Mazina'igan
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Michigan 1836 Treaty tribes prepare to defend reserved rights

By Charlie Otto Rasmussen
Staff Writer

Brimley, Mich.—Five Michigan tribes with off-reservation hunting and fishing rights reserved in the 1836 Treaty are preparing to meet a major legal challenge from state officials. Michigan Attorney General Mike Cox on September 17 asked a federal judge to declare that 1836 inland treaty rights have generally expired, based on treaty language that says tribes can hunt and fish on ceded land "until needed for settlement."

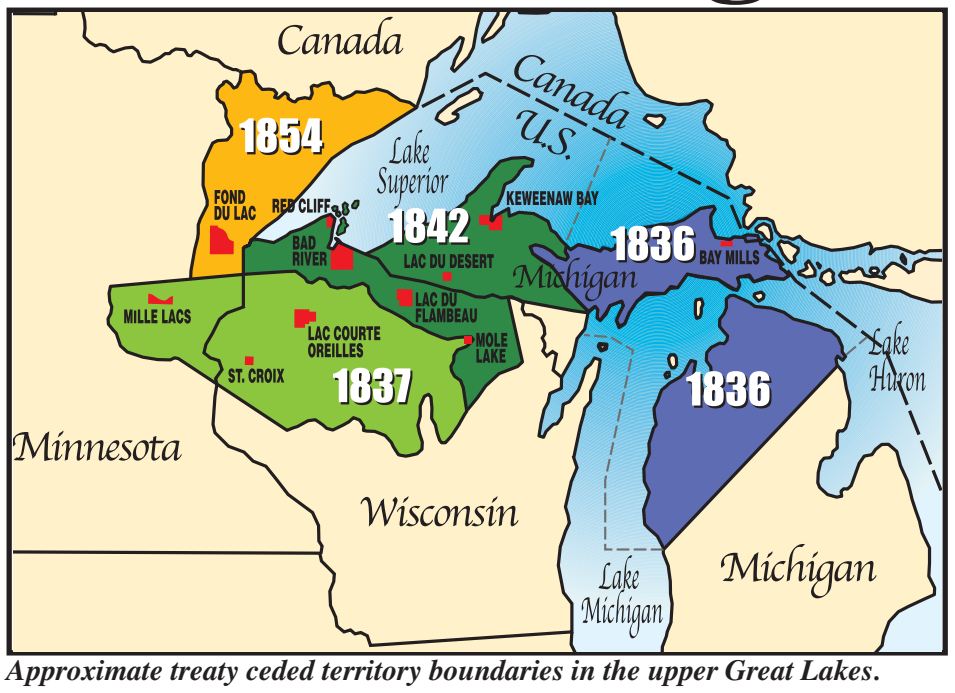
Bay Mills Indian Community Attorney Kathryn Tierney said that the treaty tribes from the eastern Upper Peninsula and northern lower Michigan welcome the opportunity to finally resolve the status of inland harvest rights.

"It's the tribes' intent to have this matter resolved," Tierney said. "I think it's better for everyone to have the federal court decide this as a declaratory matter, rather than subjecting individual tribal members to prosecutions in state courts for following their tribe's regulations."

The tribes—which include Bay Mills, Sault Ste. Marie Tribe, Grand Traverse Band, Little River Band and the Little Traverse Bay Bands—harvest reserved resources under regulated inland hunting and fishing seasons within the 1836 ceded territory. Some treaty seasons and bag limits mirror those established by the state, while others offer tribal members more latitude. All regulations are designed to conserve natural resources.

While the state has negotiated with the five Ojibwe and Ottawa tribes on Great Lakes fishing agreements over the past two decades, it is now betting that inland tribal rights might be abrogated through litigation. In the most recent pact, the 2000 Consent Decree, tribal and state officials established a framework for the management and regulation of the 1836 fishery. Treaty fishing rights on portions of Lakes Superior, Michigan and Huron had been previously affirmed in a series of court decisions in 1970s, but state officials still resisted tribal involvement in the fishery until 1985.

(See 1836 Treaty tribes, page 15)



Approximate treaty ceded territory boundaries in the upper Great Lakes.

The best buy of the year!

Tribes buy Nicolet Mineral Company and mine site land

By Sue Erickson
Staff Writer

Odanah, Wis.—Feelings of elation mixed with disbelief rippled through the Great Lakes Indian Fish & Wildlife Commission's (GLIFWC) offices when the news hit that the Sokaogon/Mole Lake Band of Chippewa and the Forest County Potawatomi Community purchased Nicolet Minerals Company (NMC) and the site for the proposed Crandon mine on October 28. The battle over the proposed Crandon mine was suddenly over!

The purchase ended years of concern over to the proposed mining project by GLIFWC and its member tribes who feared for the water and the wild rice beds should the mine go forward. Controversy over the proposed mine began in 1969 when Exxon began mineral exploration south of Crandon. Exxon filed for a mining permit in 1980 and withdrew the application in 1986. The tribes were relieved at the time, but knew the spectre presented by the proposed mine could easily reappear. And this it did when a new application for a mining permit was filed in 1994 and substantially revised in 1998.

Sokaogon and Potawatomi elders stand in front of the Nicolet Minerals Company that the two tribes recently purchased. (Photo by Sonny Wreczycki)

GLIFWC Policy Analyst Ann McCammon-Soltis and John Coleman, environmental modeler, worked extensively with the permitting process over the past ten years. Esteban Chiriboga, GLIFWC GIS mining assistant, has contributed to the effort over the last five years as well. The permit requires an Environmental Impact Statement and permit from both the Wisconsin Department of Natural Resources (WDNR) and the US Army Corps of Engineers (Corps). They were all smiles when the news hit. "It's been a long hard battle for the tribes," McCammon-Soltis says. "We're so thrilled it turned out like this."

"After years of reviewing the mine proposal, I'm looking forward to helping heal the scars of mineral exploration," Coleman says. "We know more about the hydrology and biology of that watershed than just about anywhere in the ceded territories. It's a great tribal resource both culturally and scientifically."

"After all the years of working on this project, I cannot imagine a happier outcome," says Chiriboga, adding that the sale is truly an "historic occasion."

Tina VanZile, Mole Lake vice chairwoman, announced that the tribe would withdraw the applications to mine the site because "NMC's mining proposal is environmentally unsafe and technologically unsound."

Mole Lake's attorney and NMC's new project manager Glenn Reynolds concurred with the tribe in NMC's letters to the WDNR and the Corps withdrawing the company's applications for mining permits. In his letter to the WDNR, he states, "Given the number of sulfide mines that have caused catastrophic water pollution in North America and the lack of reliable data to suggest that modern sulfide mining technology has improved sufficiently to justify taking the risks that this project poses, it is doubtful that NMC could, in good faith, meet its burden of proof

(See Tribes buy NMC page 19)

Michigan Ojibwe and Lake Superior

Northern Michigan University hosts treaty fishing presentation

By Charlie Otto Rasmussen
Staff Writer

Marquette, Mich.—The City of Marquette is at a crossroads. Two treaty areas intersect at Upper Michigan's largest city and a growing public awareness of Ojibwe treaty rights has people fishing for more information.

An invitation from Northern Michigan University's Native American Student Association brought staff from the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) and the Keweenaw Bay Indian Community (KBIC) to detail tribal fishing and resource management on Lake Superior. More than 180 students, fishermen and local residents packed into a campus lecture room October 14 for the presentation.

"Because of Marquette's unique location, people sometimes wonder which tribes are exercising reserved treaty rights and how the fishery is managed," said Jim St. Arnold, GLIFWC treaty educator.

On the east end of town, the Chocolay River forms the boundary between portions of two inland ceded territories where a number of tribes reserved harvest rights through treaties with the United States in 1836 and 1842. An invisible line running north into Lake Superior divides the two territories.

Northwest of Marquette, several Keweenaw Bay tribal members net fish from small boats under the 1842 Treaty; to the east in 1836 waters, Bay Mills and Sault commercial fishermen are governed by the 2000 Consent Decree, a 20-year agreement negotiated with state officials.

St. Arnold fleshed out the different treaties Ojibwe and Ottawa headmen forged with the United States in the mid-1800s. A common thread runs through each treaty—the tribes insisted on maintaining the right to hunt, fish and gather on territory they ceded to the United States.

Today, the tribes manage ceded territory ecosystems through both reservation-based natural resource departments and regional inter-tribal agencies.

The Chippewa Ottawa Resource Authority based in Sault Ste. Marie serves five member tribes with 1836 treaty rights in upper and lower Michigan. Eleven tribes from Upper Michigan, Wisconsin and Minnesota are served by GLIFWC which operates primarily within the 1837 and 1842 treaty areas.

"Many people don't realize that the tribes are very active co-managers of natural resources," St. Arnold said. "It's in their best interests to protect those resources."

State-licensed fishermen attending the presentation seized the opportunity to ask questions, most of which biologists Bill Mattes and Gene Mensch fielded. Of particular interest was the management of lake trout, a valued sport fish that has experienced a dramatic population rebound in recent decades following effective sea lamprey control measures. Through the middle of the Twentieth Century, over fishing and sea lamprey predation decimated trout numbers in some areas of Lake Superior.

"Lamprey still kill more lake trout than commercial and sport fishermen combined," said Mattes, head of GLIFWC's Great Lakes fishery section. "But coordinated efforts between federal, state and tribal managers are controlling their numbers."

Bucko Teeple, resource developer for the Chippewa Ottawa Resource Authority, talks with area fishermen at Northern Michigan University following a presentation by GLIFWC and Keweenaw Bay staff. Teeple was on hand to help answer questions about tribal fishing in Lake Superior. (Photo by Charlie Otto Rasmussen)

Tribal codes in 1842 waters require that each lake trout taken by treaty commercial fishermen be tagged with a color-coded plastic band, explained Mattes. Without the tag, fishermen cannot sell their lake trout catch to fish buyers.

The remaining marketable species including siscowet, whitefish, chubs and herring are tracked through daily catch reports and on-site monitoring. An annual quota established by state, tribal and GLIFWC biologists limits the harvest of all species.

While lake trout are exhibiting strong natural reproduction in many areas of Lake Superior, the KBIC maintains a stocking program, said tribal biologist Gene Mensch. In partnership with the U.S. Fish & Wildlife Service, the tribal hatchery at Pequaming rears and stocks tens of thousands of lake trout annually, along with walleye and coaster brook trout.

For sport fishermen who favor catching exotic salmon, however, tribal conservation efforts appeared unsatisfactory. The Department of Natural Resources' scaled back salmon stocking program coupled with increased numbers of hungry lake trout have reportedly resulted in low catches of Chinook in recent years.

"The tribe has always had a firm stance on working with native species," Mensch said.

While at least one sport fishing group is pressing state officials for more salmon production, Mattes said such releases might do little more than feed the growing lake trout population.

"Based on annual fishery and creel assessments, the native lake trout are doing well, whereas the non-native salmon populations have been struggling," Mattes said.

Secretary Hassett gets the low-down on marten research

By Sue Erickson
Staff Writer

Mellen, Wis.—When visiting the Great Lakes Indian Fish and Wildlife Commission's (GLIFWC) office this fall, Wisconsin Department of Natural Resources (WDNR) Secretary Scott Hassett got the attention of Jonathon Gilbert, GLIFWC Wildlife Section leader, when he mentioned an interest in pine martens. As a veteran of pine marten and fisher research, Gilbert explained aspects of GLIFWC's Waabizhesi (pine marten) Project and invited the Secretary to join the research team sometime when they check pine marten traps. It wasn't too long, and Gilbert got a call. Secretary Hassett was coming up.

So at 8:30 a.m. on October 17th a group of six staff from the WDNR, the USDA Forest Service and GLIFWC rendezvoused at the WDNR building in Mellen, Wisconsin and then headed-off down County Road GG, enjoying an overcast, moderately cool day for checking pine marten traps in the Chequamegon-Nicolet National Forest (CNNF).

"I really like to get out," Hassett said, obviously up for a day in the woods far from his Madison office. This wasn't his first trek observing field research, however. He had been out doing rattlesnake trapping in Baraboo recently, visited bear dens, checked wolf trap lines, and looks forward to going out muskie shocking during muskie population assessments.

Hassett values these opportunities both professionally and personally. "People would pay big money for the opportunity to go out in the field with all these experts," he said as the group made its way down from an observation tour overlooking the hillsides, forested with northern hardwood, preferred habitat for waabizheshi.

As an Ojibwe clan animal, waabizheshi is important both historically and culturally to the tribes. It is also listed as endangered by the tribes and the state of Wisconsin, and is considered a forest sensitive species by the USFS.

In fact, waabizheshi, like the larger fisher, was extirpated in Wisconsin in

(See Waabizheshi Project, page 6)

Staff from the US Forest Service (USFS) and the Wisconsin Department of Natural Resources (WDNR) joined WDNR Secretary Scott Hassett to check out the pine marten trap line managed by GLIFWC in the Chequamegon-Nicolet National Forest (CNNF). GLIFWC's Dr. Jonathan Gilbert, Wildlife Section leader, has headed up long-term research on the species since it was reintroduced to the region. Pictured above are: Dave Eckland, USFWS CNNF forest biologist, Park Falls; Cheri Ford, USFS tribal liaison; WDNR Secretary Scott Hassett; Jonathan Gilbert, GLIFWC; John Olson, WDNR furbearer ecologist, Park Falls; and John Wright, USFS North Central Research Station, Rhinelander.

On the cover

Jaelisa Northrup, Fond du Lac, managed to bring in a small harvest of wild rice from Perch Lake after her first time out ricing this fall. She used rice knockers specially made by her dad, Jim Northrup III, who also demonstrated knocking rice for her and poled the canoe through the rice-thick lake. (Photo by Sue Erickson)

Dick Gurnoe: GLIFWC's founding father leaves a legacy of strength & determination

By Sue Erickson
Staff Writer

Odanah, Wis.—On October 28th the St. Francis Xavier's Catholic Church on the Red Cliff reservation had standing room only as family, friends and associates of Richard (Dick) Gurnoe paid their last respects to a tribal leader who took his tribe and other Ojibwe tribes through the battles that won treaty rights affirmation and implementation in Lake Superior and later in the inland treaty ceded territories.

He was truly a founding father of the Great Lakes Indian Fish & Wildlife Commission (GLIFWC), having first pushed for the formation of GLIFWC's predecessor, the Great Lakes Indian Fisheries Commission (GLIFC), in 1982 to implement the off-reservation fishing rights of six Ojibwe bands in Lake Superior.

Following the 1983 Voigt Decision, Gurnoe, as Red Cliff's tribal chairman and the tribe's representative to GLIFC Board of Commissioners, helped forge GLIFWC, combining the Lake Superior fishing rights with the more recently affirmed inland off-reservation fishing, hunting and gathering rights in the ceded territories.

Gurnoe served on GLIFWC's first Board of Commissioners in 1984 and continued to serve in that capacity until 1987. He was chairman of the Board in 1985. He also served as a commissioner in 1989 and from 1991 through 1993, for a total of eight years.

In addition to serving on the Board, he was Red Cliff's representative to GLIFWC's Great Lakes Fisheries Committee for fourteen years, from 1984–1988, in 1989 and from 1990–1999. He chaired the committee in 1985, 1992 and 1993. The Great Lakes Fisheries Committee makes recommendations in regard to the commercial treaty fishery in Lake Superior, focusing on issues such as quotas, harvest levels, fishing units, seasons and the health of both the fishery and the Great Lakes.

As a Commissioner and committee representative, Gurnoe put on many miles, criss-crossing the ceded territories to the numerous meetings involved in the establishment of GLIFWC and later in providing direction as GLIFWC grew. Always congenial and ready with a quip during meetings, he infused wisdom and humor into the hours of serious business.

As a commissioner, he stood firmly behind the effort to provide GLIFWC wardens with state credentials to enforce state laws. The tribes had allowed state officers to be credentialed to enforce off-reservation, treaty codes, but there was no reciprocity from the state. It was a slow, uphill struggle, but Gurnoe was present at the 1991 press conference announcing an agreement between GLIFWC and the Wisconsin Department of Natural Resources that opened up avenues for GLIFWC wardens to receive state credentials.

As a commercial fisherman and a commissioner, he was especially watchful for the well-being of his loves—Lake Superior and the lake's fishery—using every opportunity to push for lake trout restoration and sea lamprey control. In fact, he was emphatic about preventing budget cuts to GLIFWC's lamprey control program. If dollars needed to be found, it would be elsewhere!

But fishing was not his only interest. He was also a hunter. It was in the early 90's that GLIFWC Commissioner Dick Gurnoe shot a decoy deer. As GLIFWC Policy Analyst James Zorn comments, "He took it totally in stride, was very gracious about it, paid the consequences and accepted the fact that his

(See Dick Gurnoe, page 15)

Red Cliff, Wis.—Richard Leo (Dick) Gurnoe, 74, passed into the spirit world on Thursday, October 23, 2003 at his home in Red Cliff (88400 Hwy. 13). He was born in Milwaukee, the son of John and Ida Fizell and at the age of six months, he came to Red Cliff and was raised by his grandparents, John and Susan Gurnoe.

He graduated from Bayfield High School in 1943, and joined the U.S. Army Air Force. He sailed on the ore boats for about 15 years and then returned to Red Cliff to fish. In the mid 1970s, he purchased his own commercial fishing boat, "The Marianne," and began the Gurnoe Fisheries. He continued this endeavor until 1999 when he retired due to health problems.

Dick was active in tribal administration and served approximately 30 years on the Tribal Council which included eleven years as Chairman, and eleven years as Vice-Chairman and Tribal Manager. He was instrumental in bringing growth and development onto the reservation, which included new economic development projects and expansion of natural resource programs. During his lifetime, he also served on various committees, including but not limited to Fishing and Conservation, Great Lakes Fishery Commission, GLIFWC, GLITC, Voigt Intertribal Task Force, Tribal-County Study Committee, and was appointed by the Governor to the Great Lakes Advisory Commission.

He is best remembered for the 1969 treaty rights test case, which went to the Wisconsin Supreme Court. Known as the Gurnoe Decision, this important case upheld the tribe's treaty fishing rights. Dick was a firm believer in tribal sovereignty and the right of tribal governments to govern themselves.

Dick enjoyed hunting, fishing, reading, being on Lake Superior, spending time with his family, taking care of others, including his dog "Minnie," and of course, smoking his pipe.

He is survived by his wife, Eleanor; two sons, Michael (Lisa) Gurnoe, and Richard Jr. (Shelly) Gurnoe; three daughters: Marian Gurnoe, Rose (Larry "Boot") Soulier and Patty (Larry Wood) Gurnoe, all of Red Cliff; brothers and sisters: Michael (Dorothy) Gurnoe, Ashland; Leo (Helen) Gurnoe, California; Morgan Fizell, California; Kenneth (Beverly) Fizell, Waukesha; Carol Gordon, Ashland; Merle (Albert) Langoehr, Milwaukee; Virginia La Prairie, Duluth, Minn.; grandchildren: Karen, Kimberly, Eric, John, Nicole, Doug, Ashley, Lynna, Jessie, Taylor, Stephanie, Richard Jr. "Hardy," Kelly, Jason, Ashley L., Richie and Elizabeth, and numerous great-grandchildren and numerous nieces, nephews, cousins and other relatives and friends.

He was preceded in death by his parents, grandparents, three children: Sharon Gurnoe, John Gurnoe and Edward Gordon; three brothers: Patrick, Gerald, Robert "Buddy" Fizell, one grandson Paul Charette Jr. and a great granddaughter Heidi Jo Belanger.

Mikwendaagoziwag: They are remembered

3rd annual ceremony honors victims of the 1850 Sandy Lake tragedy

By Sue Erickson, Staff Writer

Sandy Lake, Minn.—The Great Lakes Indian Fish and Wildlife Commission (GLIFWC) sponsored the third annual Sandy Lake Ceremony at Sandy Lake, Minnesota on September 18, holding true to the promise that the Ojibwe ancestors who perished as part of the 1850 Sandy Lake tragedy will not be forgotten.

Prior to ceremonies adjacent to the monument, several GLIFWC staff set out in canoes and a kayak to cross Sandy Lake, keeping up the traditional paddle across the lake as part of the annual event. The canoe trek recognizes the long journey by canoes and overland portages that the Ojibwe made in late October 1850.

Following a brief ceremony, three GLIFWC staff—Jim Schlender, Neil Kmiecik and Jim Zorn—set out in blustering winds to make the voyage. Mother Nature demonstrated how difficult conditions could actually have been for those ancestors, as the winds pumped up high waves, making progress against the wind slow, arduous and tricky.

Red Cliff's Leo LaFernier reflects on the Sandy Lake Tragedy after receiving a framed poster from Jim Schlender. (Photo by COR)

The boats battled their way across to a leeward shore where conditions gave them some reprieve. Those waiting for their arrival at the US Army Corps of Engineers (ACOE) site on Sandy Lake began to worry after several hours had passed, however, the three finally came into shore, tired but safe.

With the assistance of Tobasonakwut Kinew, spiritual leader from Ojibways of Onigaming, Ontario and the Mole Lake Drum, ceremonies and drum songs honored all the Ojibwe ancestors involved in the Sandy Lake tragedy, especially the 150 who perished at Sandy Lake or on their mid-winter journey home. Recognition was also given to those who persevered and returned home, refusing to cooperate with a scheme to remove Ojibwe people from Wisconsin and Michigan's Upper Peninsula to the Minnesota Territory.

