NEAR SHORE**

?? – LIFTS (JUNE,- October)

#### **PRE-RECRUIT – BABY LT**

5-LIFTS, DEVILS ISLAND (JULY,16-AUGUST,17)  
3-LIFTS, SAND ISLAND (JULY,16-AUGUST,17)

#### **LT – SPAWN**

5-12-LIFTS, WI-1 (October, 1-31)

#### **WF-SPAWN**

1-LIFT, KRONES, TROUT PT., OUTER ISLAND LIGHT & GULL ISLAND (November, 1-10)

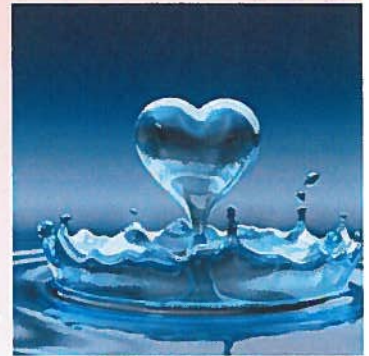


# Bayfield School

Written by: Sara Wroblewski, Natural Resource Specialist

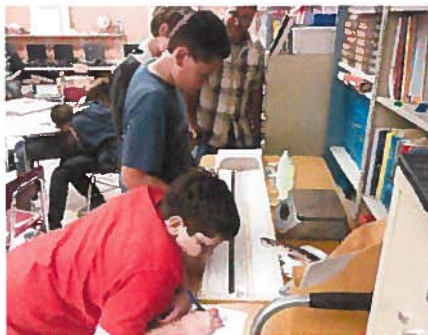
In late May, the School District of Bayfield celebrated Water Week with a variety of classroom-based activities and field trips focused on this vital resource. The Red Cliff Natural Resource Division provided hatchery tours, presentations, and activities designed to emphasize the importance of monitoring and protecting our waters.

On Monday, middle school students visited the Tribal Fish Hatchery for a tour. Chase Meierotto, Hatchery Manager, led the morning tour and explained the day to day operations of the hatchery. The students were shown the method used for taking plankton samples from the walleye ponds, then had the opportunity to view the sample under a high powered microscope. They also observed the sample count procedure for weighing and measuring hatchery coaster brook trout.



In the afternoon, Natural Resource Division staff led classroom-based lectures and activities. Lecture topics included watersheds and water quality, aquatic macroinvertebrates as indicator species, and sea lamprey management. Students participated in a simulated fish assessment activity, and made origami frogs. An invertebrate sample was taken from the creek in the ravine. This sample was brought back to the classroom where students sorted the different organisms into groups based on their sensitivity to water quality, and completed a biotic index sheet to determine the health of the creek ecosystem.

Later in the week, the entire first grade class also toured the hatchery. Water Week was an excellent opportunity for division staff to share their enthusiasm for their work with local students, and hopefully foster an interest in natural resources for some future scientists!





# NEW EMPLOYEES



Todd Norwood is a new Assistant Biologist of Forestry and Wildlife with Red Cliff. Originally from Michigan, he has spent the last six years restoring prairie, oak savanna, and woodland to Southern Wisconsin with the goal of increasing native plant and animal diversity while eradicating invasive species. What's one of his first projects at Red Cliff? "I recently developed a draft Emerald Ash Borer Response Plan that soon we'll be seeking community input for further development. It's a plan we hope to never use excluding maybe the preventative measures". His most recent project involves improving stream ecology, including brook trout habitat, as part of the stream restoration crew at Red Cliff.



Tony Corbine is the Education Outreach Coordinator / Water Resources Assistant of the Environmental Department. Originally from Chicago, he is a Bad River member and has spent his childhood on the rez during his time off from school. He enjoys spending time with his family and dressing with his regalia to dance at powwows. The scope of his work duties include the development of a Watershed Management Plan for the Tribe. He will also be involved with collecting water samples and educating the community on topics such as; issues concerning Lake Superior, mining, water quality and contamination. Please feel free to introduce yourself to Tony since you will see him throughout the community.

