

Mazina'igan

A Chronicle of the Lake Superior Ojibwe

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Spring 2003

2003 offers good fishing opportunities in Minnesota's 1837 Treaty lakes

By Sue Erickson
Staff Writer

Odanah, Wis.—It's about time to dust off the old fishing gear, check nets, sharpen spears and begin to get organized because spring fishing season is around the corner. Although the thick ice cover on many lakes that made for happy ice fishermen doesn't promise early openers on ceded territory lakes, opportunities for good fishing do await.

The eight Ojibwe bands with treaty reserved rights to fish on Mille Lacs Lake in Minnesota declared a combined walleye harvest quota of 100,000 pounds for 2003, similar to the 2002 quota. For other Mille Lacs Lake species the combined tribal quotas for 2003 are: yellow perch—106,928 pounds; cisco—11,742 pounds; burbot—13,200 pounds and northern pike—11,498 pounds.

2003 band quotas for Mille Lacs Lake are allocated among eight Ojibwe tribes, including the Mille Lacs and Fond du Lac Bands in Minnesota. The

six Wisconsin Ojibwe bands retaining 1837 Treaty rights in Minnesota are Bad River, Lac du Flambeau, Lac Courte Oreilles, Mole Lake, Red Cliff, and St. Croix.

The Minnesota 1837 Ceded Territory Fisheries Committee, a group composed of state and tribal biologists and representatives, did not reach consensus regarding the harvestable surplus level for walleye in Mille Lacs Lake for 2003.

While model results generated by the tribes and state showed similar estimates of walleye abundance and biomass, there was disagreement regarding how harvestable surplus values should be calculated from the model estimates.

Minnesota Department of Natural Resources (MDNR) biologists believe that harvestable surplus of walleye should be based on 24% of all walleye aged 3 and older, which results in a value of 550,000 pounds.

Tribal biologists maintain that harvestable surplus should be based on 24% of mature, spawning walleye. (See *Fishing*, page 3)



Sam Quagon, GLIFWC fisheries aid, measures a walleye at Cedar Creek landing on Mille Lacs Lake during the 2002 spring season. (Photo by Sue Erickson)

Hunting for deer sign on Oak Island

By Charlie Otto Rasmussen
Staff Writer

Red Cliff, Wis.—Rising some 450 feet from Lake Superior, Oak Island shoulders a deep forest of mixed hardwoods, hemlock and northern white cedar. The rugged 5,000-acre core of the Apostle Islands National Lakeshore features prominent south-facing slopes,

acorn producing oak trees and plenty of sheltered ravines that drain snowmelt and rain into Giche Gami. Sounds like good deer country—and it is.

An interagency group of 16 people trekked across the ice in late February to document physical evidence of deer and stir-up the island's white-tailed residents while a circling airplane counted animals from the sky. Although airborne staff from the Bad River Natural

Resources Department (BRNRD) spied only 18 deer under the forest canopy, the ground crew encountered a similar number of animals plus signs of many more.

"The amount of deer sign observed on the ground was substantial," said Great Lakes Indian Fish & Wildlife Commission (GLIFWC) Wildlife Biologist Jonathan Gilbert. "A total of 755 tracks and 210 beds were recorded along with several small groups of deer well distributed across the island."

The survey conducted by staff from GLIFWC, BRNRD, Red Cliff Conservation and the National Park Service (NPS) was launched to get a better handle on deer numbers aboard the secluded island that has historically received little attention from hunters or wildlife managers.

Last fall tribal representatives and NPS officials established the first white-tailed deer treaty hunt on the Apostle Islands through the Interim 2002 Deer Hunting Agreement.

Treaty hunters from Red Cliff killed one deer on Oak Island and another on Sand Island during the season that ran from October 1 to December 31. The recent survey is the first step in estimating the size of island deer herds and establishing more accurate harvestable surplus numbers, Gilbert said.

"Population monitoring is an important aspect of deer management on

the Apostle Islands," Gilbert said. "I expect this to be an ongoing effort."