Following the ceremony, GLIFWC hosted a feast for all who attended and honored those who contributed much time, thought and effort towards the planning and construction of the Mikwendagooziwag Memorial Monument which now stands on a hill overlooking the ACOE Sandy Lake Recreation Area. The meal served in the Corps' garage included wild rice dishes, venison,berries and vegetables.

Those honored were: Gigi Cloud, Bad River; Leo LaFernier, Red Cliff; Fred Ackley and Fran Van Zile, Mole Lake; Jeff Steere, Terry Ladd and Jim Henderson, all with the US Army Corps of Engineers; Bruce Goman, Mille Lacs community development project manager; Leonard Sam, Mille Lacs; Henry Buffalo, Red Cliff; Ken Fairbanks, Sandy Lake; Tobasonakwut Kinew, Ojibways of Onigaming; Lorraine Norrgard, Cloquet; Jim Zorn, GLIFWC and Charlie Rasmussen, GLIFWC. Each received a framed copy of the Mikwendagooziwag poster and a chi miigwech for their work.

For further information on the Sandy Lake tragedy or the Mikwendagooziwag Memorial, contact GLIFWC at (715) 682-6619 or e-mail pio@glifwc.org. Brochures detailing the events that occurred at Sandy Lake in 1850-51 and a limited number of posters are still available.

GLIFWC & USDA Forest Service collaborate on birch bark monitoring protocol

By Karen Danielsen, GLIFWC Forest Ecologist

Tribal members harvest the outer bark of paper birch to make many different items ranging from picture frames to lodges. The harvest, when executed correctly, does not kill the tree.

Certain bark characteristics are required for the various items made with birch. Simple examples include thick bark for canoes and smooth bark for baskets. Of course, the determination of bark suitability for any specific item always entails the assessment of a variety of characteristics, not just one.

Over the years, it has become more difficult for tribal members to find the exact type of bark to meet their individual needs. Sometimes, it takes tribal members days, or even months, of walking through the woods examining birch trees before finding the right tree. The variety of birch bark seems to be declining considerably.

Consequently, Great Lakes Indian Fish & Wildlife Commission (GLIFWC) member tribes requested that the Technical Working Group (TWG), as established by the Tribal/USDA Forest Service Memorandum of Understanding (see article on MOU annual meeting, page 5), evaluate and research this urgent concern.

As a first step, the TWG analyzed data on changes in birch tree numbers over the last twenty years. The data used by the TWG originated from a program managed by the North Central Research Station of the Forest Service called Forest Inventory and Analysis (FIA). This program entails long-term monitoring of forest plots on lands of all ownerships. The variables monitored relate to tree health and changes in associated habitats (e.g., plants, soil and air quality).

The TWG analyzed population trends of paper birch within the ceded territories of Michigan, Minnesota and Wisconsin. The analysis showed, in summary, that birch numbers have declined in all three states since the early 1980's. Apparently, existing birch trees continue growing older and larger, but are not being replaced by younger trees. These results did not necessarily surprise the TWG, as they corroborated with analyses conducted for previous studies.

However, the analysis manifested a noticeable lack of data regarding specific birch bark characteristics. It became apparent that the FIA monitoring program should be modified to include data for additional birch variables.

To remedy this omission, the North Central Research Station provided GLIFWC with funds to develop a protocol, to monitor birch bark characteristics. This monitoring would then be implemented in conjunction with the existing FIA program.

Birch bark textures.

GLIFWC staff consulted with knowledgeable tribal elders and experienced tribal harvesters from Fond du Lac, Lac Courte Oreilles, Lac du Flambeau, Mille Lacs, and Red Cliff to ascertain the important bark characteristics assessed when being harvested. Characteristics identified included texture, thickness, evidence of scars or blemishes, and the magnitude of existing "thunderbirds." The thunderbirds refer to the black marks, technically known as lenticels, that exist on the bark at various sizes, shapes, and quantities.

Other characteristics identified included the form of the tree trunk and the existence of branching. GLIFWC staff also consulted with tribal harvesters on characteristics that could be used to document past harvest (tribal or non-tribal) and determine the number of years since harvest.

GLIFWC staff photographed the different forms of all these identified characteristics and based the protocol on these various forms. For example, bark texture ranges from smooth to rough, and trunk curvature ranges from minimal to extreme. Since the determination of bark thickness entails cutting into trees, it seemed prudent to omit this characteristic from the protocol in order to prevent unnecessary damage.

Once GLIFWC staff developed a draft of the protocol and verified its accuracy and usefulness with tribal harvesters, North Central Research Station staff helped format it to fit the existing FIA monitoring protocols. During summer 2003, North Central Research Station staff revised the FIA National Core Field Guide to incorporate the protocol for monitoring birch bark. Forest Service employees began implementing this protocol during fall 2003.

Data gathered through this monitoring will provide information on the distribution of various types of birch bark and reveal if any changes occur through time. In addition, when this data is analyzed with other data gathered through the FIA program, meaningful information can be obtained relating specific bark characteristics with additional variables recorded for associated habitats. For example, researchers might choose to analyze the soil types that support birch trees of differing bark types.

In conclusion, the information resulting from this monitoring protocol will be useful to both the tribes and Forest Service researchers. The development of this monitoring protocol demonstrates the importance of recognizing the validity of tribal knowledge as different than, yet equal in quality to, western science.

Miigwech to the following tribal members for sharing their extensive knowledge and offering their assistance to this project: Mark Bisonette, Russell Boyd, Marvin Defoe Jr., Bob Sanders, Jeff Savage, Leon Valliere, Wayne Valliere, and Donald White.

Tribal elders, Forest Service convene talking circle at Bad River

By Charlie Otto Rasmussen Staff Writer

Odanah, Wis.—Preserve more mature trees, the grandmothers and grandfathers of the forest. A group of Bad River elders relayed that message to U.S. Forest Service representatives during a talking circle at the tribe's convention center on September 30.

The gathering served as a forum for tribal elders to share their impressions of regional forest management over the last half-century. Representatives from five national forests posed questions and listened to the elders' stories—ranging from casual reflection to solemn observation.

"I see a slaughter of everything growing in the forest. We've ended up with an overpopulation of these fast growing trees. It's a great disrespect," said elder Sylvia Cloud.

Cloud related her frustration over clear-cutting, a logging practice that removes all trees from the land and creates even-age forests of hardwoods, primarily aspen. Once a widespread timber harvest method in the upper Great Lakes region, some clear-cutting still occurs on national forests, Ojibwe reservations and surrounding woodlands.

Cloud said large pine and sugar maple trees are vital to forest communities. "Did you ever see babies survive without grandmothers and grandfathers? What's going to happen when you take away all of the [mature trees]?"

Since the cutover of ceded territory lands from the mid 1800s to around 1910, young hardwood tree species have dominated the landscape.

Routine timber sales throughout the Twentieth Century created forests that never reached maturity. Only a small amount of old growth has survived, tucked away in scattered stands and in protected forests like federal wilderness areas.

"I see a lot of good things in areas that have been protected," Cloud said. "Why can't this be applied to all forests?"

Elders Bob Powless and Ethel Plucinski shared stories from the local oral tradition and related their own experience on forestry issues.

"To me, it all goes back to money and who has the influence," Plucinski said of forest management decisions.

Powless added that those decisions often led to harmful logging practices in the Bad River region with timber theft and cutting along delicate rivers all too common.

Working with tribes

Jim St. Arnold, GLIFWC treaty educator and a one-time Keweenaw Bay tribal chairman, wrapped up the session with a challenge to both government representatives and their tribal counterparts to transcend the old barriers that have plagued Indian-white relations.

Ottawa National Forest Supervisor Bob Lueckel hands out gifts to Bad River tribal elders following a talking circle in Odanah on September 30. (Photo by Charlie Otto Rasmussen)

An honest and open dialogue is the key, St. Arnold said. "This is more than you being a federal employee, but rather a human being. Your word is your bond. Say what you mean. If you can't do something, say so." St. Arnold stressed that disagreements and arguments should not be taken personally. For tribal members, issues do not become personal until they're lied to, he said.

"We have a couple hundred year history of dealing with federal employees and a lot of it is not good. People remember the control wielded by the Bureau of Indian Affairs over every aspect of Indians' lives until forty years ago. That's something we work to get beyond." ❐

New technology in a traditional iskigamizigan (sugarbush)

By Karen Danielsen, GLIFWC Forest Ecologist

Jim Merhar still gathers maple sap at the iskigamizigan (sugarbush) of his childhood. As an Anishinaabe originally from the Sandy Lake area in Minnesota, he now lives in nearby Bovey and chairs the Iron Range Council of the White Earth Band of Chippewa.

His memories of his childhood include carting old lard pails filled with maple sap to the family farmhouse to be boiled down in a galvanized wash tub. At that time, his family's iskigamizigan consisted of about fifty taps with coffee cans fastened underneath each to catch the running sap.

Nowadays, his iskigamizigan has grown significantly and consists of more than fourteen-thousand taps within a sixty-acre maple stand. He uses tubes and a vacuum pump to deliver the sap first to a five-hundred gallon storage tank, then to the processing shed.

He began using these newer techniques in 1995, growing slowly through trial and error. He often minimizes his financial investment into the operation by making his own equipment, utilizing whatever materials he has available.

He likes using 5/16" taps, rather than the traditional 7/16" taps, because they cause less damage to the trees and do not really lessen the amount of sap gathered. He claims that it takes only one year for a tree to heal from a 5/16" tap verses the three years it takes from a 7/16" tap.

He uses about one hundred feet of tubing, blue in color to repel ultraviolet light, and positions it off the ground using cables tied to tree trunks. He minimizes the use of black tubing since it tends to absorb excessive heat from the sun. The resulting image creates a design of snarled radiant blue winding between the subdued greys and browns of early spring.

Once sugaring season begins, he has to inspect all the tubes, which takes about an hour, at least two times each day. He walks slowly looking for air bubbles that could indicate leaks. Squirrels can be particularly pesky chewing on the tubes.

Gravity carries the sap through the tubes to the storage tank. From the storage tank, a vacuum pump feeds the sap into a large evaporating trough housed in a covered processing shed. Boiling the sap to make syrup and sugar requires many cords of firewood, all of which he cuts prior to the sugaring season.

Boiling the sap continues during the nighttime hours. Sometimes he has the company of friends or family. Sometimes he works alone. Either way, he enjoys spending this time at his sugarbush.

He has never considered using the less labor-intensive reverse-osmosis technique, as practiced by some larger producers, to reduce sap to syrup. He says that this technique removes not only the water from sap, but also most of the minerals and flavor. A mere taste test of certain brands of store-bought maple syrup can prove it.

Though Jim has a relatively large operation, he remains cautious about how much sap he gathers. He is not greedy. Protecting the sugarbush for future generations always stays his top priority.

Approximately one hundred feet of blue tubing twists through the sixty-acre maple stand of Jim Merhar. (Photos by Karen Danielsen)

Gravity carries the sap through the tubes to the storage tank. From the storage tank, a vacuum pump feeds the sap into a large evaporating trough housed in a covered processing shed.

Tribal members interested in establishing a tribal sugarbush on national forest lands for this coming sugaring season should contact their Voigt Intertribal Task Force Representative or Karen Danielsen at GLIFWC immediately! Karen can be reached at (715) 682-6619, ext. 125 or email kdaniels@glifwc.org.

Tribal and Forest Service reps see progress on MOU implementation

Tribes continue to push for logs and dollars

By Sue Erickson
Staff Writer

Red Cliff, Wis.—Representatives of signatory tribes and the US Forest Service (USFS) met in Red Cliff on October 1 for their annual meeting to review progress on the implementation of the 1998 Memorandum of Understanding (MOU) between ten Ojibwe tribes and the USFS. While reports from USFS and tribal staff demonstrated successes in cooperative research projects, in monitoring and in providing expanded opportunities for tribal members to access national forest resources, they hit a logjam on the subjects of timber and dollars.

At issue for several years has been a provision for tribal access to 40,000 board feet of timber annually from each national forest in the ceded territories for non-commercial use such as homes or ceremonial buildings.

For example, the Lac Vieux Desert Band is seeking pine logs to build a round house. So far, the USFS has denied the tribe access to logs from the national forests under the MOU. According to Regional Forester Randy Moore, USFS officials at the national level as well as the agency's lawyers feel the agency does not have the authority.

Lac Courte Oreilles representative Mic Isham told Moore that the treaties themselves are sufficient authority for the USFS to provide the logs. Isham noted that federal court decisions confirm the tribes' right to gather "lodge poles." Other tribal representatives expressed frustration that the USFS is backing away from a commitment the agency made in the MOU.

Moore said that the agency would prefer a clearer statement from Congress resolving any ambiguity and affirming the USFS's authority to provide the logs. He also said that he understood why the tribes are frustrated and agreed to assist the tribes in pushing this issue with higher level decision makers and lawyers within the agency.

In the meantime, Moore committed to continue pursuing other avenues for providing the logs to Lac Vieux Desert and other tribes, including under the federal Stewardship Act. Under this approach, Lac Vieux Desert and USFS staff currently are looking at pine stands in the Ottawa National Forest where the tribe might be able to harvest the logs that it needs for the round house while at the same time helping the agency to implement its management plans for those stands.

Tribal representatives also pushed for more federal dollars to help implement the MOU. Moore noted that the USFS is facing very difficult budgetary times but felt that there might be options that could be explored. It was agreed that GLIFWC and USFS staff will work together to identify funding possibilities and will report back to the tribes through the Voigt Intertribal Task Force.

Despite the logjam over dollars and board feet of timber, reports provided at the annual meeting revealed numerous successes in the implementation of the MOU relating to birch bark, sugarbush, camping opportunities as well as long-term research projects.

Sugarbush

One highlight of the MOU involves the identification of over forty sugarbush sites in the Chequamegon-Nicolet National Forest (CNNF), the Hiawatha National Forest and the Ottawa National Forest (ONF). Great Lakes Indian Fish and Wildlife Commission (GLIFWC) and USFS staff were aided by tribal members in identifying potential permanent sugarbush sites through a grant from the Administration for Native Americans (ANA).

The ANA grant facilitated participation by tribal elders and other knowledgeable tribal members in locating sites suitable for permanent sugarbush operations. To date four sites have been permitted, one in the Hiawatha National Forest and three in the CNNF. Tribal members interested in setting up a tribal sugarbush site should contact Karen Danielsen, GLIFWC forest ecologist, for assistance.

Birch bark

Tribal concern over declining availability of paper birch trees, especially with characteristics suitable for traditional birch bark items, led GLIFWC and the USFS to obtain a grant through the USFS Forest Inventory and Analysis (FIA) Program to **(See MOU, page 19)**

Need brains?

Local tanner uses CWD tested deer brains

By Sue Erickson
Staff Writer

Odanah, Wis.—Brain-tanning deer hides, a tradional Ojibwe technique, produces a very soft, pliable buckskin, but the process is time-consuming and requires soaking rawhide in a solution of deer brains.

This was never a source of concern for Bad River hide tanner Katherine (Sis) Wiggins, until the news of Chronic Wasting Disease (CWD) in Wisconsin's southern deer herd hit the headlines. This, along with speculation about the transmission of prions that cause CWD and related diseases, such as Mad Cow disease and Creutzfeldt-Jakop disease in humans, had Wiggins worried.

However, she was saved some anxiety when she obtained 25 clean deer brains from the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) out of deer that had all tested negative for CWD. They were available free of charge, and she could stash them in her freezer until ready for use.

In fact, none of the 330 heads from the ceded territories came back positive from the USDA Veterinary Services Laboratory in Ames, Iowa where GLIFWC sent them for testing.

This year GLIFWC will once again be collecting deer heads from off-reservation tribal hunters to be tested and will once again make them available at no charge to tribal members, such as Sis, who may want them for brain-tanning hides. Jonathan Gilbert, GLIFWC Wildlife Section leader, says it would be nice to hear from interested people ahead of time, so they can estimate the number of brains to keep.

Sis's tanning operations have slowed a little this year once she assumed the full-time care of her grandson, but she's still at it when time allows. A beautiful white hide is currently stretched in the living room where she periodically works on it to soften the texture, and a nice chunk of raw hide awaits immersion in the brain solution. She'll tan two to six hides a year.

Her brother, Mike, keeps her supplied with hides, which he brings in cut just right and clean of meat and fat. A large hide usually requires three brains in the solution and smaller hides use two.

Ironically, Sis only has scraps of hides around her place for personal use. "All my hides go out the door either in trade or lots of times as gifts. But I make small things with the scraps, like baby moccasins," she says.

Sis continues brain-tanning because of the unbeatably soft buckskin that the process produces.

"I'm not sure what chemicals are in the brains that soften the hide, but it sure does the job. I don't know how those Indians a long time ago figured it out," she says.

Sis encourages others to learn the tried-and-true technique of brain-tanning, worried that a time-honored tradition may be lost if more people don't learn the technique.

Katherine (Sis) Wiggins, Bad River, displays a rawhide against a stretched, brain-tanned hide she is preparing. Worried about handling deer brains after the CWD outbreak in Wisconsin, Wiggins was grateful to receive CWD tested brains from GLIFWC. (Photo by Sue Erickson)

In 2004 brains from CWD negative deer will be available free of charge to tribal members for use in brain tanning hides. Please contact Jonathan Gilbert, GLIFWC Wildlife Section leader, at (715) 682-6619 to let him know of your interest.

2003 off-reservation treaty deer harvest by tribal registration station

(figures as of 10/22/03)

Registration Station	Antlerless	Antlered	Totals
Bad River	28	28	**56**
Lac Courte Oreilles	103	51	**154**
Lac du Flambeau	186	99	**285**
Mole Lake	40	17	**57**
Red Cliff	40	38	**78**
St. Croix	72	73	**145**
Mille Lacs	10	7	**17**
Fond du Lac	7	8	**15**
Totals	**486**	**321**	**807**

Gray wolves moving south?

Probably not, USFWS says

In 2001, a Missouri man fired at what he thought was a coyote, and later discovered the animal was a gray wolf that had journeyed south from the Upper Peninsula of Michigan. The body of a gray wolf, tagged as a pup in Wisconsin, was discovered in a soybean field in east central Indiana in June 2003. A gray wolf that apparently wandered hundreds of miles from its original home pack somewhere to the north was found dead in central Illinois in 2002. Are wolves making a comeback in these states?

Gray wolves are indeed recovering in the western Great Lakes, according to U.S. Fish and Wildlife Service (USFWS) biologist Ron Refsnider. But he says gray wolves are not likely to establish populations south of Wisconsin and Michigan.

"What we are probably seeing in Indiana, Illinois and Missouri are young wolves dispersing from packs in the north," Refsnider explained.

"Occasionally, these wolves travel hundreds of miles but do not survive to establish packs."

Refsnider, who works in Minneapolis as one of the Service's endangered species biologists, says lack of large land areas with a low human density and an inadequate wild prey base in states beyond the gray wolves' current range will limit the species' expansion south.

While an occasional single animal may be spotted outside its normal habitat—the wolf found in Indiana apparently skirted around Chicago—gray wolves require large tracts where they'll rarely encounter humans in order to establish and maintain self-sustaining packs.

"We're pleased to see wolf recovery is progressing so well in this part of the U.S., but I don't expect to see viable wolf populations in the near future in any of the states where these animals have turned up," Refsnider said.

Refsnider said the USFWS reclassified gray wolves in most of the United States from endangered to threatened earlier this year because populations are no longer in danger of extinction there. The next step, he said, would be to remove wolves from the federal list of endangered and threatened species and return management of their populations to states and tribes.

Waabizheshi Project

(Continued from page 2)

the early 1900s, Gilbert says. They were first reintroduced in 1975 and 1976 when 124 animals from Ontario were released into the Nicolet National Forest. In 1989 and 1990 150 martens from Minnesota were released in the Chequamegon National Forest.

However, unlike the fisher, the pine marten populations are not flourishing or expanding their range, according to Gilbert, consequently the three-year Waabizheshi Project was launched to determine factors that inhibit the animal's success.

The first year's study focused on quantifying the amount of energy used by the martens. The results were surprising, Gilbert says, because it showed the martens used less energy in the winter than the fall because they changed their behavior and became less active in winter.

The second year of research focused on marten predation. Prior to 2001 only two of the fifteen radio-collared pine marten died, but subsequent to 2001 six of nineteen collared martens were mortalities. The primary marten predators are fisher and forest raptors, such as hawks and owls, Gilbert reports.

Researchers used "robo" martens with infrared cameras trained on them, hoping to attract marten predators, but this aspect of the research did not work. They also employed extensive snow tracking of marten predators surveying 42 stations three times during the winter. They found that terrestrial marten predators were most common in aspen-birch saw logs and upland hardwood pole stands, habitat used by pine marten.

The third and final year of the project was recently launched and will collect detailed data on the movement patterns that martens follow in a study area in order to improve the realism of the robo martens when simulating marten movement in different habitat types. Marten movement is tracked through telemetry and through back tracking using GPS.

While checking the series of 40 marten traps, the team also hiked up to the fire tower to check the data-logger, a device that records marten activity around the clock. They also set up one new trap in order to show Secretary Hassett the technique and located a pine marten using radio telemetry.

It was well into the afternoon by the time the team checked the 40th trap. That one was empty, like the 39 before it. They found no marten that day, a concern for Gilbert, who says they have only trapped one marten this season. Are the marten getting "trap wise" or aren't they around anymore?