# Red Cliff Natural Resources Division

## SUMMER YOUTH CREW



*Hi, I'm Anastasia Walhovd, the Summer Youth Crew Leader. I'm a senior studying archaeology at Harvard University. I'm looking forward to working with these 3 eager interns this summer on our many exciting projects.*



*Hi, my name is Jonah Johnson. I am 17 years old. I recently moved here. I wanted to work with the Fisheries because I'd rather be working than doing nothing. I work as a summer youth intern member at the Red Cliff Hatchery.*

*Hi, I'm Brady Defoe. I'm 16 years young. I'm the intern and I'm very excited to be working here. I go to the Bayfield School and I'm going to be a junior next year. I play basketball in the winter and baseball in the spring. It's fun. It's going to be a great summer.*



*Hi, I'm John Grant. I am 17 years old and I'm a senior in high school. I am enjoying my job and I hope it will be a fantastic summer.*



# Out and About: Summer Youth Crew 2012

The Red Cliff Natural Resources Division Summer Youth Crew has been busy learning about a multitude of careers in the field of natural resources. We have shadowed a number of activities from the shores of Lake Michigan to Raspberry Island. On the 27<sup>th</sup> of June, Warden Mark Duffy took the Summer Youth Crew on patrol and showed us, in a direct learning experience, the life of the Red Cliff Game Warden. Not only did we complete a patrol of commercial and DNR buoys on the water, we got a personal tour of the islands from the warden himself.



**July 9th-August 17th**  
**10:00am-12:00pm**

**Summer 2012**

**Northwoods  
Ed-venture Series!**

**FREE**

Fun and engaging educational programs highlighting some of Northern Wisconsin's most significant natural and cultural resources!



**"Coaster Climate Conundrum!"**

**Mondays: July 9, 23 and August 6, 13**

Take a look into the past and present of Wisconsin's Coaster Brook Trout with a fun game. Once a highlight of Northwood's fisheries, Coasters can hardly be found now. How can you help address the new challenges faced by these fish?!

**"Boozhoo to You"**

**Tuesdays: July 10, 17, 24, & 31 and August 7 & 14**

Come on an Ojibwe adventure and learn about what makes this language so unique and important to Northern Wisconsin. You'll leave knowing a few Ojibwe words yourself as you are challenged to an interactive game!

**"Knockin' Through the Rice"**

**Wednesdays: July 11, 18, 25 and August 1, 8, 15**

Come join us as we pretend to enter the Bad River Sloughs and embark on the wonderful journey of ricing! Learn the techniques, history and cultural significance of manoomin (wild rice). Make your own ricing equipment, learn some Ojibwe words and maybe even taste heavenly cooked wild rice!

**"Words of the Birds"**

**Thursdays: July 12, 19, 26 and August 2, 9**

Come experience a burst of Ojibwe language as you learn how to identify Northern Wisconsin Birds on an adventurous nature walk while improving your skills with Ojibwe bird BINGO!

**"Earth Nooks"**

**Fridays: July 13, 20, 27 and August 10, 17**

Come learn about different habitats found around the world through fun take-home activities!



**[www.nglvc.org](http://www.nglvc.org) or (715) 685-9983**  
**Northern Great Lakes Visitor Center**  
**2 miles west of Ashland, WI**



\*The Northern Great Lakes Visitor Center provides equal opportunities in employment and programming, including Title IX and American with Disabilities (ADA) requirements.

**Red Cliff**

# COMMERCIAL FISH HARVEST

## INTRODUCTION

The Red Cliff Band of Lake Superior Chippewa Indians license and regulate tribal members engaged in commercial fishing in the Apostle Islands of Lake Superior. Thirty-one (31) fishing licenses were issued for the Wisconsin waters for the 2011 fishing year which ran from November 28, 2010 to November 27, 2011. Nine (9) of these permits were issued for big boats (a vessel with a powered net lifter) and eighteen (22) were issued to small boaters. Fishing was conducted with gill nets. Data is from January to December 2011 to report catch and effort data by calendar year.