Island of deer

On the bright and clear morning of February 20 survey participants met on the Gichi Gami ice alongside frozen boat slips at the Red Cliff marina. Gilbert distributed maps and data forms, and we hopped on snowmobiles and all terrain vehicles for the two-mile trip across the ice. The wind-sheared surface of the lake retained just enough snow to accommodate both tracked and wheeled vehicles.

As we got set up along the southwest shore of the island, people began stripping away the insulated pants, thermal jumpsuits and heavy coats they wore for the cold ride over. Faced with a choice of marching in cotton long johns or heavy wool slacks, I kept my pants on. With temperatures headed into the forties and sun rising high, it was going to be a cooker.

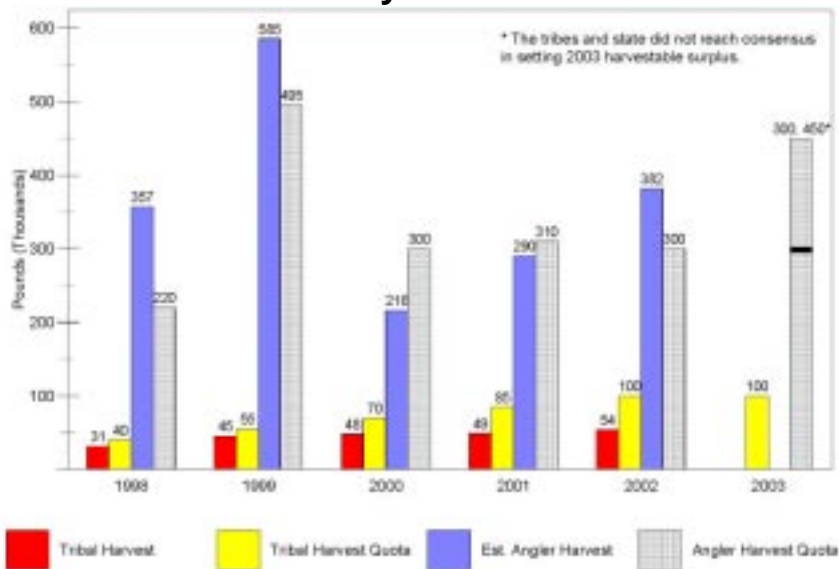
Pilot and BRNRD Biologist Tom Doolittle buzzed overhead as we scattered every hundred yards or so along the shoreline. Our mission was two-fold: to get deer moving so Doolittle and his companion, Bad River Conservation Warden, Matt O'Claire, could count them from the air and record evidence of whitetail activity on paper. The data sheets contained blanks for numbers of deer observed, tracks, trails, (See *An island*, page 8)



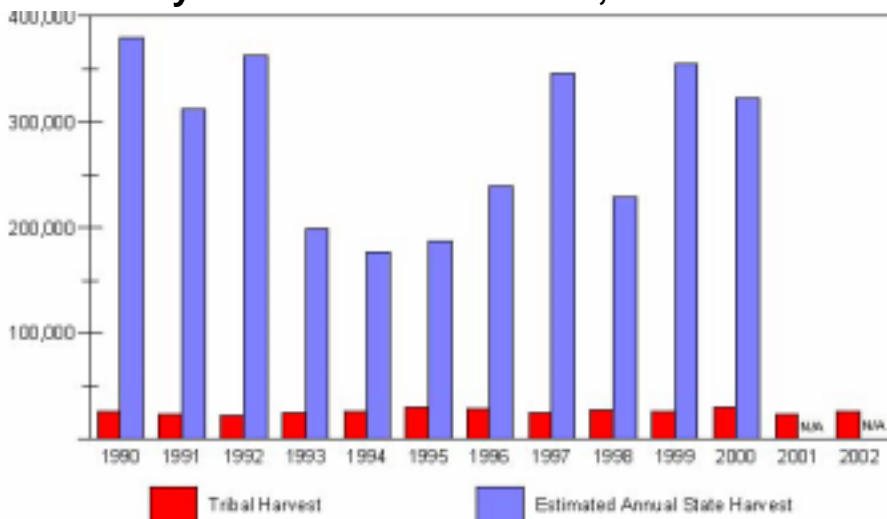
Staff from GLIFWC, Red Cliff Conservation and the National Park Service review maps of Oak Island before conducting a deer survey on February 20. (Photo by Charlie Otto Rasmussen)