Secretary Hassett and Gilbert were joined by Dave Eckland, USFS CNNF forest biologist, Park Falls; John Olson, WDNR furbearer ecologist, Park Falls; Cheri Ford, USFS tribal liaison and John Wright USFS North Central Research Station, Rhinelander.

Bear hunting in Echo Valley

State, treaty houndsmen carry on a tradition

By Charlie Otto Rasmussen
Staff Writer

Bayfield, Wis.— For much of September the Echo Valley bunch makes daily jaunts to deep-woods locations like Chicken Bone, Gravel Pit, and Pink Trailer to check for evidence that a black bear has visited. It's hunting season and these are secluded bait stations that provide a launching pad for hounds trained to pursue and ideally "tree" bears.

Sometimes it happens, sometimes it doesn't. The only sure thing about bear hunting is that it isn't easy.

Red Cliff's Jim DeFoe is one of a handful of tribal members to pick up hound hunting in the last twenty years. Along with son Chad, DeFoe hunts the Chequamegon Nicolet National Forest in northern Bayfield County with a fluid cast of around thirty men and women known as the Echo Valley Bear Hunters.

By the time I showed up in late September, most of the state-licensed hunters with Class A "kill" permits had harvested bears, and Chad had just recently tagged a three-legged, 170-pound male. A neighboring hunting group had taken a massive 637-pound boar a week earlier. That's about as big as they get, DeFoe says, and they average less than 200 pounds field-dressed.

While DeFoe has owned as many as 18 hounds, he downsized his pack to only three this season, easing the strain on his pocketbook and a chronic back injury. Dogs require daily care throughout the year, and each one is fitted with an expensive radio collar to track their progress in the woods. Echo Valley hounds also carry a bell on their collars to deter contact with local wolves.

"Since everybody started using them, we've had fewer encounters with wolves," he says, adding that they still bumped into wolves three times during the summer hound-training season. "We were walking in with tracking collars and heard the wolves light up, then the dogs started, and then we heard fighting. I think they were females [wolves]. If they had been big adult males the dogs would've been killed."

We load up the hounds in back of DeFoe's pick-up truck at sunrise as an all-night rain shower tapers off to morning mist. Echo Valley, a deep expanse of forest, criss-crossed with gravel roads and overgrown two-tracks lies northwest of Bayfield, a stones throw from DeFoe's house. I hop into the passenger seat and DeFoe works a low-band radio, checking in with other hunters converging on the valley.

"We use these radios to avoid the heavy chatter you get with a high-band CB," he says.

News crackles in through a roof-mounted speaker that the evening rain had washed away both the bear tracks and scent from the baits. Many people hunt from tree stands above bear baits that consist of a hollowed-out stump, filled with one kind of sweet or another and sealed shut with large stones or a log. Houndsmen rely on baits to provide fresh tracking scent for their dogs.

Wildlife managers and experienced hunters agree, effective bear management in thick eastern forests is near impossible without appealing to their sweet tooth. Even then, it's still a crapshoot. Bears may only come in after shooting hours for a late-night snack and natural foods like acorns and berries often trump doughnuts and candy.

DeFoe replenishes and caps the baits we visit. This is a near-daily routine before and during the season that includes 18 scattered sites. Well-made baits are assessable to only bears—logs and stones are used to keep out raccoons, fox and other animals. He rakes the surrounding soil smooth so paw prints would be visible the following day, making it possible to judge the size of bear.

Red Cliff's Jim DeFoe and his dog Annie listen for the call of hounds on the trail of a black bear in northern Bayfield County. (Photo by Charlie Otto Rasmussen)

Other Echo Valley hunters conduct a similar routine, and we rendezvous at an old gravel quarry atop a high ridge. After some discussion, they decide that it is up to the rig dogs to pick up a scent. These are highly experienced dogs, able to sniff out a bear from their kennels bolted to the bed of a pick-up. Half a dozen trucks scatter in all directions, heading for likely bear crossings—namely creek bottoms. A voice on the radio soon reports that a dog, pealing into a telltale bark, has picked up a scent.

What happens next was something akin to a jailbreak recovery operation: men and hounds slogging through the woods, the radio crackles with sightings of bear and dog flashing across roadways, trucks rush toward interception points in an effort to insert additional dogs into the chase.

With an intimate knowledge of the valley, DeFoe and the others track the hounds by sound alone, shutting off their trucks and listening from scattered locations. Depending on distance and topography, hunters also measure the chase with a radio receiver that collects the signal from the dog's collar.

An eyewitness testifies over the low band that the bear is a big one, in the 300-pound range.

We learn that DeFoe's former hound named Jack is at the helm. Jack was a one-time yard dog, a Plott, who DeFoe discovered had a knack for the rig position. Although Jack was included in the recent sell-off, he's still part of the Echo Valley group.

"Not every dog is cut out for hunting; they all have different personalities," DeFoe says. "Finding a good rig dog can be tough,"

Same goes for finding a crafty bear. DeFoe stops near an abandoned farmstead and listens for Jack. His bark grows clearer as the chase approaches and DeFoe turns loose his mostly-white Walker named Taz.

The bear manages to elude the dogs for much of day and never ascends a tree as most ultimately do. Bears usually tree within a short time, 45 minutes to two hours after the dogs pick up their scent, DeFoe says. This one is different.

About the time it seemed like the bear would simply melt back into the vast, rugged terrain, word comes through that a handful of hunters were closing in. The bear was bayed up, holding its ground some distance off a forest road. Following the sound of the dogs, an Echo Valley hunter slips into position and harvests the last bear of the season before we can catch up.

Nearing the cusp of October, the hunt is over. Bears prepare to den for the winter; scratched-up hounds visit veterinarians. DeFoe's daughter Janelle, who hunts bear near Cornucopia, comes up empty this year. Chad kills two animals, however, so there's plenty of meat to go around.

During the hunt and in the off-season, the hunters hold feasts, preparing bear meat in stews, on the grill and in the oven. Stories are told; dogs are traded or sold and equipment is tested. It's a tradition that receives little outside attention, yet runs deep all the same. Tracking black bears with hounds is a distinctive hunting method, and in Echo Valley, an uncommon, perhaps refreshing, middle ground for treaty and state hunters.

Makwa (bear). (Reprinted from clipart.com)

2003 Wisconsin treaty bear harvest

Zone	Quota	Bad River	Lac Courte Oreilles	Lac du Flambeau	Mole Lake	Red Cliff	St. Croix	Totals
A	110	4	6	5	0	10	11	36
B	40	0	0	2	10	0	0	12
C	20	0	0	0	0	0	0	0
Total	**170**	**4**	**6**	**7**	**10**	**10**	**11**	**48**

GLIFWC receives new ANA grant to address aquatic nuisance species

By Miles Falck
GLIFWC Wildlife Biologist

Odanah, Wis.— Aquatic nuisance species (ANS) include plants, fish, invertebrates and other non-native organisms that have substantial negative impacts to native aquatic ecosystems. Common examples include the sea lamprey, purple loosestrife, zebra mussels, and rusty crayfish. These organisms are often spread inadvertently via boats and trailers, ballast water in ocean-going ships and contaminated bait.

Infested waters can have serious consequences for the exercise of treaty rights. Walleye, lake trout and wild rice are just a few of the species that are directly affected by one or more aquatic nuisance species.

The Great Lakes Indian Fish & Wildlife Commission (GLIFWC) recently received a grant for $133,000 from the Administration for Native Americans (ANA) to address the ecological threat posed by aquatic nuisance species. The grant has three main objectives. The first is to develop a Tribal Interstate Aquatic Invasive Species Management Plan for Lake Superior and the inland 1837 and 1842 ceded territories. The plan will seek to enhance tribal participation in ANS management activities and prioritize actions based upon the potential impacts to treaty resources.

A second objective is to develop and implement an aggressive educational outreach campaign that targets tribal members and GLIFWC wardens. Educational outreach efforts will focus on reducing further introductions of ANS species into uninfested waters.

The third objective of the grant is to review existing environmental regulations that address aquatic nuisance species to identify opportunities where modifications of tribal codes may be used to effectively reduce the spread of ANS. Currently, only the model code for Minnesota's portion of the 1837 ceded territory addresses aquatic nuisance species.

A major component of the project will be to inventory aquatic ecosystems within the ceded territory for aquatic nuisance species, with an emphasis on waters heavily used by tribal members. The results of the inventory will be used to develop maps of infested waters and identify access points where warning signs are needed to help prevent further introductions. Inventories will be conducted by staff from the wildlife, inland fisheries, and Great Lakes sections at GLIFWC.

For more information on exotics, go to GLIFWC's Exotic Plants Information Center at www.glifwc.org/epicenter/.

Aquatic nuisance species have substantial negative impacts to native aquatic ecosystems. These organisms are often spread inadvertently via boats and trailers, ballast water in ocean-going ships and contaminated bait. Upper left: Zebra mussel. (Photo by USGS) Upper right:Purple loosestrife. (Photo by Miles Falck) Lower left: Eurasian water-milfoil. (Photo by R. Westbrooks, USGS)

GLIFWC surveys lakes for aquatic nuisance species

By Nick Milroy
GLIFWC Inland Fisheries Biologist

Odanah, Wis.— During August 2003 GLIFWC Fisheries Biologists Nick Milroy and Phil Doepke along with Invasive Plant Specialist Steve Garske searched 14 lakes in the St. Croix River basin for evidence of exotic species. Funding for this work was provided by the US Fish and Wildlife Service and the Aquatic Nuisance Species (ANS) Task Force.

Aquatic nuisance species that are exotics can have a negative impact on native species and disrupt ecosystems. Once an exotic is introduced and establishes a reproducing population, it is almost always impossible to eradicate. So efforts often shift to education aimed at preventing the further spread of the exotic, to management through some type of control (i.e. chemical or biological), and to surveillance surveys to determine if the range has expanded.

GLIFWC's surveys were for surveillance to determine if zebra mussels had moved outside the St. Croix River and into inland lakes. All of the 14 lakes surveyed drain into the St. Croix River, have a public boat launch, and have a walleye population that has been harvested during spring by Ojibwe tribal members.

St. Croix basin lakes surveyed for exotic species during August 2003

LAKE	COUNTY	AREA	Rusty Crayfish	Asian Mysterysnail*	Banded Mysterysnail*	Purple Loosestrife	Eurasian water milfoil	Curly-leaf pondweed
Sand	Barron	322	X	X		X	X	
Middle Eau Claire	Bayfield	902	X					
Upper Eau Claire	Bayfield	996	X	X				
Big Mckenzie	Burnett	1,185		X	X	X		
Lipsett	Burnett	339						
Yellow	Burnett	2,287						
Lower Eau Claire	Douglas	802	X					
Upper St. Croix	Douglas	855	X			X		
Balsam	Polk	2,053	X	X		X		
Half Moon	Polk	579	X	X	X			
Wapogasset	Polk	1,186		X				X
Nelson	Sawyer	2,503		X	X			
Lake Nancy	Washburn	772					X	
Shell	Washburn	2,580		X				

X = Species present
* Mysterysnail species identification are tentative

The field surveys consisted of visually observing for exotic plant and animal species around the shorelines with special attention placed on areas adjacent to public boat landings. Also, scuba gear was used to look for plant and animal species underwater.

Several exotic species were observed throughout the survey. Rusty crayfish, a large and aggressive exotic crayfish species, was observed in half of the lakes surveyed. This crayfish is a popular fishing bait that has been introduced into many lakes.

Also found were two snail species tentatively identified as exotic mysterysnails. Three exotic plant species were noted in several of the lakes. Purple loosestrife was found in four of the lakes, Eurasian water milfoil in two lakes, and curly-leaf pondweed in one lake. Zebra mussels were not observed in any of the surveyed lakes.

The zebra mussel has the potential to displace native mussel species, some of which today are found only in the St. Croix River. These native mussels play an important role in the ecosystem. However, zebra mussels can out compete and suffocate native mussels. Habitat degradation and pollution have already eroded the distribution and abundance of several native mussels. The spread of zebra mussels will only further imperil native mussels.

Through the use of surveys and public education, GLIFWC is working to prevent the further spread of zebra mussels and other exotic species.

Kennecott evaluating potential nickel mine near Marquette

Exploration underway at additional Upper Michigan sites

By Charlie Otto Rasmussen
Staff Writer

Marquette, Mich.— After nearly a decade of drilling test holes in Upper Michigan, the Kennecott Exploration Company is formulating plans for a possible nickel mine on the Yellow Dog Plains. The site under consideration is situated on two sensitive Lake Superior tributaries—the Salmon Trout and Yellow Dog Rivers—raising concern among local residents and the nearby Keweenaw Bay Indian Community (KBIC).

"Our staff is monitoring the project and has met with Kennecott representatives," said Mike Donofrio, KBIC Biological Services director. "Kennecott has done exploratory drilling at many sites on our reservation and purchased mineral rights for over 400,000 acres in Baraga and Marquette Counties."

The KBIC Tribal Council issued a motion in September formally opposing the mining initiative known as the Eagle Prospect. The council's motion additionally opposes sulfide mining anywhere in Michigan. The 54,000 acre Keweenaw Bay Ojibwe reservation is centered around the city of L'Anse, due west of the Yellow Dog Plains.

Donofrio said the tribe and other organizations are closely scrutinizing Kennecott's activity because the potential harmful impacts to surface and groundwater are significant. The transportation and processing of mine rock could create further environmental problems, he said.

Kennecott began searching the Upper Peninsula for a viable mineral lode in 1994, discovering nickel and copper at the Yellow Dog site the following year. The company's first public announcement of it's findings came in August 2003.

Among a host of environmental concerns is the ongoing rehabilitation of coaster brook trout. A remnant population of coasters—the last native strain on the south shore of Lake Superior—relies upon the clean waters of the Salmon Trout River and its tributaries for spawning and nursery habitat.

Exploratory core drilling to define the size and grade of the ore deposit wrapped up in mid-October. Following an analysis of the ore samples this winter, Kennecott officials are expected to announce whether to pursue mine development in late spring.

Lynn Boyd, Michigan Department of Natural Resources forest and minerals manager said that a potential development of the Eagle Prospect might take shape as either an underground or open pit mine. A combination of both configurations was also a possibility, she added.

> "Our staff is monitoring the project and has met with Kennecott representatives. Kennecott has done exploratory drilling at many sites on our reservation and purchased mineral rights for over 400,000 acres in Baraga and Marquette Counties."
>
> **—Mike Donofrio, KBIC Biological Services director**

Western U.P. exploration

At least two additional mining companies, Prime Meridian Resources and Minerals Processing Corporation, are seeking to uncover minerals in western-half of Upper Michigan. The Wisconsin based Prime Meridian Resources secured metallic mineral leases from the Michigan Department of Natural Resources (MDNR) in September for potential mine sites in Iron and Gogebic Counties.

Prime Merdian is in the exploratory phase of mine development and the company is not required to disclose which minerals they're looking for, said the MDNR's Lynn Boyd.

"The fact is, there's not a lot of information [for the MDNR] to release at this point," she said.

John Coleman, environmental biologist for Great Lakes Indian Fish & Wildlife Commission, is monitoring activity at Wolf Mountain near Wakefield where Prime Meridian has leased a 120-acre block of state land. Coleman said that in contrast to the scattered Iron County mining leases, the Wolf Mountain site is well defined and may yield quicker results from exploratory drilling. Mining leases in Iron County encompass nearly 3,900 acres on 74 parcels of land.

Near the Menominee River just beyond the 1842 ceded territory border, Mineral Processing Corporation is formulating a plan to remove zinc, copper, gold and silver concentrations discovered in October 2002. Known as the Back Forty Venture, the mining initiative has caused unease among a handful of organizations and local citizens in nearby Stephenson.

The Michigan Department of Environmental Quality serves as the primary regulatory agency for mining operations in the Upper Peninsula.

Ceded territory news briefs

FdL applies for Treatment as State status under Clean Air Act

Fond du Lac reservation, Minn.— The Fond du Lac (FdL) Band has applied for Treatment as State (TAS) status under the Clean Air Act in order to expand its ability to protect air quality. If successful, the band will be able to review air permit applications from potential polluters within 50 miles of the reservation. Any issues that FdL might have with permit would carry the same weight as those of the state.

Clean air is not a new concern for FdL. The band's Air Quality Program was created in 1999 and employs three people. The program monitors the concentrations of air pollutants on the reservation with six outdoor monitors. The monitors measure acid deposition, mercury deposition, dioxin, fine particulates, nitrogen oxides and ozone. The program also tests for indoor radon at individual homes.

If FdL's application for TAS status is approved, they will join only a few tribes nationally who have been granted TAS under the Clean Air Act.

Mille Lacs County continues to oppose treatment facility and files appeal over boundary dispute

Mille Lacs reservation, Minn.— Despite a judge's ruling against them and positive statements from the federal Environmental Protection Agency (EPA), Mille Lacs County officials continue the legal battle against the Mille Lacs Band. The county's repeated and failed efforts have already cost area residents more than one million dollars, according to a report in Mille Lacs' publication, *The Woodland Voice*.

In 1999 the band teamed with the city of Garrison to develop a new wastewater treatment plant that would serve 10,000 residents along Mille Lacs Lake's western shore. The current aging and inadequate septic systems and a shortage of wastewater treatment options threaten the water quality of the lake.

Although the plan received applause from environmental organizations and the EPA issued the necessary discharge permit to allow the treatment plant to operate, the county continues to oppose the plant. They base their opposition on a fear than non-Indian residents will be subjected to tribal jurisdiction because the Mille Lacs Band will operate the facility. Mille Lacs County has also sued to have the Mille Lacs Band's reservation legally disestablished, claiming that the band wants to control non-Indians and their property. In May, U.S. District Court dismissed the county's case, saying the county failed to show it had been harmed by the reservation boundaries and lacked the legal standing to bring its claims.

Despite the judge's strong dismissal of the case, the county continues to appeal, draining even more money from the county budget, taxpayers and the Mille Lacs Band's budget, during times when most governments are struggling. *(Information from* ***The Woodland Voice****, Fall 2003)*

Guenther to head new Minnesota DNR Fish and Wildlife Division

St. Paul, Minn.— The Minnesota Department of Natural Resources (MDNR) recently announced the appointment of John Guenther to head a combined MDNR Fish and Wildlife Division. Guenther, a 28-year MDNR employee, served as the MDNR's Regional Director for Northeastern Minnesota for the last ten-years.

Former Fisheries Director Ron Payer and Wildlife Director Tim Bremicker will now be section chiefs, rather than division heads. The change resulted from the combining of the Fisheries and Wildlife divisions.

MDNR Commissioner Gene Merriam says Guenther's work with the agency has centered on citizen involvement. He was special assistant and ombudsman to former Commissioner Joe Alexander and a project manager to resolve conflicts under former Commissioner Rod Sando. As regional director, he has worked extensively with stakeholders and local governments on integrated natural resource management.

GLIFWC tests Lake Superior fish for contaminants

Odanah, Wis.— GLIFWC currently has two grants from the Environmental Protection Agency (EPA) to perform contaminant level testing on samples taken from Lake Superior fish. An Environmental Justice grant provides for the testing of 64 samples of lake trout collected this fall for levels of mercury, PCBs, chlordane, and organo-chlorine pesticides. The information obtained from the testing will add to a data base on the condition of Lake Superior fish.

The second grant from EPA's Waste, Pesticides and Toxics Division looked at 57 samples of fish samples already archived. This testing will focus on dioxin levels in Lake Superior fish, including lake trout, whitefish, siscowet, herring and a few lake sturgeon. The samples have already been sent, and the laboratory testing completed, However, the data needs to be examined and a report written on the findings.

Apostle Islands hunting and trapping rules established

Treaty hunting and trapping regulations are on the books for the Apostle Islands National Lakeshore (AINL). The tribal deer season runs through December 31 and includes an antlerless quota of 15 deer. The harvest of otter, bobcat and fisher is prohibited during small game trapping and hunting season. Specific portions of the islands are closed to hunting and tribal members should consult their reservation conservation departments or a GLIFWC warden for details. Voigt Intertribal Task Force representatives and staff from GLIFWC and AINL developed the harvest guidelines and continue to work on rules for wild plant gathering.

Fall walleye surveys conducted on 180 ceded territory lakes

By Joe Dan Rose, GLIFWC Inland Fisheries Biologist

Odanah, Wis.— During fall 2003, electrofishing surveys were conducted in 180 ceded-territory waters including 155 lakes in Wisconsin, 23 lakes in Michigan, and 2 lakes in Minnesota. These walleye recruitment surveys are conducted each fall to determine if, or to what extent, juvenile walleye have entered (or recruited) into the population. The Great Lakes Indian Fish & Wildlife Commission (GLIFWC) conducts these surveys on behalf of its member tribes to evaluate the strength or weakness of the two most recent (young-of-the-year and age 1) year classes of walleye.

Lakes selected for surveys are primarily those where a shared state/tribal fishery has developed or those with a naturally reproducing population of walleye. Results from these surveys are also used to determine walleye recruitment codes for individual lakes and to monitor long term trends in year class strength from both lake-specific and regional perspectives.

Ten electrofishing assessment crews were used, including four from GLIFWC, two from US Fish & Wildlife Service, and crews from the Bad River, Fond du Lac, Mole Lake, and St. Croix tribes. Electrofishing boats sampled lakes four nights per week throughout September and October 2003. For scheduling purposes, it was assumed that each boat could sample five to seven miles of shoreline per night.