## HARVEST SUMMARY

Harvest information and effort data was obtained from mandatory catch reports submitted by commercial fishermen. Commercial reports require fishermen to document date and location of fishing, gear, type, mesh size, feet of net set, twine material, nights out, depth of set as well as the pounds of fish harvested. (Pounds are reported as dressed except walleye, which are reported as round).

During calendar year 2011 Red Cliff commercial fishermen fished a total of 3,733,645 feet of large mesh gill nets (4.43"-4.5") targeted for whitefish and lean lake trout. This yielded a total of 377,407 pounds of whitefish, 74,536 pounds of lean lake trout and 1,811 pounds of walleye. There was no targeted effort for siscowet in 2011. Incidental catch of siscowet was 4,792 pounds.

*Small mesh gill net effort targeted for herring was 1,397,900 feet yielding 309,620 pounds of herring. Including incidental catch, 312,368 pounds of herring was harvested.*





# Recent Mining News...

The state of Michigan Department of Environmental Quality, Water Resources Division and Air Quality Division received an application for permit by Orvana Resources U.S. Corporation to construct a new copper mine. The site is located north of Wakefield, MI. and less than 10 miles to shore of Lake Superior. The applicant proposes to dredge and fill streams and wetlands during the construction of the mine entrance, mill, tailings basin and related structures. The mine will be a room and pillar mine with material being removed using the drill and blast mining method. Ore will be processed on site before being sent off site for smelting. Tailings will be disposed on site and above ground. Approximately 58 acres of wetlands will be filled and 13,672 linear feet of stream will be abandoned.



In the state of Michigan, Copper is almost found exclusively in the western portion of the Upper Peninsula, some call the area Copper Country. The copper found in this area is highly unusual among other copper mining locations, because it is mostly found in the form of pure copper metal (native copper) rather than copper oxides or copper sulfides that form the copper ore elsewhere.



Early B.C. Native Indians were the first to mine and work the copper of Lake Superior and the Keweenaw Peninsula. Natives used the copper to produce tools, however, hundreds of years later the copper nuggets were prized when found, but Chippewa people did not mine copper. The first American prospectors arrived in the 1840's. Natives guided missionary men to view a respected 1.5 ton piece of copper along the Ontonagon River.

Although it should go without saying, the environmental impact of mining is detrimental. Pollution controls need to be implemented for soil, ground water, surface water contamination and air pollution resulting from excess heating in the summer time. Iron and sulfur with copper carried with surface waters might cause heavy metal pollution in potable and irrigation waters. In addition to the loss of quality water resources, wildlife is impacted as animals and plants are plowed over to clear space for a mine. This usually means that there are less trees; resulting in an increase of Carbon Dioxide, and lower composition of Oxygen.

A less glamorous, still more economical approach is to recycle copper. Recycled copper is already cleaned and refined so it has less of an effect on the environment. This reduces the consumption of land to retrieve the copper and any emissions to mine it. The overall carbon footprint is greatly smaller, yet the profit for the company is larger as the cost to purify the copper is less.

Environmental consciousness means environmental prosperity. Please recycle your goods and purchase recycled goods.



# RABIES CLINIC

DATE: Wednesday, July 18, 2012

TIME: 9:00 AM – 2:00 PM

LOCATION: Red Cliff Fire Hall

Your pet must be at least 3 months old to receive their first rabies shot. (6 – 9 weeks old for other vaccines)



For more information, contact Jacob Maas at (715) 779 – 3707

**FREE RABIES SHOTS** for dogs and cats will be available. The Red Cliff Tribal Animal Control Ordinance requires that dogs must be vaccinated for rabies and licensed.

There will be other vaccines available as stated below. Pet owners will be responsible for the cost of these additional vaccinations & deworming.