Mille Lacs Lake total tribal harvest and estimated angler harvest of walleye 1998-2003



Comparison of tribal/state walleye harvest in Wisconsin, 1990-2002



Tribes declare quotas for WI treaty ceded waters

By Sue Erickson
Staff Writer

Odanah, Wis.—Meeting the March 15 deadline for the declaration of tribal harvest quotas for walleye and muskellunge in northern Wisconsin ceded territories' waters, the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) filed a final report on behalf of six Wisconsin Ojibwe bands, declaring a total of 45,776 walleye and 1,522 muskellunge in 298 lakes and five lake chains. These fish are available for tribal harvest throughout the open-water season.

Declarations for Wisconsin are made in numbers of fish, unlike Minnesota, where tribal quotas are primarily in pounds of fish. Declarations are determined by each tribe following meetings with their tribal membership and determination of tribal need.

The total 2003 walleye safe harvest level, determined by the Technical Working Committee comprised of tribal and state staff, is 95,647 walleye. The 2003 muskellunge safe harvest figure was set at a total of 4,450 in the declared lakes.

In addition to the declared lakes and lake chains, twenty-seven river segments are also open to treaty spring spearing.

The declarations were filed on behalf of the Bad River, Lac Courte Oreilles, Lac du Flambeau, Mole Lake/Sokaogon, Red Cliff and St. Croix Ojibwe bands.

In 2002 the tribes' combined declaration for walleye in Wisconsin ceded territory lakes was 48,628, and the harvest total was 25,543, taking 53% of the declared walleye quota. For muskellunge in 2002, the tribes harvested 218 from a declared quota of 1,555 fish, or 14% of the declared quota.

From 1989 through 2002 in Wisconsin, tribes have harvested a total of 350,842 walleye from a combined total quota of 590,566, or 59% of their declared walleye quota. Over the same fourteen-year span, tribes harvested 3,474 muskellunge from a combined total quota of 19,161, or 18% of the declared total quota.

Further information about the treaty, spring harvest opportunities can be obtained at GLIFWC's main office, (715) 682-6619 or at tribal registration stations.

Ojibwe Journeys now available

Foreword by Billy Mills

Ojibwe history and traditions come alive in the new release from GLIFWC Press, *Ojibwe Journeys: Treaties, Sandy Lake and the Waabanong Run*. The book explores key events in the Ojibwe treaty-making period of the early 1800s and traces the ensuing journey to protect reserved rights from formidable governments and anti-Indian groups.