Electrofishing surveys began at dusk and continued until the entire shoreline of the lake or a set of predetermined index stations was sampled. The number of boats assigned to each individual lake was based upon shoreline length, and whether the entire shoreline or index station segments would be surveyed.

All fish collected were identified as to species, and their total length in inches was measured. Scale samples were collected from five walleye per half-inch group to determine the age composition of the sample. All fish were live-released back into the lake after data were collected and recorded.

Ten ceded-territory lakes in Wisconsin were jointly surveyed by GLIFWC and the Wisconsin Department of Natural Resources assessment crews. These lakes included: Middle Eau Claire (Bayfield Co.), Upper and Lower Post (Langlade Co.), Pelican (Oneida Co.), Balsam (Polk Co.), Chetac, Nelson and Sand (Sawyer Co.), Crab, Lac Vieux Desert and Trout (Vilas Co.).

An electrofishing survey was also conducted at Mille Lacs Lake, Minnesota. Like past years, three electrofishing boats were scheduled to survey the entire 78 mile shoreline of Mille Lacs Lake in four nights. This fall, these electrofishing crews were able to sample approximately 70 miles of shoreline despite less than ideal wind and weather conditions throughout most of the survey period.

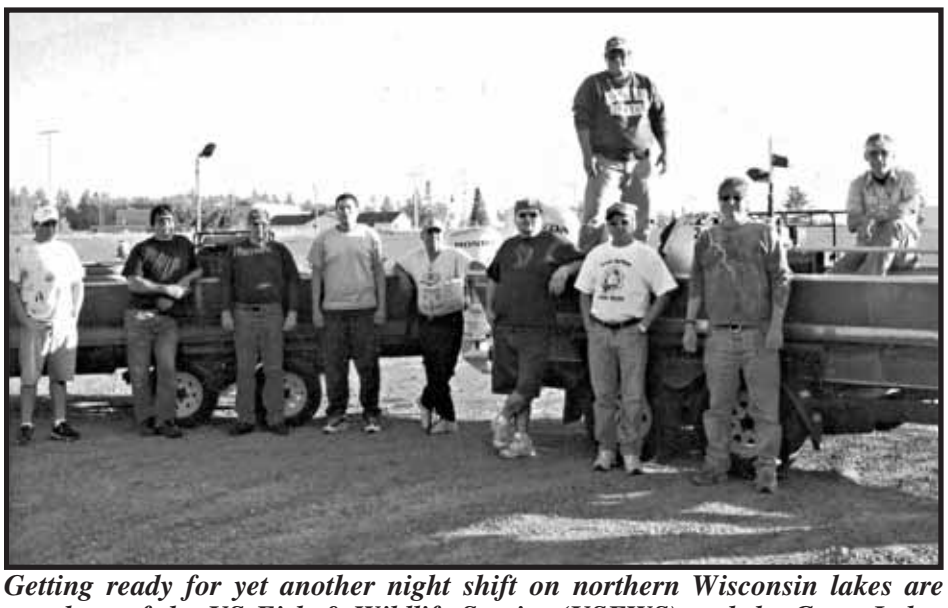
A mark and recapture juvenile walleye population estimate was conducted on Siskiwit (Bayfield Co.). Sampling procedures similar to those used for the fall recruitment surveys were followed, except that all walleye less than 13 inches in length received a mark before they were live-released.

After allowing time for the marked fish to mix with unmarked fish, the recapture phase of the survey was conducted. The proportion of marked to unmarked fish collected during the recapture phase of the survey is used to calculate an estimate of abundance.

Results from the fall walleye recruitment surveys are expressed as the number of age 0 (young-of-the-year) and age 1 walleye collected per mile of shoreline sampled. For fall electrofishing surveys conducted on Wisconsin ceded-territory lakes with naturally reproducing walleye populations between 1984 and 2002, the average number of age 0 and age 1 walleye collected per mile of shoreline surveyed is 34.5 and 10.7, respectively.

Results from the 180 walleye recruitment surveys conducted by GLIFWC during fall 2003 are currently being compiled. Thus, it is not yet known whether lake-specific or regional walleye year class strength for 2003 will be above or below these long term averages.

All GLIFWC, US Fish & Wildlife Service, and tribal assessment crews are collectively thanked for operating and maintaining electrofishing boats and equipment, sampling fish, and collecting data under a wide range of conditions throughout the fall survey season.



Getting ready for yet another night shift on northern Wisconsin lakes are members of the US Fish & Wildlife Service (USFWS) and the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) electrofishing crews. All total, crews from USFWS, GLIFWC, Bad River, Fond du Lac, Mole Lake, and St. Croix tribes surveyed 180 ceded territory lakes. Pictured above, from the left, are (front row) Ed Whitebird, Butch Mieloszyk, Ed White, Josh Johnson, Hilary "Junie" Butler, Shane Cramb, Dale Corbine (standing) Louis Plucinski, Steve Skemp and Frank Stone. (Photo by Sue Erickson)

Fish population studies continue with grant award

Modeling focus on Lake Superior, Mille Lacs

By Charlie Otto Rasmussen, Staff Writer

Odanah, Wis— Following a recent grant award from the Administration for Native Americans, GLIFWC fisheries biologists are launching the second phase of a project to model fish populations in Lake Superior and Lake Mille Lacs. With grant monies totaling more than $236,000, GLIFWC biologists are continuing to cultivate cutting edge techniques to estimate the size and age structure of fish populations.

"The funding provides crucial support in building upon the walleye and lake trout models we developed this past year," said Neil Kmeicik, GLIFWC Biological Services director. "Having staff trained and experienced in modeling fish populations improves our ability to participate along with other agency scientists in setting harvest quotas."

Inland Fisheries Biologists Joe Dan Rose and Nick Milroy spearhead the Lake Mille Lacs study, working to establish models that assist the tribes and state in improving northern pike management.

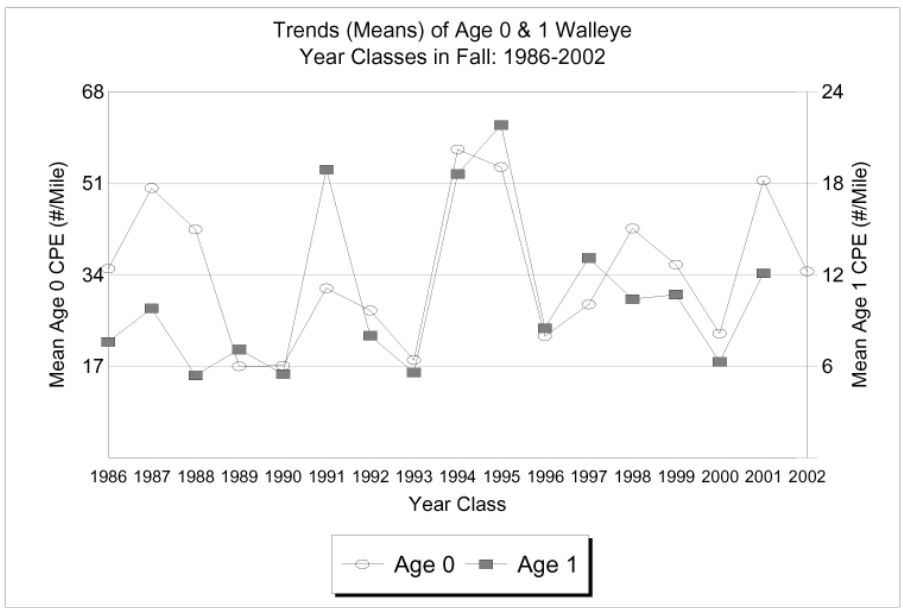
Skilled in using a number of fisheries models, GLIFWC Data Analyst Rick Madsen assists the biologists in describing fish populations.

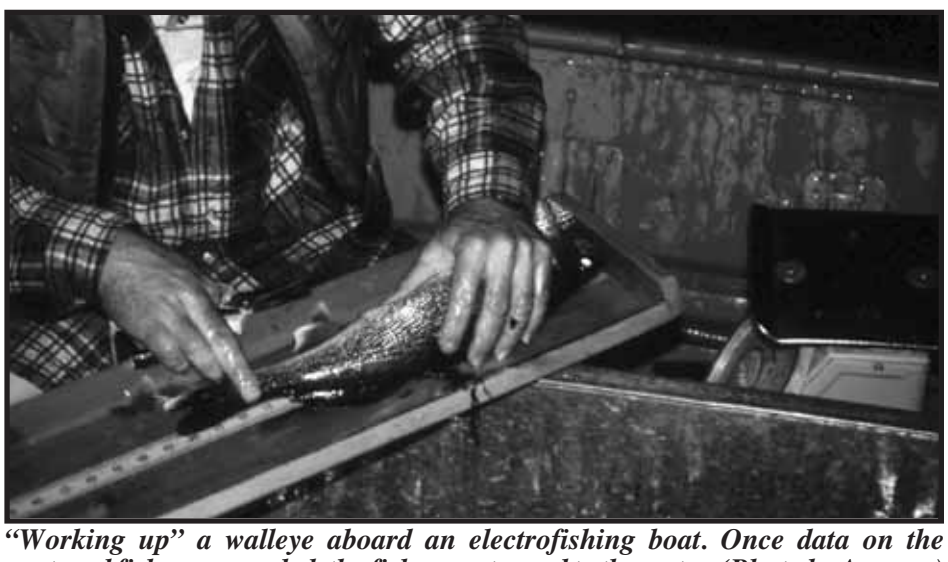
"At this point, our knowledge of the northern pike population in Lake Mille Lacs is rather limited," Madsen said. "Our modeling will help us synthesize the available information to give us a better picture of what's out there. It should also help us find out what kinds of information we can collect to improve our estimates in the future."

On Lake Superior, Biologist Bill Mattes is focusing on a management unit lying north of the Keweenaw Peninsula called MI-3, covering an area between Copper Harbor and Misery Bay.

Modeling is a way of using mathematical equations to estimate the size and age structure of fish populations. Routine fisheries surveys that include electrofishing, gillnetting and trawling are generally factored with harvest data from state and tribal fishermen to develop models.

"The models we use to describe and forecast fish populations can range from the fairly simple to some that are quite complex. We're fortunate to have this grant so we can get additional training, consult with several fisheries experts and devote more of our time to these tasks," Madsen said.





"Working up" a walleye aboard an electrofishing boat. Once data on the captured fish are recorded, the fish are returned to the water. (Photo by Amoose)

Restoring a wild resource

By GLIFWC Staff

It is a breezy but sunny, early September afternoon. Deep in the Chequamegon National Forest someone has just slipped a canoe off of a truck and plopped it unceremoniously onto the edge of a small lake. Pleased to have the place to himself, he hoists a few heavy grain sacks into the center of the canoe, grabs a paddle and sets off for the far shore, seeking the mucky shallow shelf near the outlet.

Here, under the watch of an immature bald eagle, he maneuvers the canoe into a position where the wind will blow him across the shallows, cuts open the bags, and begins launching handfuls of dark seed high into the wind. Once airborne the jumbled seed falls into rank, aligning vertically before plummeting to the surface and diving to the sediments below. In a little more than an hour he is all done and paddling back, thinking about when he would return.

This solitary exercise was not the illegal baiting of some wanna-be duck poacher, but a small part of a highly cooperative, inter-agency effort to restore some of the historic abundance of wild rice in Wisconsin, Michigan and Minnesota.

The need for this effort is clear, according to Great Lakes Indian Fish & Wildlife Commission (GLIFWC) Biologist Peter David. "Manoomin, or wild rice, was once far more common within its range than it is today. Although it is hard to put an exact figure on what has been lost, historic accounts and even geographic place names indicate that the loss has been substantial. The great ecological value of this resource, and its cultural significance to both Indians and non-Indians alike merits its restoration. The re-affirmation of Ojibwe off-reservation treaty rights has really helped spur that restoration."

The strong cultural significance of wild rice to the Ojibwe made it natural for its restoration to be a high priority. However, since the tribes do not own off-reservation lands they could manage, they reached out to other agencies that did.

"It didn't take a hard sell to get other land managers interested in this effort," David continued. "The work was being done in a few areas, but there was a latent desire to do more."

However, GLIFWC's initial efforts to promote rice restoration were limited by a lack of funding. That hurdle was greatly overcome when the Bureau of Indian Affairs was able to secure funding for the Circle of Flight program, which promotes tribal wetland restoration work in the midwest.

"The Circle of Flight funding was the trigger that really made this possible," noted David. "Rice restoration isn't really very expensive—that's one reason this effort is attractive to biologists—but it does take some support, and the Circle of Flight program was able to provide it. With it, we were able to approach potential cooperators talking about cost sharing, and were able to provide seed to their doorstep. People responded; this past fall, for example, we handled about four tons of seed in this effort, which is fairly typical of what we have handled annually for the last decade or so."

Dan North, GLIFWC wildlife technician, throws unfinished, or green rice, into Lac Vieux Desert's Rice Bay near the Michigan-Wisconsin border in an effort to restore former rice beds. (Photo by Charlie Otto Rasmussen)

In recent years, GLIFWC has concentrated its efforts during the month-long harvest season on the front end of this effort, procuring rice seed from individual pickers and getting it into the hands of cooperators, who share the cost of the seed and do much of the actual planting.

The cooperation begins with the harvesters. "We have ricers who go out of their way to sell to this program, because they are glad to know the seed is going back to benefit the resource," said David. And it often ends with other

(See Restoring, page 13)

Wiigwaasi Mitig: The Giving Tree

Important to northern cultures around the globe

By Sue Erickson, Staff Writer

Cloquet, Minn.—If you look around the earth, south of the northern tundra, there's a region that circles the world where wiigwaasi mitigoog (birch trees) grow. Within that region around the world people have made remarkable use of the gifts from the wiigwaasi mitig—those people include Ojibwe and other northern Indian people in the United States and Canada as well as northern dwellers in Finland, Norway, Sweden and Russia—all have benefited from what Filmmaker Lorraine Norrgard calls "the giving tree."

Norrgard's fascination with the wiigwaasi mitig sparked around 1986 when she was filming the late Jerry Maulson from Lac du Flambeau crafting a wiigwaasi makak (birch bark basket) for the film *Enduring Ways of the Lac du Flambeau People*. Since that time her interest in and relationship with wiigwaasi have grown to include an expanding circle of friends skilled in the use of wiigwaasi.

Galina Dakina, a Russian master of birch bark, working at home on her baskets. (Photo by Lorraine Norrgard)

She also filmed Red Cliff's Diane Defoe making baskets for the recent video series *Waasa Inaabidaa: We Look in All Directions* and empathized with Defoe's respect and love for the environment, the trees, and the land. "She would offer tobacco before she harvested the birch and would relate to the tree as another being. It was like she was handling its skin," Norrgard says. That's a powerful connection to the earth and one that Norrgard admires and shares.

This summer her birch bark circle became even larger as she departed for a trip to visit Sweden and Russia with a grant from the Jerome Foundation to research their use of wiigwaasi. Her intent was to explore the indigenous use of birch in these places as well as some of the indigenous beliefs and stories about it.

"In history, birch has been a major provider for people, used for medicines, shelters, net floats, apparel, grave covers, boats, jewelry, baskets, and ornaments. It's a real giving tree," Norrgard comments.

She arrived in Dululth's sister city Petrozavodsk in the Russian Province of Karelia, Russia in June, just in time for Petrozavodsk's 300th anniversary. June is also the month when the birch peels in Russia, as it does in the United States.

She was accompanied by Russian-born Irina Haller, now a resident of Duluth, Minnesota, who makes very tiny one-inch birch bark shoes given for good luck or as a protection gift, Norrgard says. Haller served as a translater for Norrgard while in Russia. Both women were also sponsored by the Duluth Sister City Program.

While in Petrozavodsk, Norrgard interviewed four masters weaving birch bark. In Russia they give awards and medals to master craftsmen. Among them was Galina Dakina, who weaves baskets of many designs and even produces incredible three-dimensional sculptures. Norrgard brought home one three-dimensional character called the "woodsman." He is like a forest spirit, she says. He holds a basket and seasonal berries are placed in the basket as an offering.

A three-dimensional character made by Galina Dakina of Russia. The character is the "woodsman" and represents a forest spirit. Seasonal offerings of berries are to be placed in the basket he carries. (Photo by Sue Erickson)

Birch bark craft work in Russia today is both a tradition and a necessity. It operates like a cottage industry, providing a much needed income to the craftsmen, Norrgard comments. She found the Russian economy to be very poor and unemployment common. For instance, Lyudmila Savina, a birch bark master who also holds a doctorate in mathematics, and her husband, who has a doctorate in forest science, live in a one-room apartment with their two daughters.

Savina's weaving is extrodinary in design and geometry, Norrgard says. She uses a three step process of drawing on graph paper, making a model from paper and finally producing the birch bark basket.

Some of the techniques for decorating birch items were quite unlike those Norrgard had seen previously. In Russia she found numerous examples of embossed birch bark. A design is carved into a stamp and then pressed into the bark. Originally, they used reindeer antlers to make the stamp.

(See Wiigwaasi Mitig, page 19)

Only ten months 'til ricing season—the best season of all!

Sawyer, Minn.—"Ricing is never more than eleven months away," "Fonjalacker" Jim Northrup quips with a grin as he patiently sorts through a plate of green manoomin (wild rice), picking out the remaining husks. For him the harvest and processing of manoomin is a season rich with unique sights, sounds and aromas. He revels in the sound of water, the touch of wind, the steady swish-swish-swish-swish-swish-swish of rice knockers and later of parching paddles turning rice in a huge metal kettle that emits the nutty fragrance of roasting rice. It's a beautiful season—Jim's favorite season involving the "most work and the most family."

Northrup, a noted Ojibwe poet, author and skilled birch bark craftsman, has participated in the annual harvest of rice since childhood in Sawyer, Minnesota. Still living in the same neighborhood of the Fond du Lac reservation, he and his wife, Pat, remain true to the traditional methods of hand harvesting and hand processing manoomin.

"It's important to keep this method alive," Jim says. "It worked for Grandpa, and the world will probably run out of gas eventually." Both he and Pat have taken the time and care to pass their knowledge on to family—children, grandchildren and godchildren—and to anyone who is interested, for that matter. "My wife Pat and I taught our godson Zach to make rice. Zach taught ten others. It's important to pass on the knowledge. Someone took the time to teach me," Northrup comments.

The rice harvest begins with feasting the rice for the Northrup family. "We always put out a dish to thank for the gift of wild rice," he says. When it's time to slip the canoe in the water, asemaa is put down, also thanking for the rice and another opportunity. Then Jim checks that everything is ready for a day in the rice field—poles, paddles, rice knockers, lunch, water, bread and gum. The gum and bread are to remove waazawashk, he explains, which are barbs on the rice plant that can be irritating if stuck in your skin or eye.

"If I see an eagle flying around while I'm out ricing, I know he will tell the Creator that we are still using that gift, so we will get it again next year," Jim comments. "Wild rice is a gift from the Creator. There is no good year or bad year. It's a gift."

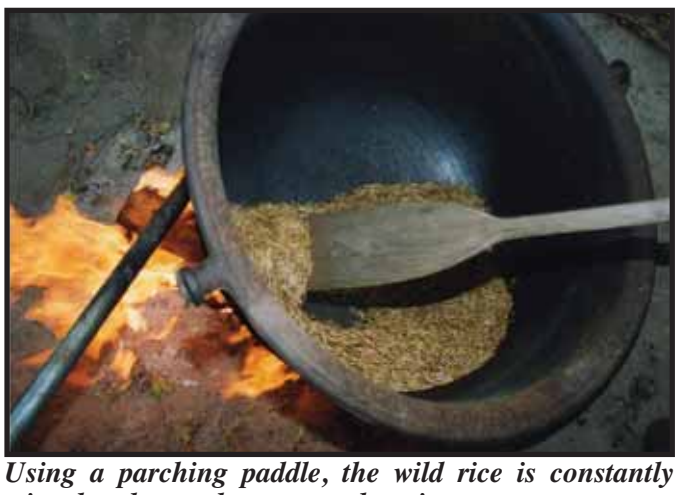
For many years there were only a few people ricing on the lakes, but in recent years more people are participating in the harvest. The Fond du Lac Tribe buys a good quantity of rice from the ricers, Jim says, using one-third of it for seeding purposes and the rest for gifts. Jim and Pat keep their rice for personal use and for special occasions such as feasts and funerals.

Jim makes his own rice knockers and ricing poles. He uses tamarack for the lengthy pole used to push the canoe through the rice beds. The spiral grain of the tamarck gives it strength, and he fashions the pole's fork from diamond willow because it doesn't split. White cedar is used for the knockers, so they will be lightweight. Poles last about ten years, he says, and so will knockers if they are not banged against the side of the canoe too often.