*\* NOTE: follow-up /booster vaccine costs will be different than those listed here! \**

For Dogs:	<b>Rabies</b> (R)	<b>FREE</b>
	Distemper/Parvo (DHPPL <sub>4</sub> )	\$13.00
	Lyme disease (L)	\$26.00
	Bordetella (Kennel Cough) (B)	\$10.00
	Deworming (Pyrantel)	\$5.00
For Cats:	<b>Rabies</b> (R)	<b>FREE</b>
	Leukemia/4-way (RCCPLv)	\$21.00
	Deworming (Pyrantel)	\$5.00



# We Want You ...



to bring your  
**Hazardous & Electronic Wastes,  
 Meds & Appliances to a Clean Sweep Collection**  
**Saturday, July 21, 2012**

**Co. Hwy. Garage, Washburn**  
 (on Central Avenue toward lake)

**10:00 a.m. - 12:00 p.m.**

**Co. Hwy. Garage, Iron River**  
 (on US Hwy. 2 on east end of town)

**3:00 p.m. - 5:00 p.m.**

Northwest Wisconsin residents and farmers (first 200 lbs.) can properly dispose of their **hazardous chemicals free of charge**. Businesses, governmental units/agencies and schools are charged a small disposal fee and must pre-register by calling Jen Barton, Northwest Regional Planning Commission, at (715) 635-2197. Most **electronic equipment** can be disposed of at the collections **free of charge**. Residents can also bring unwanted **medications** and **Freon free large appliances free of charge**. **Freon containing appliances are \$25.**

## Hazardous Wastes Accepted

Solvent- & Oil-Based Paint, Lead Paint  
 Stains, Shellac, Varnish, Wood Preservatives  
 Roof Coatings, Driveway Sealers  
 Pesticides: Herbicides, Insecticides, Fungicides, Poisons  
 Household Cleaners, Acids, Caustics, Pool Chemicals (Chlorine)  
 Automobile Transmission & Brake Fluids, Antifreeze, Degreasers,  
 Waste Motor Oil  
 Solvents, Thinners: Turpentine, Achesives, Kerosene, Lighter Fluid, Gasoline  
 Household Batteries (button, lithium, nicad), Thermometers, Thermostats  
 Aerosols  
 Fluorescent (50¢ or 75¢ ea. depending on size) & HID Light Bulbs (\$2.50 ea.)  
 Oil Filters (\$1 each)

## Medications Accepted

Prescription and over-the-counter medications including: pills, capsules, ointments, liquids, sprays, creams, inhalers, vials and drops.

## Large Appliances Accepted

Washers, dryers, refrigerators, freezers, dehumidifiers, humidifiers, stoves, air conditioners, water heaters, dishwashers and residential furnaces

## Electronic Equipment Accepted

Computers/Computer Components	Free
Desktop Copiers /Printers/ Scanners	Free
VCR/DVD Players	Free
Regular TVs/Radios	Free
Microwaves	Free
Cell Phones	Free
Projection TVs	\$45
Wood Console TVs	\$25

## FOR MORE INFORMATION CONTACT:

Bayfield County Extension Office at  
 373-6104 or  
 Bayfield County Emergency Mgt.  
 Office at 373-6113.

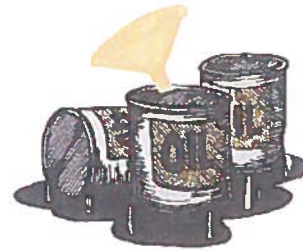
Fisheries	715-779-3750
Environmental	715-779-3650
Natural Resources	715-779-3795
Transfer Station	715-779-0171
Conservation wardens	715-779-3732

**We are on  
the Web**

[www.redcliff-nsn.gov](http://www.redcliff-nsn.gov)  
[www.redcliff-environmental.org](http://www.redcliff-environmental.org)