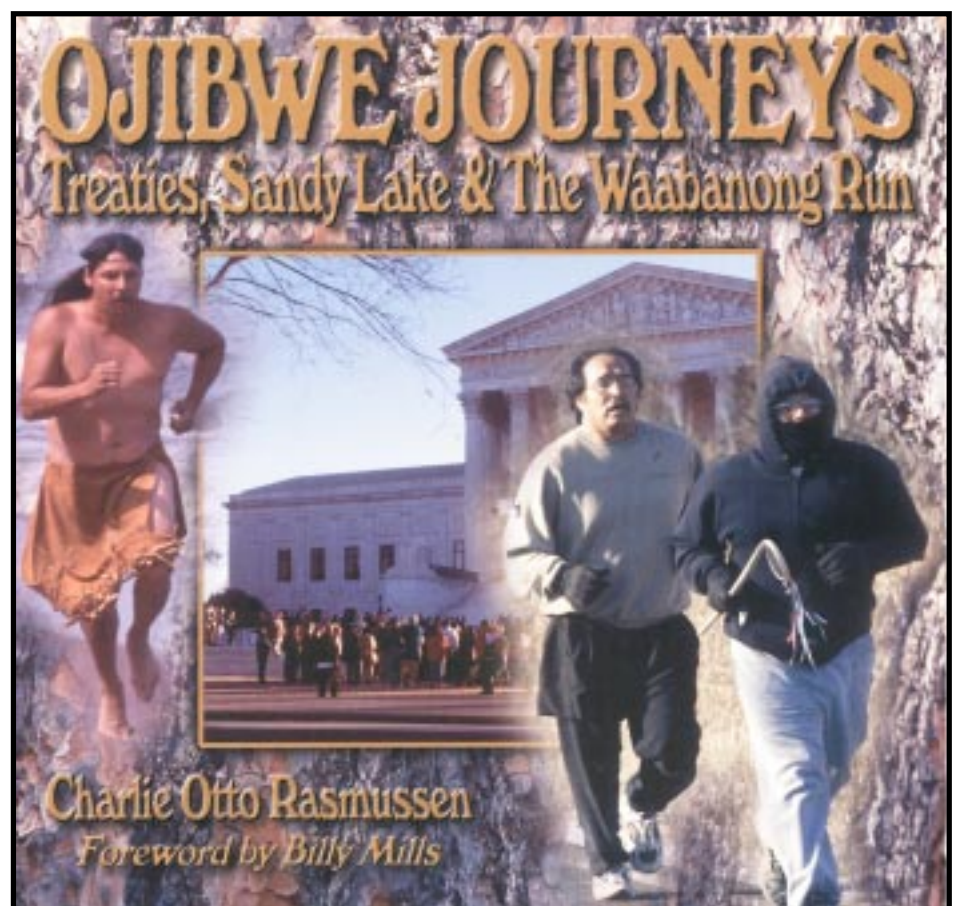
Over a 150 year period the Ojibwe utilized a fusion of running traditions, cultural directives and legal skills to maintain their lifeway in the greater Lake Superior region. Extensively researched and documented, the book provides a rare and intimate look into Ojibwe culture and how the tribes approached the court hearings of the 1990s.

Olympic running champion and Oglala Sioux Billy Mills authored the book's foreword. Mills, a Gold Medal winner in the 1964 Tokyo Olympic games, places the spiritual and legal journey of the Ojibwe people into relief with his own experiences.

Written by Charlie Otto Rasmussen, *Ojibwe Journeys* contains color maps and pictures, footnotes, a bibliography, plus the runners' journal from the 1998 Waabanong Run that brought the Treaty Staff from Lac du Flambeau, Wisconsin to Washington, DC entirely on foot.

Books are \$16.00, which includes postage. Retail and educational discounts are available.

"Rasmussen brings a warm humanity to his writing and has a gift for blending his extensive research with the words of the Ojibwe themselves."
John Little Bird Anderson
Professor of American Indian Studies Emeritus
St. Scholastica & Mount Scenario Colleges



Order Form

Please send your \$16.00 check or money order (U.S. Funds only) to: Great Lakes Indian Fish & Wildlife Commission, Public Information Office, P.O. Box 9, Odanah, Wisconsin 54861; phone (715) 682-6619 ext. 108 or e-mail pio@glifwc.org.

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On the cover

A taste of spring! Several balmy March days were enough to loosen the sap in maple trees. Sharon Nelis, Bad River tribal member, and members of her family were ready with taps and buckets to catch the first drops. Everybody got to sample the sweet liquid, including helper Austin Nelis and Sharon's granddaughter Rena LaGrew. (Photo by Sue Erickson)