Once the rice is brought in, the preparation must begin. The rice is dried in the sun to prevent spoilage. When ready to begin, a fire is started in the fire pit behind the Northrup's home. Jim hauls out a huge black metal kettle that rests at a slant

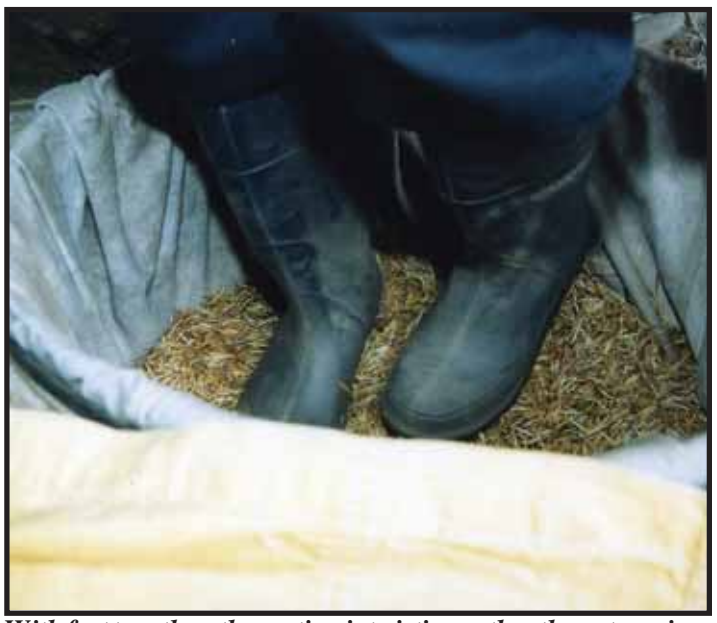
(See Processing manoomin, page 13)

Preparing to parch, Jim Northrup pours wild rice into a gigantic kettle set over a fire pit.



Using a parching paddle, the wild rice is constantly stirred and turned to prevent burning.

Dancing the rice, Pat Northrup moves her feet over the parched rice to break open the husks, adjusting the pressure by putting more or less of her weight on the rack.



With feet together, the motion is twisting rather than stomping.

Once the rice has been danced and the husks opened, it must be fanned using a winnowing basket. The rice is gently tossed into the air, and the breeze removes the dried husks.

The final step is patiently removing the remaining husks by hand.

Article and photos by Sue Erickson, Staff Writer

Processing manoomin Grandpa's way

(Continued from page 12)
over the fire, propped between the edge of the fire pit and a metal rod above. A quantity of rice is poured into the kettle to be parched over the fire. Using a parching paddle, Jim keeps the rice moving in the pot, careful not to let it scorch or burn. He can feel the rice changing. At first it's clumpy, he says, and then it begins to move like water. He stops to check it occasionally, feeling the kernels to see if they are dry and crack easily. The nutty fragrance from the roasting rice fills the crisp fall air.

For the next step, Pat takes over. She will dance the rice. Donning a pair of rubber boots reserved for this, she steps into a small pit lined with a piece of canvas from an old tipi into which the parched rice has been placed. She formerly used moccasins, but finds the rubber boots work better. Resting her arms on a specially devised rack in front of her, she begins to dance the rice. Keeping her feet together, she moves them gently from side to side, twisting rather than stomping. The motion cracks the brittle husks away from the kernel.

Pat stops to kick the rice up and resumes the dance. She adjusts the pressure on the rice by resting more of her weight on the rack towards the end of the process. Occasionally, she checks the rice. If its fluffy, the kernel is out, she says. After about 20 minutes of dancing, the rice is ready to be fanned, so is removed from the dancing pit and a quantity of it placed in one of Jim's birch bark winnowing baskets.

Out ricing for the first time last September, Pat and Jim's granddaughter, Jaelisa, is ready to go out on Perch Lake with her father, Jim Northrup III, using child-sized rice knockers he fashioned especially for her.

A nice breeze is helpful to blow the dried, cracked husks away as the basket is gently shaken, bouncing the rice into the air. If the wind is not cooperative on a particular day, Jim resorts to technology and plugs in a fan he has sitting outside to deal with that problem.

That brings us back to where we began with Jim sitting at his kitchen table carefully picking out the hulls that did not blow away during the fanning. "Manoomin means good seed," Jim says, admiring his finished product, happy to know that next ricing season is only eleven months away and that his granddaughter, Jaelisa, was going out ricing for the first time on that September day.

(**Author's note:** While sitting at the table, Jim almost shared a story with me, but remembered in time there was no snow on the ground and the frogs and the toads might hear us. Maybe he will share the story when the frogs and toads are sleeping underground. Jim can be contacted at northrup@cp.duluth.mn.us.)

When it's all said and done—what a beautiful nutritious product you have. (Photos by Sue Erickson)

Manoomin

By Jim Northrup, Fond du Lac Ojibwe

Tobacco swirled in the lake
as we offered our thanks.
The calm water welcomed us
rice heads nodded in agreement.
Ricing again, mii gwech Manido.
The cedar caressed the heads
ripe rice came along to join us
in many meals this winter.
The rice bearded up.
We saw the wind move across the lake
an eagle, a couple of coots
the sun smiled everywhere.
Relatives came together
talk of other lakes, other seasons
fingers stripping rice while
laughing, gossiping, remembering.
Its easy to feel a part of
the generations that have
riced here before.
It felt good to get on the lake
it felt better getting off
carrying a canoe load of food
and centuries of memories.

Wild Rice and grape salad

3 cups cooked rice
1 cup seedless green grapes, halved
1 small can water chestnuts, sliced
1/2 cup celery chopped medium-fine
1 big bunch green onions choppeed medium fine
1/2 cup slivered or sliced almonds
1 cup Hellmans mayo (do not use substitutes)

Stir vegetables and mayo into rice, stir grapes in gently. If too thick, thin with a little milk. Taste for seasoning. Keep refrigerated.

Gagoonz—Little Porcupines

1 lb. ground venison
1/3 cup uncooked wild rice
1 small onion minced very fine
1 seeded green pepper minced very fine
1 tsp. salt
1/4 tsp. pepper
1 can tomatoes
1 can tomato soup

Combine meat, uncoooked rice, onion, green pepper, salt & pepper, mix thoroughly. Shape into 1" firm meat balls. Bring soup and tomatoes in their liquid to a boil in frypan with tight cover, put in meat balls, reduce to very slow simmer. Simmer, covering tightly, until done with rice popping out of balls like porky quills—about 40-45 minutes.

—Olga Masica, Minneapolis

(Recipes reprinted from kstrom.net/isk/food/r-wild.html.)

Wild rice turkey casserole

Pour 1 c. boiling water over 3 c. of bread crumbs, 3 tbsps. butter and 2 eggs. Beat smooth. Then add 1 1/2 c. cooked wild rice, 3 c. cooked turkey, 1 c. diced celery, 1/4 c. minced onion, 1 small can mushrooms, 1 small can water chestnuts, drained and cut up, 1 can cream of chicken soup, 3 tbsps. soy sauce, 1/4 tsp. poultry seasoning, salt and pepper to taste, more water or broth if needed. Put in casserole, top with buttered bread crumbs, Bake 1 hr. at 350 degrees. Serves 10.

Restoring a wild resource

(Continued from page 11)
cooperators, who suggest sites and provide the time and money needed to make it work.

The cooperator list is a long one, including state Departments of Natural Resources, the U.S. Forest Service, the U.S. Fish and Wildlife Service, county governments, tribal nations, private organizations such as Ducks Unlimited and the Wisconsin Waterfowl Association, local lake associations, and even interested individuals. And while this effort is limited to public waters, GLIFWC can offer guidance to individuals interested in restoring rice on private lands.

While it may be hard to pinpoint how much of the historic abundance of manoomin has been lost, it is easier to see what has been restored. "I think this effort is having a measurable impact on the landscape," said David. "Harvest surveys in Wisconsin suggest 15-25% of the human harvest now typically comes from stands that didn't exist 20 years ago, like those on the Phantom Flowage in Burnett County, the Gile Flowage in Iron County, the Spring Creek Wildlife Area in Price County or the Hiles Millpond in Forest County—just to name a few. And the opportunity for human harvest is really one of the lesser benefits of this effort. The biggest winners from this undertaking are the ducks, geese, swans, rails, muskrats, and other species that utilize the bounty this plant provides."

For more information, contact Peter David at (715) 682-6619 ext. 123 or email pdavid@glifwc.org.

Dams, ditches & wild rice restoration at Fond du Lac

By Sue Erickson
Staff Writer

Fond du Lac, Minn.—"It was a good rice year," says Larry Schwarzkopf, Fond du Lac (FdL) Natural Resources Program (NRP) manager. "The Fond du Lac Tribe bought 30,000 pounds of manoomin (wild rice) off the landings in 2003. A portion of that will be used for re-seeding and restoration efforts."

This year's abundant rice yield is both a tribute to a cooperative Mother Nature and a long-term commitment by the FdL Band to restore wild rice in a number of its on-reservation lakes. The battle for restoring manoomin on the Fond du Lac reservation has been long, labor intensive, complex, and, most importantly, successful.

Restoration of manoomin has been a goal for the FdL Band for many years. It has also been a goal for Schwarzkopf since he started work for the Band in 1988. Originally, the Band sought to regulate water levels with a concrete dam built in 1936 on Perch Lake, and another wooden dam on Rice Portage Lake built in 1939.

Other methods were employed including sandbagging and removal of beaver dams. However, these efforts were not enough to effectively restore wild rice stands due to some very deep-seated problems stemming from the loss of the dams and extensive ditching around and through five of the FdL's wild rice lakes.

The Perch Lake dam fell apart over the years, and a local landowner dynamited the wooden dam built by the Bureau of Indian Affairs on Rice Portage Lake in 1958. The ditch banks provided trees and fertile banks for the beaver to anchor dams in contrast to the original streams that meandered through the marshes

The ditching was part of an effort in the early 1900s to drain the lakes, making way for roads and providing farmland, according to Schwarzkopf.

The drainage drastically reduced the size of the lakes, but never produced very viable farmlands, he says. When the depression hit, the farmers, who were expected to pay a "ditch" fee to Carlton County, were unable to pay, and consequently, the County along with the farmers went bankrupt.

The wild rice fields were also "bankrupted," and the Band was left with half-drained lakes connected by a web of drainage ditches. Subsequent to a 1936 drought, cattails became established in some of the lakes, presenting more of a nightmare for the restoration efforts underway today.

Fond du Lac's Natural Resource Program staff had their work cut out for them in order to provide viable wild rice fields for tribal members. They tackled the situation from several fronts.

For one, they replaced the old dam on Perch Lake. They also constructed water control structures on Perch Lake, Rice Portage Lake, the Upper Deadfish Impoundment and Deadfish Lake in order to manipulate the water levels and encourage restoration of hundreds of acres of wild rice. The dams were all completed by 1999.

The dam on Rice Portage Lake will bring this 425-acre wild rice lake back to historic levels in several years. The water level on Rice Portage Lake will be raised incrementally as the cattails are removed and the wild rice habitat is restored. Deadfish Lake still faced flooding problems during severe storms, Schwarzkopf explains. So, the band built a 71-acre impoundment dam above it to hold back floodwaters. The water is released slowly once the impoundment fills.

FdL is also installing digital water level gauges on the dams. The gauges provide continuous data on the lake's elevation and tail water elevation at each dam on a digital read-out. This data and the precipitation is used by Reggie Defoe, FdL NRP technician supervisor, in their HydroCad hydrology model to anticipate lake level changes and manage the four dams.

On another front, the tribe also faced lakes filled with cattail, pickerel weed and water lilies, all which intrude on wild rice. Schwarzkopf says that between 1988 and 2000, the pernicious pickerel weeds expanded their range on Perch Lake by four to five times, taking over established wild rice on much of this lake. The gigantic weed removal project was far beyond manual removal.

To tackle the job, the Band purchased a diesel-powered "cookie cutter" outfitted with two five-foot propellers to chop cattail and pickerel weed. For clean-up, FdL also purchased two harvesters to pick-up the chopped weeds which are brought to shore to decompose. In this way, the decomposing weeds along shore will return the nutrients to the lake.

In areas where weeds have been removed and wild rice re-seeded, healthy, robust wild rice plants have flourished, Schwarzkopf says. In some restored areas on Perch Lake, the wild rice is now so thick that it is difficult to get canoes through during harvest. The NRP is testing the use of the "cookie cuter" to cut up the thick rice straw in these areas in order to speed up decomposition so next year's crop will also be abundant.

Students from Fond du Lac Tribal and Community College have assisted FdL in studying the plant community and sediment, sampling both prior to weed removal and following wild rice establishment. They examine for nutrient levels and sediment characteristics. Studies are based on a wild rice lake sediment classification system developed by wild rice expert Dr. Peter Lee, Lakehead University, Thunder Bay, Ontario, relating types of sediments and wild rice productivity. It seems that removal of the aquatic weeds disturbs and mixes the bottom sediment and may provide a better nutritional base for wild rice growth, Schwarzkopf says.

The removal of aquatic weeds is a slow-moving process, especially in dense stands of cattails. The NRP crews worked on a portion of Rice Portage Lake this summer, June-September. They encountered ice under the cattail mat throughout June due to the exceptionally cold winter, which further impeded the project. Schwarzkopf estimates weed removal on Rice Portage Lake will continue for seven to ten years, but hopes to see 300-400 acres of rice rather than the current 100 acres once the project is complete.

Bagging rice on Miller Lake. (Photo courtesy of Fond du Lac Natural Resources Department)

Pointing to one of many aerial photographs of the six wild rice lakes, Schwarzkopf indicates areas dense with aquatic weeds, areas that have been cleared and areas with current wild rice stands. He takes the photos at the floating leaf stage and at harvest time to reveal the changing plant communities in the lakes as the restoration efforts move forward.

Also on the docket for 2004 is Jaskari Lake where pickerel weed needs to be removed. This weed was introduced into the lake in the 1940s from Perch Lake and has flourished. While pickerel weed is endemic to the United States, it is not native to these lakes. Schwarzkopf warns that the weed is sold for lake landscaping, and buyers should be wary of using it in the vicinity of a rice lake because it can and will take over.

Once an area of a lake is cleared of the culprit weeds, the work is not over. Crews have to watch for regeneration. These weeds are perennials; they come up every year, so can be more difficult to eradicate than wild rice, which is an annual plant, Schwarzkopf says. So, there is continuous maintenance work to be done on the lakes to keep them clean. Most of this work is done mechanically with the "cookie cutter" and the harvesters.

Other potential problems concern Schwarzkopf, problems such as the nasty Eurasian water milfoil, curly pond weed and hydrilla—all harmful, exotic, aquatic plants that are very difficult, and probably impossible, to remove. If any of these plants were accidentally introduced to a wild rice lake, it would result in the permanent loss of wild rice stands in that lake and potentially to a chain of wild rice lakes, Schwarzkopf says.

Rice lakes are often also duck lakes—that brings duck hunters with boats, motors and decoys, which are moved from lake to lake and are potential carriers of these exotic weeds. Schwarzkopf believes duck hunters should be made aware of the potential problems they could create if their boats and gear are not properly cleaned of weed debris.

Schwarzkopf gives the example of a lake several miles northeast of the FdL reservation. The lake is now covered with Eurasion water milfoil that was most likely introduced by duck hunters a few years ago. As more lakes become infested with these harmful, exotic plants in this region, the potential for accidental introduction into more lakes increases.

While still battling problems from the past and watching for future problems, Schwarzkopf is pleased to see successful wild rice restoration occurring on the Fond du Lac reservation and especially pleased to see increased interest in harvesting wild rice at the tribal level. More people are taking to the lakes and benefiting from the improved rice fields. That's a big reward.

The Fond du Lac Band funds much of the restoration work, but grants have been significant funding sources as well. Schwarzkopf estimates it requires $1,000 to $3,000 per acre to restore the lakes, depending on weed type and density.

The Legislative Commission on Minnesota Resources assisted with a grant to purchase the second aquatic harvester. The Natural Resources Conservation Service provided Environmental Quality Incentive Program dollars to cost share on vegetation removal. The Circle of Flight program has been a major contributor, and the FdL Band was the first tribal recipient of a large grant from the North American Wetland Conservation Act for all four dams.

Working with Schwarzkopf on executing the restoration work are his dedicated staff: Reginald Defoe, supervisory technician and four technicians: Terry Perrault, Charles Nahganub, Russ Northrup and Chuck Greensky.

(Editor's note: For more information on exotic plants, visit GLIFWC's Exotic Plant Information Center at www.glifwc.org/epicenter. This website includes educational materials, a slide library, etc.)

GLIFWC Enforcement Divison benefits from COPS grant

Monies to help fund three warden positions

Odanah, Wis.—It was good news for GLIFWC's Enforcement Division when they got word recently of two grant awards from the Department of Justice's (DOJ) Tribal Resource Grants Program, Office of Community Oriented Policing Services (COPS). The awards, providing a total of $279,164, will go along way towards funding three warden positions for three years. (See job announcement below.)

One award contract for $55,965 directs COPS dollars towards training of three officers, including training in basic recruit, first response, defibrillation, and cold-water rescue. It also provides for uniforms and basic issue for three officers. In addition, the grant funds recertification training for ten officers and portable computers for GLIFWC's ten satellite enforcement offices on member reservations.

The second award for $224,199 provides 75% of the salary and fringe for three officers for three years.

GLIFWC has established a community-based policing program to enforce tribal off-reservation conservation ordinances. GLIFWC conservation wardens, who live and work within tribal communities, more effectively detect fish and game violations.

GLIFWC conservation officers must attend basic law enforcement recruit training, completing a minimum of 520 hours of basic training to qualify as a conservation officer. The training is the same as states require for law enforcement certification.

Basic training involves study of state and tribal law, reporting procedures, use of firearms, medical response, defense tactics, and emergency vehicle operation. GLIFWC officers also become certified as first responders and in cold-water rescue.

In addition to basic training, GLIFWC officers maintain and improve proficiency through mandatory training sessions. Training includes firearms training; Defensive Arms & Arrest Tactics; twenty-four hour re-certification in cold-water rescue; and twenty-four hour re-certification in law enforcement.

GLIFWC's Enforcement Division works cooperatively with state conservation officers and local law enforcement. Cooperation may include joint patrols, like night patrols for shining, jointly monitoring a deer decoy during deer season, or checking out suspected illegal fishing. Wardens also work cooperatively with local emergency medical services and fire departments.

Vacancy Announcement

(Editor's note: At various times of the year GLIFWC has vacancies in the Enforcement Division. These are our most current postings.)

Positions: Conservation Officer—DOJ COPS Grant
****KEWEENAW BAY, MICHIGAN—1 OPENING**
****ST. CROIX, WISCONSIN—1 OPENING**
****MILLE LACS, MINNESOTA—1 OPENING**

The Great Lakes Indian Fish & Wildlife Commission represents eleven Ojibwe bands with off-reservation treaty rights to hunt, fish and gather in the ceded territories of Wisconsin, Michigan and Minnesota. The Commission is composed of five divisions: Administration, Biological Services, Public Information, Enforcement, Intergovernmental Affairs, and Natural Resources Development.

Salary: $21,902—$24,094 depending on GLIFWC pay scale and qualifications (GLIFWC offers a full range of fringe benefits including health insurance and retirement.)

Supervision: Reports to the Supervisor or Chief.

Opening date: October 7, 2003

Closing date: Until filled

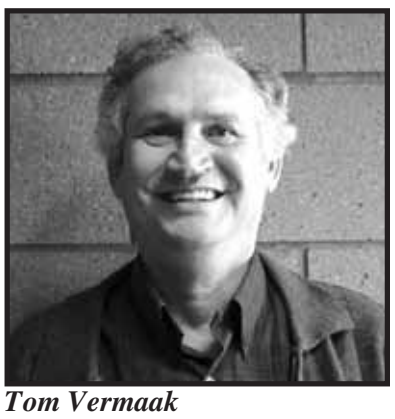
Duties and Responsibilities:
Responsible for reporting to his/her immediate supervisor on a day to day basis and completing other duties as assigned by his/her immediate supervisor. Monitors fishing and hunting activities by tribal members, including the preparation of catch reports and tagging of fish and wildlife. Issues any and all required permits for fishing and hunting activities. Issues citations to violators of off-reservation tribal fishing and hunting regulations and, if determined necessary, the seizure of equipment and catch. Testifies in tribal court concerning issued citations. Patrols, maintains daily logs and records, vehicle reports, monthly reports, and attends meetings as assigned.

Qualifications:
- ✓Applicant must possess a high school diploma or GED. In addition, law enforcement officers first employed after February 1, 1993, must obtain at least 60 college credits or an associate degree within five years of initial law enforcement employment.
- ✓Must be at least 18 years of age.
- ✓Must possess a valid driver's license and be insurable under GLIFWC's insurance policy.
- ✓Must have no felony convictions.
- ✓Must be State certified or able to become State certified.
- ✓Demonstrate skill in understanding oral and written instructions as well as skill in report writing and other written or oral communications.
- ✓Must be able to perform physical, mental and sometimes strenuous duties conducted at odd times and locations.
- ✓Be of good moral character, as determined from the results of a background investigation.
- ✓Be free of any physical, emotional, or mental condition which might adversely affect law enforcement performance.
- ✓Must be willing to live on or near above assigned area and/or be willing to relocate to assigned area within 60 days of employment.
- ✓Indian preference will be followed if all other qualifications are equal.

Training:
If he/she has not already done so, the incumbent must, within the first year of employment, complete required Basic Recruit training. Incumbent must also successfully qualify with assigned weapon on a semiannual basis and complete at least 40 hours of in-service training each year.

Applications:
Contact Kim Campy (715) 682-6619 for a copy of the application form. All applications MUST be on a GLIFWC Conservation Enforcement Application or they will not be accepted. Application can be mailed to: Kim Campy, Administrative Assistant, Great Lakes Indian Fish & Wildlife Commission, P.O. Box 9, Odanah, Wisconsin 54861.

New staff


Tom Vermaak

Odanah, Wis.—Most new employees just "get their feet wet" when they start at GLIFWC, but Tom Vermaak, new Employee Benefits Specialist, literally became immersed a few weeks after joining the staff on September 3. During his maiden canoe voyage on Sandy Lake, rough wind and waves cut the trek short by overturning the canoe. However, he did not let the upset deter his enjoyment of the ceremonies at Sandy Lake that followed.