## Recycle Your Waste Motor Oil



by bringing to a Hazardous Waste  
Clean Sweep Collection  
**Saturday, July 21, 2012**

Co. Hwy. Garage

**Washburn**  
(on Central Avenue  
toward lake)

10 am - 12:00 pm

Co. Hwy. Garage

**Iron River**  
(on US Hwy. 2 east  
end of town)

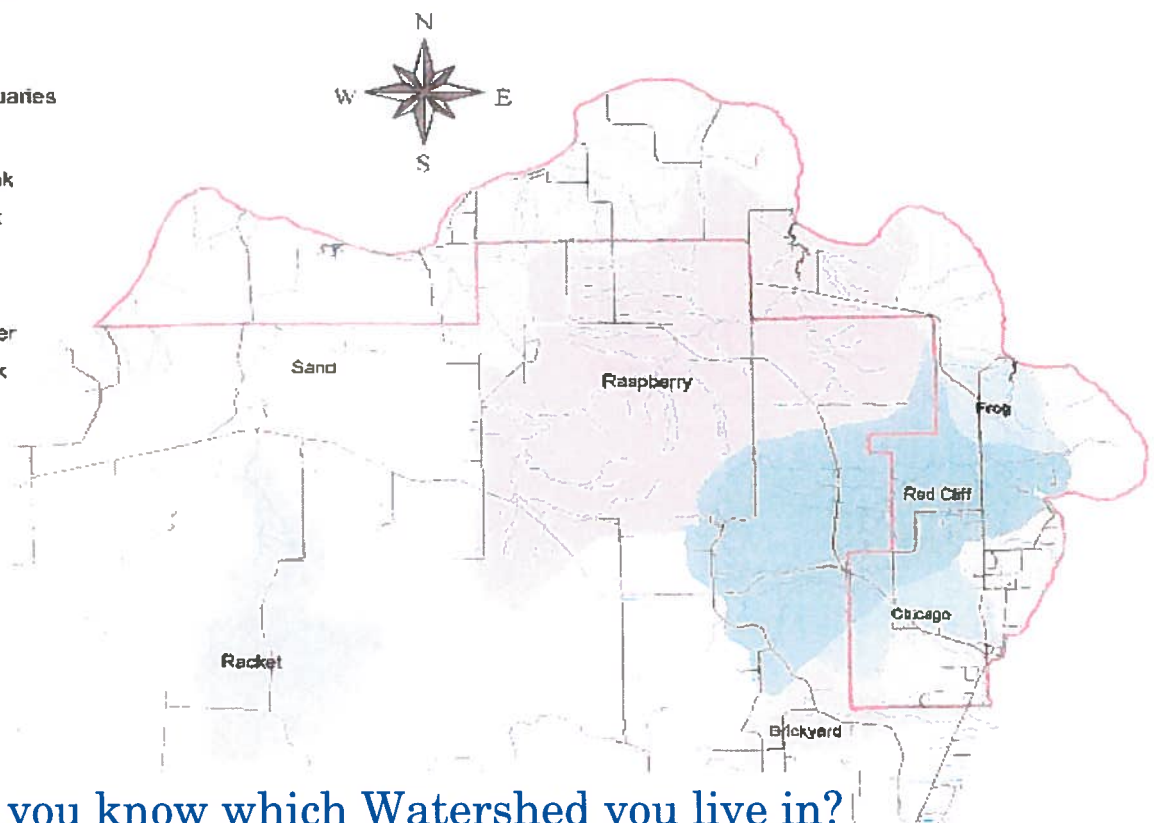
3 pm - 5:00 pm

## Watersheds, streams, and roads of the Red Cliff Reservation

- Reservation Boundary
- Roads
- Streams
- Ponds and Estuaries

### Watersheds

- Brickyard Creek
- Chicago Creek
- Frog Creek
- Racket Creek
- Raspberry River
- Red Cliff Creek
- Sand River
- Unnamed



**Do you know which Watershed you live in?**