Electrofishing crews ready for 2003 spring season

By Sue Erickson, Staff Writer

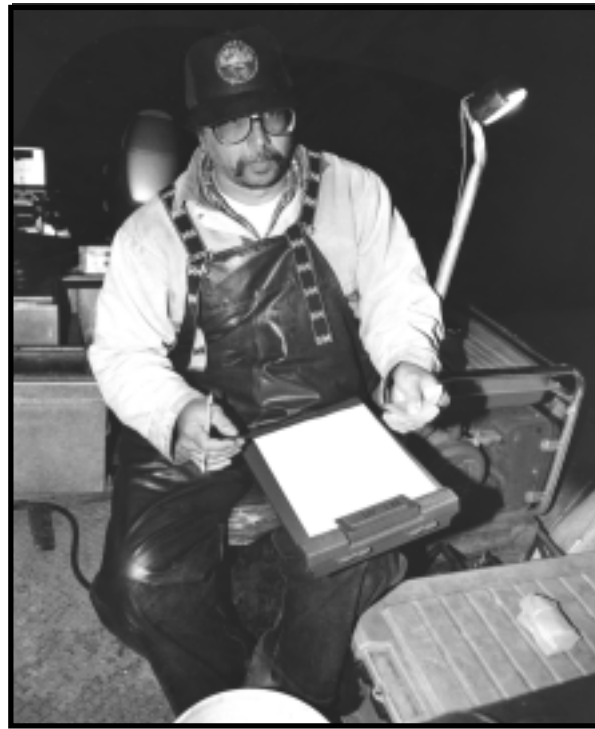
Odanah, Wis.—A sure sign of spring at the GLIFWC offices is when the electrofishing crews start preparing their boats and gear for the spring assessment season—an activity that starts with ice-out on northern lakes.

As usual the crews have a list of lakes in Wisconsin for the spring adult walleye population estimates. Among those lakes are several of GLIFWC's long-term study lakes, which are identified in bold. The list of alternates may or may not be surveyed depending on time and conditions. The Wisconsin survey lakes are as follows: **Lake Owen** and **Siskiwit Lake**, Bayfield County; **Butternut Lake**, Forest County; Sawyer Lake, Langlade County; Wheeler Lake, Oconto County; **Squirrel Lake**, Oneida County; Round and Little Round Lakes, Sawyer County; **Annabelle, Kentuck, Sherman** and Trout Lakes, Vilas County; **Bass/Patterson** and Long Lakes, Washburn County. Alternate lakes are: Metonga and Stevens Lake, Forest County; Boot Lake, Oconto County; Connors Lake, Sawyer County; Forest and Star Lakes, Vilas County.

Also to be surveyed this spring are: King Lake, Baraga County, Michigan; and Mille Lacs Lake, Minnesota

This spring GLIFWC will have two crews working on the Wisconsin survey lakes along with a crew each from the Mole Lake/Sokaogon Tribe, the St. Croix Tribe and the U.S. Fish & Wildlife Service (USFWS).

In Minnesota two GLIFWC crews will be working with two crews from the USFWS and a crew from the Fond du Lac Tribe.



Butch Mieloszyk, GLIFWC inland fisheries technician, records data as crew members measure, determine sex and tag walleye captured during a Mille Lacs Lake electrofishing run. (Photo by Sue Erickson)

Fishing opportunities in Minnesota's 1837 Treaty lakes

(Continued from page 1)

which results in a value of 400,000 pounds. The MDNR has unilaterally set the harvestable surplus level at 550,000 pounds, which results in an angling quota of about 442,000 pounds for 2003 after subtracting the 100,000 pound tribal declaration, and subtracting a 7,500 to 8,000 pound penalty since the state exceeded its quota last year.

In addition to Mille Lacs Lake, twenty-three other lakes have been declared for the spring treaty season in the Minnesota 1837 treaty ceded territory. A harvestable surplus figure has been determined for each, and quotas declared by the individual bands. Names of lakes and quotas can be obtained from GLIFWC satellite enforcement offices or tribal registration stations.

Minnesota plans to manage the state-licensed angling by starting the season with a 17-28 inch protected slot, which means anglers may not keep walleye between 17 and 28 inches. They will have a four fish daily bag limit and be allowed to keep one trophy fish longer than 28 inches.