Tom originally hails from South Africa; however, he and his wife, Mavis, moved to the United States in 1979. Mavis grew up in Sleepy Eye, Minnesota, but the couple met when she was employed in South Africa. Previous to coming to the Ashland area in 1997, Tom worked as a contract draftsman in Minneapolis and was self-employed as a conceptual designer for a number of years. As a conceptual designer he would create designs for innovative products through production drawings, helping his clients develop their ideas for new, marketable products.

In 1997 Mavis landed a position in Ashland as a Job Development Team Leader with New Horizons North, which brought the family north. Tom took the opportunity to pursue a career change and became a full-time student studying accounting at UW-Superior, graduating with a Bachelor of Science in December 2002.

Tom and Mavis have two grown children. Natasha, age 23, who graduated from St. John's University, Annapolis, Maryland and is currently living in San Diego, California where she hopes to pursue a Master's Degree in material science. Their son Matthew, 19, is currently living in Ashland.

In his leisure hours, Tom enjoys beadwork, using size 13 and 14 beads primarily. He beads sculptures and bottles and is currently working on reproducing a painting called "Night Hawk" with beads on canvas. He also enjoys reading and plays soccer with a Sunday soccer group. Welcome to GLIFWC, Tom!

1836 Treaty tribes

(Continued from page 1)

The Sault Ste. Marie-based Chippewa Ottawa Resource Authority (CORA) provides biological services for the tribes, working with state and federal authorities on cooperative management of the Great Lakes treaty fishery; CORA's Inland Lands and Waters Resources Committee deals with the mainland ceded territory.

Bay Mills is a member of both CORA and the Great Lakes Indian Fish & Wildlife Commission, an off-reservation natural resource management agency representing 11 Ojibwe tribes in Upper Michigan, Wisconsin and Minnesota.

Dick Gurnoe

(Continued from page 3)

tribal counterparts and GLIFWC staff now had marvelous material for jokes."

Gurnoe is remembered at GLIFWC for many things, but primarily as a trailblazer, a founder and a fighter for treaty rights, the tribes and the fishery. He was a man sparing on words, but big on action.

Meetings with state and federal agencies or politicians did not spur him to change out of his tee-shirt, suspenders and jeans. Pretensions were out the window with Gurnoe at any level. He looked like a fisherman forced to come ashore in order to take care of necessary business. His image was comfortable in contrast to those choked by starchy collars, tightly fit ties and suit coats. His pipe was also part of those many meetings.

Rose Wilmer, GLIFWC's executive secretary, took minutes at numerous meetings with Gurnoe. " I couldn't wait for him to light up his pipe," she says, "that aroma was so wonderful, and it was distinctly Dick's tobacco, Captain Jack." Other staff agree. You knew when Dick was around.

On October 28th several GLIFWC staff stood outside of the crowded church during Dick's funeral service. Looking out at the vast, but calm Lake Superior that formed the backdrop to the tiny white church, they saw a lone, empty fishing tug chug quietly out to sea.

Wild Rice: Ojibwe Spirit Food

Wild rice traditions subject of new documentary

Marquette, Mich.—Ojibwe traditions of "wild ricing" in the Upper Peninsula are featured in a new ethnographic documentary by Northern Michigan University professor and filmmaker Michael Loukinen. Most of the video was recorded in the vicinity of the Lac Vieux Desert community in Watersmeet.

"Ojibwe youth are losing the wild ricing traditions of their ancestors due to the deaths of knowledgeable elders and the harmful environmental pressures impacting their sacred lake, Lac Vieux Desert," Loukinen said. "There has long been an identity between the lake and the tribe. This video will preserve the ricing traditions for future generations and tell us a great deal about the history of the lake."

The documentary covers the practices of planting, rice-boat building, harvesting, parching, dancing, winnowing, cooking, and finally eating wild rice at a feast. The opening sequence features the late Spiritual Elder Archie McGeshick, Sr.

"While dying of cancer, Archie continued to plant and harvest," Loukinen said. "He took me out to record these practices. The opening scene shows him ceremoniously offering Ojibwe-language prayers and tobacco to the Water, Shore and Great Spirits as he surveys the rice bed that he restored."

The documentary incorporates live-action scenes with historical photographs, animation, music and narration. Much of the latter was provided by Thomas Vennum, ethnologist emeritus of the Smithsonian Institution and author of the award-winning **Wild Rice and the Ojibwe People**.

The film not only shows the wild ricing traditions, but the teaching of these traditions to Ojibwe children. "This was made for a general audience, but it will be especially interesting to parents and children, teachers, folk arts educators, cultural anthropologists and Native American studies educators," Loukinen added. "Project materials will be archived for future research opportunities."

A brief science segment explores how human and environmental forces affect the health and survival of wild rice. Peter David, a biologist with the Great Lakes Indian Fish & Wildlife Commission, explains in the film that rice beds are declining throughout the Lake Superior region. He attributes the trend to the adverse impacts of the thinning ozone layer, variations in rainfall and snow melting, motorboat traffic and especially dams.

The Lac Vieux Desert Band of Lake Superior Chippewa first contacted Loukinen in 1996, after members became increasingly aware of the loss of their traditional Elders. They approved a two-pronged project: building a digital archive of video, sound and transcribed text to preserve their tribal heritage; and completing a series of documentaries designed to increase the understanding of and sense of appreciation for their heritage.

"As Archie's nephew and as a participant in his film, I'm very proud of what I have seen in the nearly completed film, including everything from the historical and traditional aspects to the documentation of the harvest season and the current fights the tribes are encountering to preserve and maintain their sacred gift from the Creator. I believe all who view this film will be moved and become involved in protecting this important part of the Anishinabe heritage."

—Roger LaBine

Coming home with rice-filled canoes. (Photo courtesy of www.upfilms.com)

Loukinen began recording in 1998.

Ojibwe Teachings was the first film in the series, followed by the recently completed *Wild Rice: Ojibwe Spirit Food*.

Remaining productions will explore the history of the tribe's migration and settlement, evolving into a look at how the gaming industry has impacted contemporary work and leisure activities.

Throughout the process—from preparation to post-production—Loukinen has relied heavily on the assistance of current and former NMU students: Heath Patrie for music, Grant Guston for graphics and editing, and Robert Ruuska for translation. He has also utilized the expertise of NMU staff and faculty Martin Reinhardt, Elda Tate, Lillian and Leonard Heldreth and April Lindala in such roles as narrator, cultural adviser, story consultant and musician.

Funding for the video projects has been provided by the following: Michigan Council for the Arts and Cultural Affairs; the Lac Vieux Desert Band of Lake Superior Chippewa; the Michigan State Department of Consumer and Industry Services; NMU faculty grants; the NMU Department of Sociology and Social work; and the NMU College of Professional Studies.

For more information, contact Loukinen at (906)227-2041 or Loukinen@nmu.edu

Archie McGeshick Sr.'s prayer in Ojibwemowin opens the video

Oo Oo Manidoo!

Asemaa noongom tekonag gawe jimi naan nindinaajimod aw Anishinaabe, wii- gitigaadamaan o'ow manoomin.

Na gewiin manidoo imaa eyaad genawendang gewiin o'ow nibi, na kinabemaadak imaa agamiing.

Mii' gegiin odaapinamooshin naadamaw aw Anishinaabe, chi manidoo minaan gewiin.

Na dabadakisin nawaj imaa manoomin gaye chinitaawaging.

Miish chi manoominiked imaa a'a Anishinaabe,

Mii' gagwejiminaan chi naadamawiyaang moongom owe wii- pagidinamaang owe manoomin chi bisaagiging i-dash nawaj niibiwa dash ta manoominike wa'aw Anishinaabe.

Mii' gagwejiminaan naa damawishinaam.

Haw haw'.

Shawenimishinaam, shawenimishinaam,

shawenimishinaam, shawenimishinaam.

Haw! Na! Miigwech!

Na miigwech gegiin imaa eyaad genawendang o'o kina bimaadiziwin.

Odaapinamawishin a'aw asemaa noongom.

Miigwech, miigwech, Miigwech na miigwech.

Na miigwech!

Oo, na mii'iw, wii- pagidinamaan noongom iwe manoomin

Rice fields. (Photo courtesy of www.upfilms.com)

Oh Great Spirit

I am holding this tobacco to ask you for direction and permission as an Anishinaabe since I am about to plant some rice.

Now, speaking to the spirits, ones who are there, as we know, water spirits, including every living spirit along the shores.

And shore spirits, take this tobacco, help our people,

You too, Our Great Spirit, take this tobacco, help our people.

Then, the rice will be plentiful.

Rice shall grow to be plentiful for our Anishinaabe.

The Anishinaabe will then have joy while ricing.

Today, I am asking the spirits to help us grow rice.

And let it be a growth of rice

And let it stick in mud at bottom of the waters

Let Anishinaabe pick plenty of rice.

Help us be a success.

Have pity on us. Have pity on us.

Have pity on us. Have pity on us.

Oh thank you Great Spirit

I also give thanks to all who have given us guidance.

And, this wonderful way of life.

Now, please accept this tobacco I am offering you and all spirits who take care of us.

Thank you

Now, here is the rice I am planting today.

Let it grow for our people.

(Translated by Lisa Brunk (my maiden name is McGeshick). My spirit name is Nemikigokwe. My clan is the Gineu, or Golden Eagle. Currently, I live in Baraga, Michigan, but I'm from Lac Vieux Desert. My mother is Joann (McGeshick) Douyette. She is Ojibwa also.

First I must say that when I translated the prayer on the documentary, it wasn't too long after my uncle's passing into the spirit world. So, it was an honor to pass those words on for the upcoming generations. I also know that Anishinabemowin does not translate directly into the English language, so the spirit within the prayer transcends far beyond the written word.)

Trumpeter swan restoration progressing in western UP

L'Anse, Mich.—The Keweenaw Bay Indian Community (KBIC) in Michigan and USDA Ottawa National Forest (ONF) are pleased to report that trumpeter swans have successfully reared young or cygnets at a western Upper Peninsula (UP) wetland.

"We believe this successful nesting marks the first time in over 100 years that trumpeter swans have produced young in this region," says Robert Evans, ONF Wildlife Biologist.

The KBIC and ONF cooperated with the Michigan Department of Natural Resources, Bureau of Indian Affairs "Circle of Flight," U.S. Fish and Wildlife Service, and Kellogg Bird Sanctuary in releasing 35 swans from 1998 to 2000.

These swans were released at several sites including: Sucker Lake, Presque Isle Flowage, Huron Bay and Prickett Dam in the western UP in sibling groups. In the fall of each year, the swans migrated south and frequently found companions in Wisconsin, Minnesota and Illinois. In Michigan, trumpeters are still considered a threatened species with a state inventory of under 300 swans in 2002.

"We've received more public attention through our trumpeter swan release program than any other tribal natural resource program," says Mike Donofrio, KBIC natural resources director. The KBIC receives most of the sighting information in the winter when the swans are congregated. Observations have come from as far away as Missouri and Arkansas.

The swans were released with green plastic neck collars, so they are very discernible. "We haven't received word from all of the swans after they left the area, but have obtained news from over half of the original swans post-initial migration," Donofrio said.

The KBIC staff communicates with state, federal and non-governmental agencies through emails, and the general public also contacts them, says Donofrio. For example, in the winter of 2001 and 2002, they received several emails about tagged swans inhabiting Springfield Lake in Illinois. Most of the migrated swans are observed in Wisconsin, and Pat Mantheny of the Wisconsin Department of Natural Resources has been a great resource.

Trumpeter swans photographed at Lake Springfield in Illinois. (Photo courtesy Chris Young, State Journal-Register, Springfield, Ill.)

In Baraga County, the most visible swan this summer has been 83E. She was released at Mountain Lake, Marquette County, in June of 2002 and found her way to the "Head of the Bay" last fall. She reluctantly left the UP in January of 2003, only to be spotted sitting on Highway 70 near Tipler, Wis. She was transported to and rehabilitated at a wildlife sanctuary, Raptor Education Group, Antigo, Wis.

She was picked up and re-released on May 16.

"We had intended on releasing her with a lone male, 36E, at Prickett Dam but he was found dead from predation causes just a few days prior by Tim Wilson of Baraga," Donofrio says. She quickly paddled to the mouth of Kelsey Creek and remained there until early September when she found her way back to the Head of the Bay. We hope she'll return with a mate in the spring and establish a new nest in Baraga County.

Unfortunately, some of the original swans have been lost over the years. To date, Donofrio is aware of six of the original 35 that have died. They have succumbed to lead poisoning, predation, and mortality from powerlines.

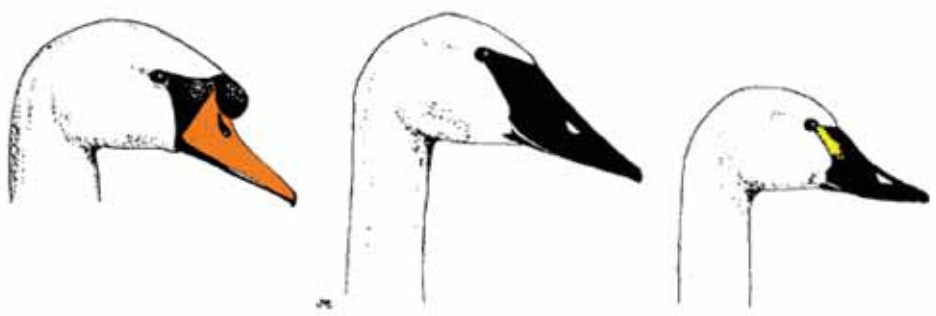
One of the more visible swans that was lost last spring was 60E. He was released at Prickett Dam in 1998 and returned to Eagle Harbor for three summers without a mate. In April of this year, he was found dead in central Wisconsin after flying into a powerline during a snow storm. He had just paired with a female and produced young in 2002.

The successful pairings in 2003 were located near Miller Lake and Iris Creek in Gogebic County. Biologists believe that more nests will be established in the western UP in the coming years.

"The public is reminded that trumpeter swans are state protected species so feeding, harassing or tampering with nests and swans is prohibited," says Joe Johnson of the Kellogg Bird Sanctuary. He also commented that the Seney National Wildlife Refuge has been an excellent swan producer for the last 10+ years.

If you see a trumpeter swan in your area, don't hesitate to contact a natural resource agency in your area, and remember that trumpeters are easiest to distinguish from exotic, mute swans because trumpeters have black bills.

For more information contact Mike Donofrio, KBIC Natural Resources Department at 906-524-5757.



(Image courtesy of The Trumpeter Swan Society.)

Now which swan was it?

By Peter David, GLIFWC Wildlife Biologist

There are three species of swans in North America, and three species can be found in the ceded territory. Although all three are large, all-white plumaged birds, there are a number of physical and behavioral characteristics that can be used to distinguish between them.

The exotic mute swan is the most easily identified, distinguished by a bright orange bill and distinctive knob on the forehead. Discerning between the native trumpeters and tundras is a little more difficult, especially since our rare trumpeters may mix with the more common tundras as the latter migrate through the area.

Trumpeters are larger than tundra swans, have a straighter profile along the upper bill, and have a bill that is all black. Most trumpeters weigh 21-30 pounds, although males may exceed 35 pounds. Standing on the ground, an adult trumpeter swan stands about 4 feet high.

The smaller tundra has a relatively smaller bill that may show a small amount of yellow near the eye. These characteristics can be difficult to distinguish from a distance, however, and various differences in vocalization, posture and behavior are very useful identification aids. The tundra swan weights 13-20 pounds and stands about 3 feet tall.

For example, its easy to remember that the trumpeter swan's call is deep and trumpet like, while the tundra's is much higher pitched, and the mute is pretty close (but not quite) mute! The Trumpeter Swan Society web page offers some great identification details.

It is also important to remember that the more common tundra swan does not nest in the ceded territory, so summer time observations in this area will be either trumpeters or mutes; larger flocks of birds seen during migration, however, are likely to be tundras.

Trumpeter swans were once fairly common throughout most of the northern United States and Canada. Market hunting and the millinery trade rapidly depleted nesting populations during the 19th century.

Trumpeters nested in Minnesota and Wisconsin until the 1880s. In Minnesota, the species occurred in the prairie and parkland areas of western, central, and northern portions of the state. In Wisconsin, trumpeters may have nested in all but the northeastern forested regions, most likely in large marshes or shallow lakes. Elsewhere in the Midwest, the trumpeters' historic breeding range reached from western Nebraska to central Michigan. It extended as far north and east as James Bay in Canada.

(Includes information taken from the WDNR website.)

Morrow presented with Outstanding Involvement Award from WDNR

Lac Courte Oreilles' George Morrow was recognized October 18 at the Lac Courte Oreilles Ojibwa High School for his 10 years of dedicated service as a hunter education instructor. The award was presented on the final day of the 2003 hunter safety course held a the high school. The award was presented by the Wisconsin Department of Natural Resources. (Photo by Sue Erickson)

Tribal hatcheries replenish on and off rez lakes & rivers

By Sue Erickson
Staff Writer

Odanah, Wis.—2003 was a "bumper" year for some tribal hatcheries, while a couple experienced difficulties affecting production level. Problems are not unusual in the delicate business of hatching fish eggs and rearing them to fry and fingerlings.

Despite the ups and downs in fish numbers, tribal hatcheries stocked healthy numbers of walleye fry and a significant number of extended growth walleye fingerlings into ceded territory lakes this year as well as other species, such as coaster brook trout and muskellunge.

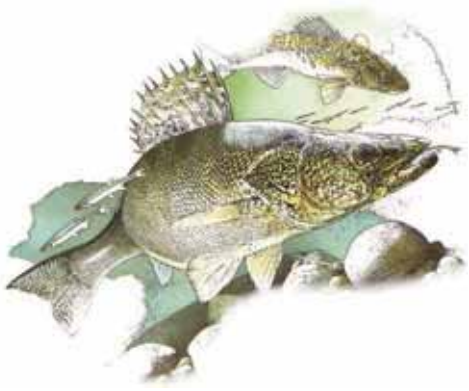
Bad River

The Bad River Hatchery hit a new record for walleye production and stocking this year. A total of 265,000 two-inch walleye fingerlings were stocked into the Bad River this summer and of the 15 million walleye fry produced, 14 million went into the Kakagon River and one million were stocked into the Bad River.

Last year, the hatchery produced eight million walleye fry and 40,000 walleye fingerlings, so numbers were definitely up.

St. Croix

The St. Croix Hatchery also hit record numbers with their walleye production in 2003. They produced 455,370 two-inch walleye fingerlings, which were stocked in off-reservation lakes used by the tribe during spring spearing.



Those lakes include Bear, Beaver Dam, and Sand Lakes in Barron County; Big McKenzie, Big Sand, Devils and North Sand Lakes in Burnett County; Big Round, Halfmoon and Pipe Lakes in Polk County, and Long Lake in Washburn County.

Lac Courte Oreilles

The Lac Courte Oreilles Hatchery put one million walleye fry into the Chippewa Flowage; 500,000 fry into Whitefish Lake; 200,000 fry into Big Lac Courte Oreilles Lake; 200,000 fry into Round Lake; and 100,000 fry into Sand Lake.

In addition, 168 eight to ten-inch muskellunge fingerlings and 350 four to six-inch walleye fingerlings were stocked into the Chippewa Flowage. Finally, 600 walleye fingerlings went into Spider Lake.

Lac du Flambeau

The Lac du Flambeau Tribal Hatchery stocked 6,000,000 walleye fry into 20 lakes on or adjacent to the reservation. In addition 139,248 walleye fingerlings went into ten of those lakes, including the Flambeau Flowage, Little Trout, Fence, Big Crawling Stone, Upper Sugarbush, Middle Sugarbush, Poupart, Gunlock, Pokegama, and Sunfish Lakes.

The hatchery's stocking figures were down somewhat this year. The very cold temperatures this spring interfered with efficient egg gathering.

Red Cliff

The Red Cliff Hatchery focused on coaster brook trout, stocking 2,003 eight to twelve-inch coasters into Lake Superior at the Red Cliff Marina site. An additional 177,500 coaster fingerlings went to other agencies.

Various high schools received 1,000 coaster brook trout eggs and swim-ups for school research and 3,000 coaster eggs and swim-ups went to Purdue University for use in a genetic study. The hatchery has 4,000 remaining coasters yet to be stocked.

In addition to coaster brook trout, Red Cliff stocked 700 eight to ten-inch walleye in Lake Nebagamon and 75 eight to ten-inch walleye in Nelson Lake this year.

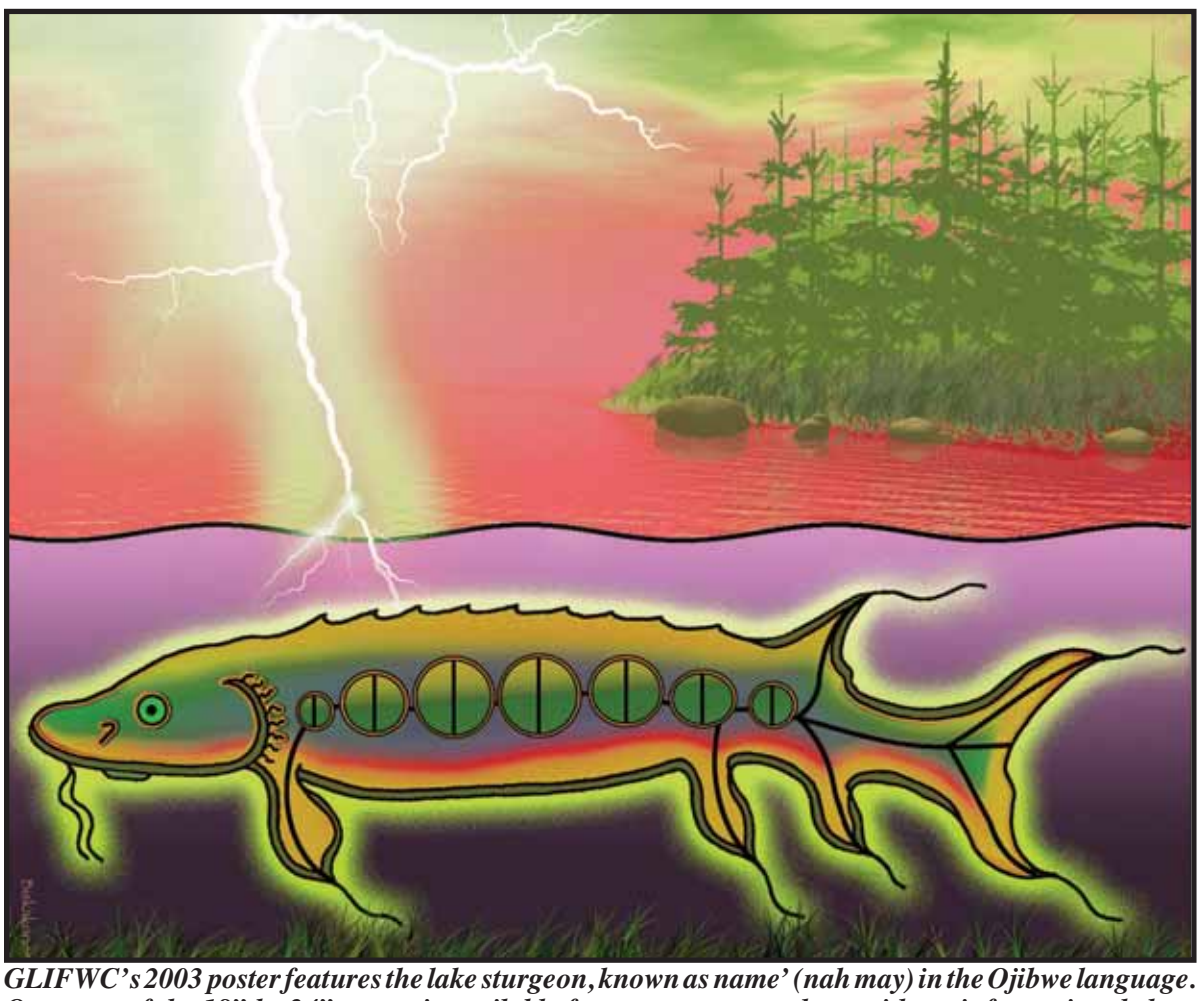
Keweenaw Bay

The Keweenaw Bay Tribal Hatchery stocked 93,000 seven to eight-inch lake trout yearlings into the Keweenaw and Huron Bays. In addition they stocked western Upper Peninsula (UP) streams with 70,000 one to three-inch coaster brook trout; 16,466 three-inch Jumbo River strain brook trout; and 7,725 nine to eleven-inch Jumbo River strain brook trout. Six western UP lakes also received 64,282 two to three-inch walleye fingerlings from the hatchery this year.

Lac Vieux Desert

The Lac Vieux Desert Hatchery also had a busy season. They stocked about 2.5 million walleye fry into Lac Vieux Desert and put the remaining 100,000-200,000 fry in the tribe's rearing pond. Those have now reached the extended growth length of 12 to 13 inches and will be stocked into lakes that tribal members use for spring spearing.

Namé—Ogimaa giigonh Sturgeon—King of Fish



GLIFWC's 2003 poster features the lake sturgeon, known as name' (nah may) in the Ojibwe language. One copy of the 18" by 24" poster is available free upon request along with an informational sheet about the Ojibwe people's relationship to the lake sturgeon. Multiple copies of the poster are $2.00 each. To receive a poster contact GLIFWC's Public Information Office at (715) 682-6619 ext. 150 or e-mail at pio@glifwc.org.

KBIC Hatchery completes another successful year

L'Anse, Mich.—The Keweenaw Bay Indian Community (KBIC) Fish Hatchery has completed another successful fish stocking program in 2003. This year, the hatchery was responsible, partially through agreements with the State of Michigan and U.S. Fish & Wildlife Service, for the planting of 105,488 lake trout yearlings (6-9"), 86,446 brook trout (1.5 to 11") and 64,282 walleye fingerlings (2") this year.

These fish are stocked for management purposes in several western Upper Peninsula watersheds. This program could not be successful without cooperators, including the Ottawa National Forest staff and KBIC hatchery employees Evelyn Ravindran and John Hebert.

The lake trout were released at Keweenaw Bay and Huron Bay as part of an ongoing program started by the KBIC Hatchery in 1993 that has yielded 1,082,321 trout into these waters over the last 11 years.

In 1999, the hatchery initiated a program to restore coaster brook trout into two small watersheds on Keweenaw Bay, Little Silver and Kelsey creeks. The parents from these trout came from Isle Royale National Park and are currently held at the Iron River National Fish Hatchery in Wisconsin. That program has resulted in 258,899 brook trout fry (1-2 inches) for these streams.

The KBIC Hatchery also stocked Jumbo River strain brook trout into several watersheds in 2003 including: Silver River, Slate River, Ravine River, Black Creek, and the Falls River. "We've received many compliments about the 7,700 extra brook trout stock that were planted during this past summer," says Gene Mensch, KBIC Fish and Wildlife Biologist. The Jumbo River strain program concluded in mid-September when 16,446 brook trout fingerlings were released by staff.

Finally, the hatchery cooperated with the State of Michigan in stocking 64,282 walleye into Vermillac, Bob, Parent, King, Pike, and Sandy Lakes to complement 31,426 planted in 2002. To date, the KBIC has been responsible for planting 1,082,321 lake trout, 475,952 brook trout and 95,708 walleye.

The hatchery is owned and operated by the KBIC. The facilities are located near Pequaming and were constructed in 1992.

Wiigwaasi Mitig

(Continued from page 11)

Some of the ornamental and decorative work is extremely intricate. Designs are cut out of a layer of birch bark and then glued to a darker piece of birch to make a very ornamental basket cover. Designs are also burned into the bark similar to burning wood or leather.

They also fashion a seamless basket lining by cutting a log of birch and then pounding the log out from its bark, leaving just the unbroken bark. If extra strength is need from a woven basket, they will make a four-layer basket, which is very sturdy. Woven baskets are often boiled, which tightens the weave. The rim of the basket is simply curled over to produce a very sturdy rim.

A Russian birch bark basket with a seamless lining. The lining is made by pounding the log out from the bark, leaving the bark unbroken. The basket is decorated through embossing. (Photo by Sue Erickson)

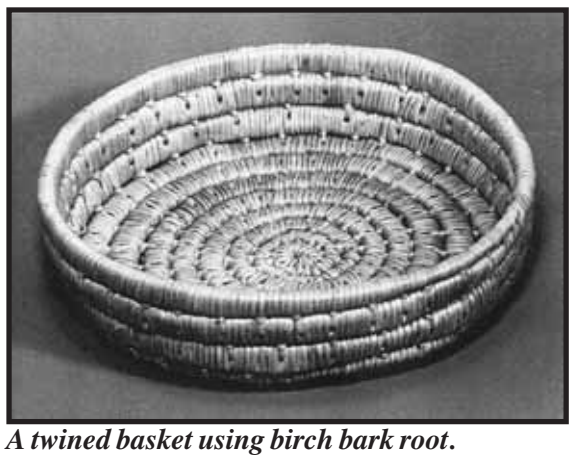
In Russia the strips used for weaving are rubbed with a vegetable oil to keep it soft and flexible. It also helps protect the hands, she says. In Sweden they use beeswax for the same purpose.

In Sweden, Norrgard focused first on the Saami Tribe, a tribe of reindeer herders whose traditional range has spread through northern Sweden, Norway, Finland and into Russia. They were also hunters, fishermen and gatherers, following the herds according to season. The Saami lived in goahte, or tepees, which look much like the tepees of the Plains tribes. Today they live in modern houses, but may still use the goahte for summer camping. The Saami have their own language and culture, and they have their own land, which they call Sameatnam, even though it is not recognized by the nation states.

The Saami use of birch is extensive; however, they primarily use the roots of mountain birch trees, says Norrgard. The birch trees that far north are small, gnarled and twisted, so it is difficult to get a large piece of bark. They pull the roots out of peat bogs, a little here and little there, so they do not harm the tree. Then they peel off the outer coating. The root can be anywhere from a half-inch thick to a hair thin.

The Saami split the thicker ones and use them for basket rims. The root is used to make twine, rope and twined baskets. They avoid using spruce roots because it's hard on the hands and not as strong.

Tightly twined birch root baskets are used even for making cheese from reindeer milk, Norrgard says, because the root does not flavor the cheese. It also makes a very decorative design in the cheese when removed from the basket mold. Some of these cheese baskets have been passed down for generations. Larger birch twined baskets are used on canoe-shaped sleds as containers for gear.



A twined basket using birch bark root.

The Saami also make use of the large burls on the birch trees. They make wooden bowls out of them, and they serve as the base for their hand drums. Today the Saami have a Samidoudji, or a craft guild, to try to keep their traditions alive and teach traditional crafts to Saami people. In order to belong, people have to be able to prove their Saami origins.

Norrgard also traveled further south in Sweden to Mora, where weaving birch is more the custom, using strips of birch bark. Both in Sweden and Russia they sometimes cut the bark off the tree using a spiral cut that just peels off in a long strip that they roll into a ball of bark.

A medallion made of birch root by the Saami in northern Sweden. (Photo by Sue Erickson)

Cradleboards were constructed from birch as well as salt containers. They use strips of birch to weave baskets of all sizes, hats, backpacks, purses and shoes, to mention a few items. In earlier times they wrapped stones in birch for net weights and used bark for scrolls. Museums contain examples of these with writing in the old Nordic runes.

Norrgard says the region has been logged for so many centuries that few large trees remain. What they call a "quick basket" is sewn, using larger pieces similar to Ojibwe baskets, otherwise, they must use the strips taken from smaller birch trees.

During her travels Norrgard heard concerns from birch bark craftspeople about the decline of the birch tree due to poor logging practices and concerns about the impact of global warming on this invaluable species that holds links to the traditions and lifeways of so many people. "Birch is affected quickly by climate change," Norrgard says. "We must put our efforts towards keeping it strong and healthy."

Norrgard, who also weaves birch bark, brought home a fantastic collection of birch bark items to add to the pieces she has collected in the United States and Canada. Around her home, your eye is carried to birch displayed or used in some way in each room. Each piece holds it own fascination and makes you think of the craftspeople through the centuries, each who had to begin at the beginning with the giving tree, wiigwaasi mitig. We must be thankful for its beauty, strength and versatility.

For more information contact Lorraine Norrgard a lnorrgard@aol.com.

Many hats—all made of birch bark. The two hats on each end are Ojibwe. The white western style hat comes from Red Lake and the hat on the far right comes from Mille Lacs. The others are Russian made birch bark hats, with the exception of the one with rosemaling. That one is Swedish. (Photo by Sue Erickson)

Tribes buy NMC

(Continued from page 1)

under the Wisconsin Mining Moratorium Law."

In his letter to the Corps, Reynolds states, "NMC has determined that the current proposal poses unacceptable risks to the fragile natural and cultural resources of the Upper Wolf Watershed as well as the irreplaceable trust resources of the Native American Tribes living in the project area."

Both the Mole Lake Band and the Potawatomi have vehemently opposed the mining proposals at the site for years. Under those proposals, the mine would affect water and increase sediment in Swamp Creek, which flows into Rice Lake on the Mole Lake reservation just west of the proposed mine site. The Potawatomi reservation is also nearby to the northeast.

The tribes and GLIFWC have identified numerous problems with the proposed mine. They repeatedly pointed out that the mine and the tailings dump with its 16 million tons of waste would be a perpetual source of toxic waste and groundwater contamination. Transportation of hazardous materials, such as cyanide, and the potential of spills also posed a concern about risks to surface and groundwater.

Impacts on surrounding resources, particularly wetlands, due to flooding and drying as the mine manipulates water levels has been another source of tribal concern as well as the dumping of tons of sediments into wetlands and streams.

In total, the tribes purchased nearly 6,000 acres of land, largely in Forest County with a small tract in Shawano and Oconto County. Significantly, the purchased acreage includes Spirit Hill, considered a sacred site by many Mole Lake Band members. Spirit Hill is the site of an historic battle between the Ojibwe and the Sioux over wild rice beds about 200 years ago, according to Ken Van Zile, Mole Lake councilman.

The land and mining company were purchased from the Northern Wisconsin Resources Group, who had acquired NMC and the property from BHP Billiton, the world's largest mining company, as recently as April 2003. The property will be divided between the two tribes, but the Mole Lake Band owns NMC.

However, the mining hiatus is likely to be brief for GLIFWC staff, as the Crandon controversy ends, increased mineral exploration in the Michigan's Upper Peninsula has brows wrinkling in Indian Country.

MOU implementation

(Continued from page 5)

develop a monitoring protocol for birch bark characteristics. Again, the grant provided for the opportunity to incorporate tribal elders and harvesters in identifying birch bark characteristics sought by tribal members. (see related story, page 4)

According to Danielsen, another potential cooperative project may allow USFS and GLIFWC staff to look at past and present distribution of aspen and paper birch and study the interaction of the two species.

Campground use

As of 2000 tribal members have been able to obtain tribal permits for the free use of campground sites in national forests under the MOU. The forests include the CNNF, Hiawatha National Forest, ONF and the Huron-Manistee National Forest. 2003 numbers indicate an increasing amount of interest in using national forest campsites, especially in the CNF where 57 permits were issued and in the ONF where 39 camping permits were issued this year.

Cooperative long-term studies

Several other cooperative long-term studies involve the pine marten research in the CNNF (see related story, page 2) and the understory logging study that GLIFWC initiated in 1995. In 2003 the USFS provided seasonal employees to assist with sampling at the test sites. This study seeks to identify the impact of logging practices on understory plant species, especially those of interest to tribal gatherers.

Spring harvest opportunities

Introduction

During 2000 and 2001, GLIFWC staff interviewed tribal elders regarding non-medicinal uses of plants. With approval from the elders, we are sharing this information as a regular feature in *Mazina'igan* in the form of a harvest calendar.

In this issue, the harvest calendar is devoted to those plants that may be gathered for non-medicinal uses during the upcoming ziigwan (spring) months of onaabani-giizis, hard crust on the snow moon (March); iskigamizige-giizis, maple sugar moon (April); and waabigwanii-giizis, flower moon (May).

Tree Sap

sugar, syrup, candy

ininaatig wiishkobaaboo—sugar maple sap
zhiishiigimiiwanzh waboo—red maple sap
adjagobimak waboo—box elder sap
wiigwaas mitig waboo—paper (white) birch sap
wiinizik waaboo—yellow birch sap
wadoop mitig waboo—alder sap

Sap Processing Utensils

boughs used to stop sap boil over;
wood used for tree taps and sap stirring paddles

zhingob waatigwaanan—balsam fir boughs
zhingob waatigwaanan—black spruce boughs
gaawaandag waatigwaanan—white spruce boughs
giizhik waatigwaanan—white cedar boughs
giizhik misan—white cedar wood
wiigob misan—basswood wood
moozo gawinzh misan—moosewood wood
apaakwaanaatig misan—sumac wood

Greens and Flowers

raw, sauteed, steamed, boiled, deep fried, soup

waagaagan—ferns (young shoots)
nessibag aniibiishan—clover leaves
__waabigoniin aniibiishan—cowslips leaves
doodooshaaboojiibik aniibiishan—dandelion leaves
bagwaji zhigaagawinzhiig aniibiishan—wild leek leaves
__shaaboosigan aniibiishan—milkweed leaves
*watercress leaves
*pigweed leaves
*aster leaves
anajiiminan—wild peas
*beach peas
datgaagmin inaskoon—thimbleberry stems
apakweshkway inaskoon—cattail stems
*wild asparagus stems
apakweshkway waabigwaniin—cattail flowers
doodooshaaboojiibik waabigwaniin—dandelin flowers
bibigwemin waabigwaniin—elderberry flowers
wazhaskwedoonsag—morel mushrooms

__Must be properly prepared, see disclaimer.

Fruits

raw, jams, jellies, pie fillings

ode-iminan—strawberries

Roots

roasted, sauteed, steamed, boiled

waabiziipin ojiibikan—arrowhead (moose ears) roots
oga'damun ojiibikan—yellow water lily roots
bagwaji zhigaagawinzhiig—wild leeks
bagwaji zhigaagananzhiig—wild onions
apakweshkway ojiibikan—cattail roots
anaakanashk ojiibikan—bulrush roots
anaakanashk ojiibikan—rush roots
doodooshaaboojiibikan ojiibikan—dandelion roots
namepin ojiibikan—wild ginger roots

Miigwech to those speakers in Mille Lacs, Minnesota and Lac du Flambeau, Wisconsin for their help in providing us with the Ojibwe names for these plants.

***We have been unable to find the names for these plants in Ojibwemowin.**

Tea

ode'imin aniibiishan—strawberry leaves
apakwanagemag aniibiishan—red pine leaves (new growth)
wiinisiibag aniibiishan—wintergreen leaves
mashkigobag aniibiishan—swamp (Labrador) tea leaves
kaakaagiwanzh aniibiishan—hemlock leaves
zhingob aniibiishan—balsam fir leaves
giizhik aniibiishan—white cedar leaves
mishkomin mitigosan—raspberry stems
okwemin nagek—black cherry bark
asasawemin wategwaanan—choke cherry twigs
wiinzik—yellow birch bud tips
wiigwaas mitig—white (paper) birch bud tips
doodooshaaboojiibik ojiibikan—dandelion roots

Tobacco

nessibag aniibishan—clover leaves
doodooshaaboojiibik aniibishan—dandelion leaves
bagaaniminzh aniibishan—hazelnut leaves
datgaawanzh aniibishan—thimbleberry leaves
wiinisiibag aniibiishan—wintergreen leaves
*pigweed leaves
miskwaabiimizh aniibishan—red willow (kinnickinnick) bark
wiigob ojiibikan—basswood roots

Insect Repellents

giizhik aniibishan—white cedar leaves
miskwaabiimizh waaboo—red willow sap

Decorations

*trailing arbutus flowers
oziisigobimizh waabigwaniin—pussy willow flowers

wiigwaas—paper (white) birch bark

lodges, baskets, containers, canoes, caskets, scoops, cradle boards, ornaments, firestarter

Disclaimer

While the list identifies those plants that can be harvested during the winter months, we strongly recommend that before you pick them, you meet with elders in your community to talk about proper ways of harvesting, times of harvesting and proper preparation of the plants before eating them.

This is important because some plants need to be harvested in certain ways to ensure that they will continue to grow, while other plants need to be properly washed and prepared prior to eating or using them. In addition, those elders can also help you in different uses of these plants.

Namé (lake sturgeon)- a species of special concern

A BIG fish!

Lake sturgeon can grow to be very big fish. They have been known to get as big as a man, over six feet long and over 200 pounds.

An old fish!

Lake sturgeon go back to the age of dinosaurs, so have been in our waters for millions of years!

A weird-looking fish!

Lake sturgeons have a shark-like tail (large upper lobe) and a long, torpedo-shaped body. They don't have scales like many fish, but are covered with thick platelettes. They don't have any bones, only cartilage. They have funny looking whiskers under their long nose called barbels. They use them to feel along the bottoms of lakes and rivers to find food.

A long-living fish!

Lake sturgeon can live a very long time. Some live over 100 years.

A rare fish!

Our lakes and rivers in the northern midwest used to have many, many lake sturgeon, but now there are only a few in the rivers and lakes where they have always lived. People have put dams on rivers changing their homes, and in some places people fished for them and killed far too many. Now there are only a few left.

Let's help the lake sturgeon!

Today fish managers are studying the lake sturgeon so they know how many sturgeon there are and where they are. They are also trying to protect the sturgeon from being over-fished. Some hatcheries help stock baby lake sturgeon back into our waters.

An elder's story

Excerpted from Anishinabe Almanac: Living through the seasons

Each year in the early spring, when booming sounds were made by the melting and cracking of thick ice on the lakes, the *Ojibwe Anishinabe* people knew that the water would soon "turn itself over." It was during this time, from the murky dark waters, that *Nahmay*, or sturgeon, would soon begin to move around, becoming visible in the shallow spring waters.

During the migration upriver, *Nahmay* could be seen, swimming side by side, in numbers so great that the rivers looked like a solid purple, blue and black mass from bank to bank. Elders say that the sound of their movement was like a murmur, rippling across the water onto the land and through trees like a lullaby in the *Anishinabe* way.