Mille Lacs walleye tagging study to continue in 2003

By Joe Dan Rose, GLIFWC Inland Fisheries Section Leader

In 2002, state and tribal biologists initiated a multi-year walleye tagging study at Mille Lacs Lake, Minnesota. This joint mark-and-recapture tagging study was undertaken to provide an independent estimate of walleye abundance to supplement ongoing state and tribal population modeling efforts. Biologists also hope the study will provide valuable insight into the seasonal movements and spatial distribution of adult walleye throughout this immense 132,516 acre ceded territory, mixed-fishery lake.

In spring 2002, electrofishing survey crews from the Great Lakes Indian Fish & Wildlife Commission (GLIFWC), United States Fish & Wildlife Service (USFWS), Fond du Lac Band (FDL), and St. Croix Band (STC) combined their efforts to capture, tag, and release over 12,000 adult walleye in Mille Lacs Lake. During this same time period, Minnesota Department of Natural Resources (MnDNR) fyke-netting crews tagged and released approximately 8,000 adult walleye. An additional 14,000 angler-caught walleye were tagged and released during the summer of 2002 by MnDNR personnel working in cooperation with state-licensed commercial fishing launch operations on Mille Lacs Lake.

In the spring of 2003, fisheries assessment crews from these federal, state and tribal fisheries agencies will once again return to the waters of Mille Lacs Lake in an effort to tag an additional 20,000–40,000 adult walleye. Some of the adult walleye captured this spring will be fish that were already tagged in 2002. Various data from these recaptured fish and those tagged in 2003 will be collected by all of the tagging crews.

GLIFWC and FDL creel clerks will collect data from tagged and untagged fish as they are observed during spring 2003 and 2004 harvest monitoring. MnDNR will also collect harvest data from state-licensed anglers through its annual Mille Lacs Lake creel survey and future fisheries assessment survey work.

Tribal spearers and netters should once again expect to see some walleye in their catches that are marked with plastic, spaghetti-shaped tags which stick out from the left side of the fish between the dorsal fin and the tail. These tags will be yellow in color and will have "MN DNR" plus a number printed on them. A small percentage of tagged fish will be double-tagged to help determine tag loss rates.

Tribal creel clerks have been instructed to remove all tags encountered during spring 2003 harvest monitoring. Any tags from speared or netted fish that may have been missed during harvest monitoring should be removed and given to any tribal biologist, creel clerk or warden. Tags may be sent to Nick Milroy at GLIFWC, P.O. Box 9, Odanah, WI 54861. Tags can also be reported by phone at (715) 682-6619 or email (nmilroy@glifwc.org).



Tribal spearers and netters should notify GLIFWC if above tag is found on walleye. (Photo by Nick Milroy)

Winter spearing survey winds down at Lac Courte Oreilles

By Charlie Otto Rasmussen
Staff Writer

Hayward, Wis.—Winter spearing harvest surveys are wrapping up in the Lac Courte Oreilles area as ice diminishes on lakes across the ceded territory. Since December 2002 GLIFWC creel clerk Sam Quagon has monitored off-reservation spearing on the Chippewa Flowage, Lac Courte Oreilles Lake and Grindstone Lake in Sawyer County.

Quagon said most of the fish speared thus far have been muskies and northern pike from the Chippewa Flowage and Lac Courte Oreilles Lake.

"Walleye is most desired, but spearing success has been very limited," said Quagon. "Many spearfishers will also have tip-ups or setlines out while spearing, and they seem to have better success harvesting walleye with those methods."

GLIFWC conducts winter spearing surveys every few years, alternating between lakes in the Lac Courte Oreilles (LCO) and Lac du Flambeau regions where most off-reservation fishing occurs through the ice. While tribal creel clerks count and measure every

fish taken during the spring treaty harvest season, GLIFWC fisheries managers rely on a creel census to track the tribal bag through the ice. Similar to how the Wisconsin Department of Natural Resources estimates state angler harvest, fishermen are interviewed by a creel clerk who tallies data including numbers of fishermen observed, how much time they spent fishing and species harvested.