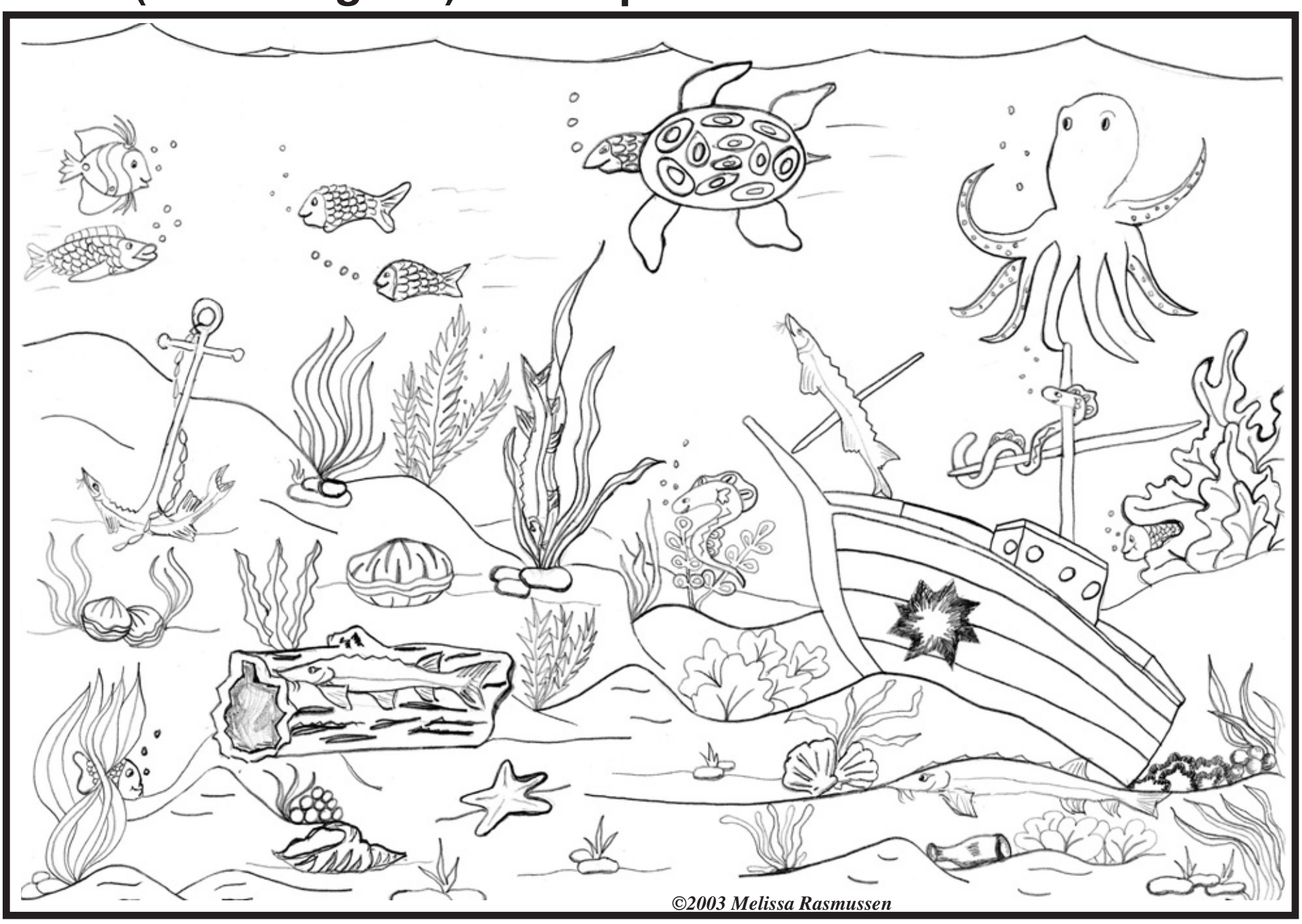
When the ice began to break up, the sturgeon would ram their backs and bellies on the underside of the ice chunks as it began floating freely through the water. Some of the younger and braver *Anishinabe* would jump onto an ice chunk in order to get a ride as it was being pushed along on the back of a big *Nahmay*.

In that time of long ago, etched in the memories of *Anishinabe* elders, the magnificient *sturgeon Nahmay* was playful with the human beings. My father, *Awke waynzee Jingo Gezhik*, known as Joe Benton, and others of the Lac Courte Oreilles Reserve of Wisconsin recalled riding on the back of a sturgeon. "That's how big they were on the Namekagon and Flambeau Rivers, at one time...," he would say sadly. Today, there are no longer many sturgeon in these rivers.

(Miigwech (thanks) to Eddie Benton-Banai for allowing the use of this story about the sturgeon. It is excerpted from his soon-to-be published book, ***The Anishinabe Almanac****. The above story is copyrighted, and the story or segments of it, may not be reproduced.)*

Editor's note: The orthography for Ojibwemowin (Ojibwe language) used in this story is different from GLIFWC's preferred orthography that is based on the double-vowel system and is used in GLIFWC's publications.

Finding Namé! Can you find the naanan (five) namé (lake sturgeon) in the picture below?



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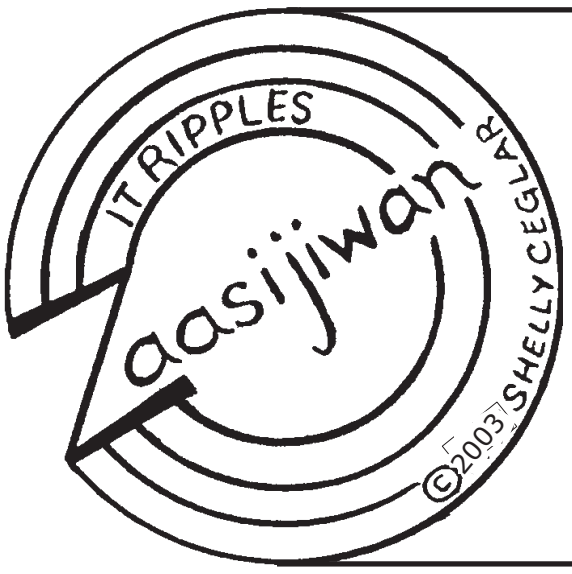


Biboong...

**gashkidin omaa. Gashkidino-giizis wa'aw giizis. Ganabaj wii-kipagaakwadin i'iw nibi.
Gemaa wii-pibagaakwaadin i'iw nibi. Gego dwaashiniken!
Gimikwendaan ina gii-twaa'igeyaang? Akwa'waad minwendam ningozis.
Ningagwejim, "Aandi izhaayan?" Nakwetam, "Nindizhaa akwa'wewigamigong."**

When it is Winter...

**it is frozen here. She is the frozen over-moon this moon. Maybe it will be frozen thick that water. Or it will be frozen thin that water. Don't fall through the ice!
Do you remember it? When we made a hole in the ice for water?
When he tries spear fish through the ice, he is content my son.
I ask him, "Where are you going?" He answers, "I am going to the fishhouse."**

Bezhig—1

OJIBWEMOWIN
(Ojibwe Language)

Double vowel system of writing Ojibwemowin.
—Long vowels: AA, E, II, OO
Gaawiin—as in father
Apane—as in jay
Wii—as in seen
Noongom—as in moon
—Short Vowels: A, I, O
Idash—as in about
Nibi—as in tin
Omaa—as in only

—A glottal stop is a voiceless nasal sound as in A'aw.

—Respectfully enlist an elder for help in pronunciation and dialect differences.

Preverbs

They are sounds spoken before the action words (verbs) to add clarity. Hyphenated to the verb.

bi— in the direction of the speaker, this way.
mino— good, nice
maji— bad
gichi— great, big, very
izhi— in a certain way, thusly
daa— should, could, would, might, can
endaso— so many, certain number
wii— future tense, want to
ga— future tense, definate
gii— past tense, did

Niizh—2

Circle the 10 underlined Ojibwe words in the letter maze. (Translations below)

A. Mewinzha nibi, gii-nibiikaa. Gii-piinad.

B. Noongom, gaawiin ganawenjigaadesinoon o'ow nibi.

C. Onzaam gimamoomin idash ginishwaanaajitoomin.

D. Ningoding gwaaba'ibiiyaang wiinad. Gaawiin giminikwesiimin.

E. Gakina, awiiya,bemaadizijig, giinawaa giga-wiidookaagem.

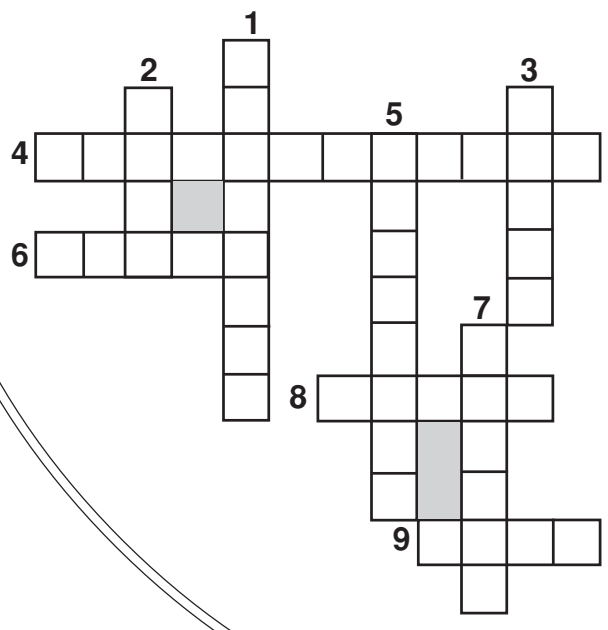
F. Awanjish apane gidaa-paamendaamin o'ow nibi.

G. Noongom,zoogipon idash biiwan.

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

Niswi—3

**IKIDOWIN
ODAMINOWIN
(word play)**



Down:

1. He/she answers
2. Here
3. Where?
5. My son
7. How/What way?

Across:

4. You remember it.
6. Always
8. He/she goes
9. Water

Niiwin—4

Preverbs (Prenouns, too)

Mino-bimaadiziwin.—The Good Life.
Gichi-mookomaan.—Big knife, One who carried a big knife (white person).
Aaniin endaso-diba'iganek?—How many units of measure? (What time is it?)
Maji-izhiwebizi.—Behave badly.
Izhaa.—He/she goes.
Bi-izhaa.—He/she comes.
Ningii-pi-izhaa.—I did come here.

*Initial vowel change occurs after question words and other.

gichi—
mino—
gii—
ezhi—
***vowel change**
daa–
maji—

**Goojitoon! Try it!
Translation below.**

1. Ni___-minikwen i'iw ___-nibi.
2. ___-ziibi gaawiin gaskadinzinoon biboong.
3. Aaniin ___-ayaayan noongom?
4. Wii-piindigeyan, gi___-naadinan iniw makizinan idash azhiganan.
5. Noongom ___-giizhigad. ___-giizhigad!

Translations:
Niizh—2 **A.** Long ago water, there was a lot of water. It was clean. **B.** Today, it is not taken care of this water. **C.** Too much we take it and we waste it. **D.** Sometimes when we draw water, it is dirty. We can not drink. **E.** All, everyone, human, you all, you all shall help. **F.** Diligently always we should take care of this water. **G.** Today it is snowing and it is a blizzard.
Niswi—3 **Down:** **1.** Nakwetam **2.** Omaa **3.** Aandi **5.** Ningozis **7.** Aaniin **Across:** **4.** Gimikwendaan **6.** Apane **8.** Izhaa **9.** Nibi
Niiwin—4 **1.** I did-drink that bad-water. **2.** Great-river does not freeze over when it is winter. **3.** How or in what way thusly-are you today? **4.** When you will-go inside, you should-fetch those shoes and socks. **5.** Today it is a good-day. Good-day!

Chippewa Flowage managers, property owners unite to preserve resources

Protection sought for tribal cultural areas

By Charlie Otto Rasmussen
Staff Writer

New Post, Wis.—Tribal, federal and state representatives all agree—the Chippewa Flowage is better off wild. Natural resource officials, resort owners and a handful of Sawyer County residents reaffirmed support for protecting environmental and cultural resources on Wisconsin's third largest lake during an August 15 meeting at Herman's Landing resort.

Under a banquet pavilion staked on the edge of the Flowage, representatives from Lac Courte Oreilles (LCO), Wisconsin Department of Natural Resources (DNR) and U.S. Forest Service held their annual meeting under the award-winning Chippewa Flowage Joint Agency Management Plan. Ratified in 2000, the plan details management goals established by the three governments, which control approximately 90% of the shoreline.

While maintaining the natural character of the flowage and protecting key tribal resources top the list of management objectives, meeting participants agreed that more vigilance was required to stop destructive land use practices.

Chippewa Flowage managers held their annual meeting at Herman's Landing to discuss cultural and environmental protection policy for Wisconsin's third largest lake. Pictured are resort pioneer Oscar Treland, Department of Natural Resources Manager Neal Kephart, U.S. Forest Service Officer Barry Paulson, LCO Governing Board Member Mic Isham and Assistant Tammy DeNasha. (Photo by Charlie Otto Rasmussen)

"The islands are getting trampled; people are cutting down trees and digging in what they think are graves for souvenirs," said LCO Governing Board Member Mic Isham.

Following the construction of an earth-filled dam on the Chippewa River 80 years ago, floodwaters inundated small farms, wild rice stands and the LCO village, Pahquahwong, where generations of Ojibwe lived, died and were buried. Some graves within the Chippewa Flowage exist on high points of land-turned islands; others rest under 20 feet of water.

Ojibwe Spiritual Leader Jerry Smith related the sentiments of many Lac Courte Oreilles people: "Even though it came from tragic means, it is still a beautiful place. What better way to honor our ancestors buried under the flowage than to keep it wild and natural."

Smith, a tribal historic preservation officer, is working with more than a dozen local organizations to stop private land development on Big Timber and Moonshine Islands in the southeast corner of the reservoir.

Rather than battle developers over zoning codes, the groups, including the Couderay Waters Regional Land Trust, are waging a fundraising campaign to purchase the island property outright. Acting as lead government agency in the effort, the DNR is preparing to facilitate the transfer of purchased land into the public domain. Land use covenants are planned to keep the islands open to the public, but prohibit development.

Housing a wealth of cultural artifacts from early Indian occupation to white settlement, the entire Chippewa Flowage is a candidate for additional protection beyond the tri-agency management plan.

Archeologist Will Gilmore is assisting LCO in exploring preservation options that include placing the Flowage on the national register of historic places and possibly naming the immediate region as an historic district. In preparation for a possible historic designation, Glimore and Jerry Smith are organizing an 120-mile shoreline survey to document culturally sensitive sites. Gilmore estimated the survey project would take three to five years to complete.

The joint management plan received an American Indian tribal governance award from Harvard University's John F. Kennedy School of Government in 2003. Twelve years in the making, Harvard cited the flowage plan as an outstanding example of tribal initiative and innovation.

The Great Lakes Indian Fish & Wildlife Commission (GLIFWC) provided technical and policy expertise to LCO throughout the planning process with the cooperating agencies. In addition, GLIFWC has worked to increase public awareness about the human, cultural and social impacts the Flowage has had on the LCO community.

In 1998, GLIFWC Press published *Where the River is Wide: Pahquahwong and the Chippewa Flowage*, a book that details the development of the reservoir and tells the story of how the local Ojibwe people struggled against government and business interests bent on flooding their homeland.

Bad River completes major land, water acquisition

Regains 23,000 acres on-rez

By Charlie Otto Rasmussen
Staff Writer

Odanah, Wis.—The ongoing restoration of tribal homelands on the Bad River reservation got a major boost September 30 with the addition of 23,688-forested acres, including 28 miles of stream frontage. The Nature Conservancy brokered the land deal, described as the largest private land conservation purchase in Wisconsin history.

"This has been a dream of all Bad River people," said Eugene Bigboy, tribal chairman. "I can recall my father and my uncles discussing how to reacquire these lands forty years ago at tribal council meetings."

After negotiating the $4.5 million purchase of more than 21,000 acres from Plum Creek Timber Company, the Nature Conservancy transferred its acquisition rights to the Bad River Band. In a separate transaction, the tribe paid the Nature Conservancy for additional on-reservation woodlands formerly owned by another industrial forest company, Stora Enso North America. The tribe now possesses approximately 74% of its original 154,000-acre reservation.

Bigboy said the tribe has no plans to develop the land and it will incorporate the mix of woods, water and wetland into their Integrated Resource Management Plan (IRMP). Bad River also signed a Memorandum of Understanding with the Conservancy that, like the IRMP, outlines protection for water quality, riparian areas and forest resources.

"The opportunity to protect the water was the real driving force in this acquisition," said the Nature Conservancy's Matt Dallman. Including the Stora Enso property, the tribe added 28 miles of stream frontage, including portions of the Bad, White and Potato rivers. The Bad River system empties into a series of wetlands and sloughs that clean the water before it enters Chequamegon Bay.

The tribe paid nearly $5 million, or around $210 per acre, for the land originally reserved through the 1854 Treaty. A late Nineteenth Century federal program called allotment converted tribal holdings into private property at Bad River and other Indian reservations, creating a "checkerboard" pattern of land ownership.

Through gaming revenues and assistance from organizations like the Nature Conservancy, many tribes across the United States are slowly piecing back together their former land base.

The Bad River Tribe recently purchased 23,688-forested acres, including 28 miles of stream frontage. (Photo by Dale Thomas)

While the tribe has made great gains in restoring title to reservation lands, Bigboy stressed the importance of continued property reacquisitions. One key parcel lies in the center of the reservation adjacent to the Bad River Falls where lake sturgeon migrate annually from Lake Superior to spawn. Xcel Energy owns the 438-acre property and Bigboy said he's hopeful that a purchase agreement can be negotiated in the future.

> "This has been a dream of all Bad River people. I can recall my father and my uncles discussing how to reacquire these lands forty years ago at tribal council meetings."
>
> **—Eugene Bigboy,**
> **Bad River Tribal Chairman**

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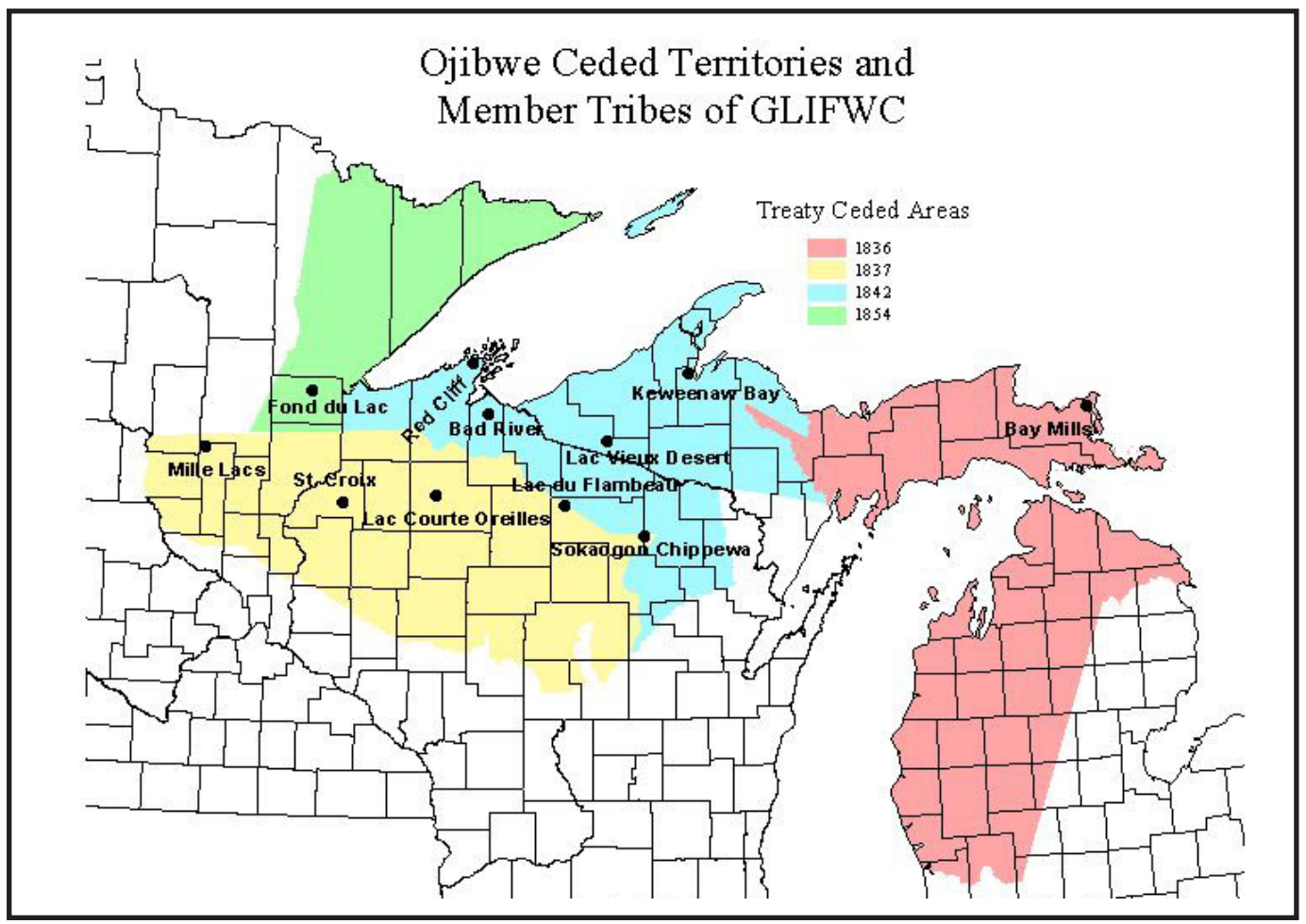

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