Quagon said each lake is covered in its entirety by snowmobile to locate treaty fishing activity.

"Basically, I trailer a snowmobile four days a week to a public access and traverse the lakes to make my counts and interview spearfishers as I encounter them," he explained.

Quagon finds most LCO tribal fishermen inside handmade, tar-papered darkhouses, commonly referred to as ice or spearing shacks. Less frequently, spearers use commercially manufactured fishing tents, he said.

During the last winter spearing survey conducted on Lac Courte Oreilles area lakes in 1998, GLIFWC creel clerks recorded eight muskies, six northern pike and one walleye. Muskies averaged 32.7 inches long, and northern pike were commonly around 18.5 inches.

Under the tribal off-reservation conservation codes approved in the Voigt litigation, treaty fishermen may harvest muskies during the winter by hook-and-line and spearing through the ice. The first fish may be of any size; thereafter, at least one-half of a catch must be at least 32 inches.

SETAC investigates environmental health

By *Charlie Otto Rasmussen*
Staff Writer

Rhinelander, Wis.—Members of the Midwest Chapter of the Society of Environmental Toxicology and Chemistry (SETAC) convened their 11th annual meeting at UW-Stevens Point's Treehaven Research Station on January 29-30.

The conference provided a regional forum where cutting-edge environmental research was made available to a broad spectrum of interests.

"Scientific professionals from government agencies, academia and the commercial sector participated in a constructive sharing of information and ideas," said 2002-2003 SETAC President Kory Groetsch. "The conference was very well attended."

Groetsch, a GLIFWC environmental biologist, has organized the event for the past several years. He said this year's meeting was especially useful for government and commercial policymakers learning how to utilize complex laboratory work to gauge the health of the environment.

"Much of the focus dealt with connecting lab research to real-world environmental issues," said Groetsch, citing studies conducted by keynote speaker Dr. Gerald Niemi as a model

for better understanding impacts on the environment.

"Dr. Niemi's research team is analyzing how specific organisms known as environmental indicators respond to pollution in a laboratory setting in order to detect potential pollution in similar organisms that exist in nature," said Groetsch, who also presented data on contaminant levels in Lake Superior fish.

Groetsch and GLIFWC's John Coleman, Esteban Chiriboga and Ed Kolodziejski have collaborated on a number of studies to track environmental contaminants in the ceded territory. All four detailed their recent efforts to the gathering of approximately 75 scientists.

"The real key to our work at GLIFWC is that we look at broad areas of the environment to access its condition," explained Coleman, section leader of GLIFWC's Environmental Division. "By incorporating multiple indicators into our analysis, we can better understand the dynamics of water quality and environmental health."

Coleman's work centers on gathering baseline data on the quantity of various metals in plants, animals and water at the site of the proposed Crandon Mine near the Mole Lake Reservation. Similarly, Chiriboga presented a poster at the meeting that illustrates



Ed Kolodziejski, GLIFWC's Federal Energy Regulatory Commission field assistant, presented findings from a study conducted in cooperation with the Lake Superior Research Institute that tracked mercury concentrations in walleye harvest from eight ceded territory reservoirs. (Photo by Kory Groetsch)

GLIFWC's environmental monitoring efforts in Minnesota, Wisconsin and Michigan.

In one of the final papers at the conference, Ed Kolodziejski delivered findings from a study conducted in co-

operation with the Lake Superior Research Institute that tracked mercury concentrations in walleye harvest from eight ceded territory reservoirs.

[see pages 12-13 for information on GLIFWC's monitoring program]

GLIFWC fish study presented to Duluth health professionals

By *Charlie Otto Rasmussen, Staff Writer*

Duluth, Minn.—A study launched by GLIFWC may assist health professionals, as well as the general public, identify potential contamination problems associated with Lake Superior fish.

With funding from an Administration for Native Americans grant, GLIFWC has collaborated with toxicologist Larry Brooke to analyze the level of chemical contaminants in popular Lake Superior fish.

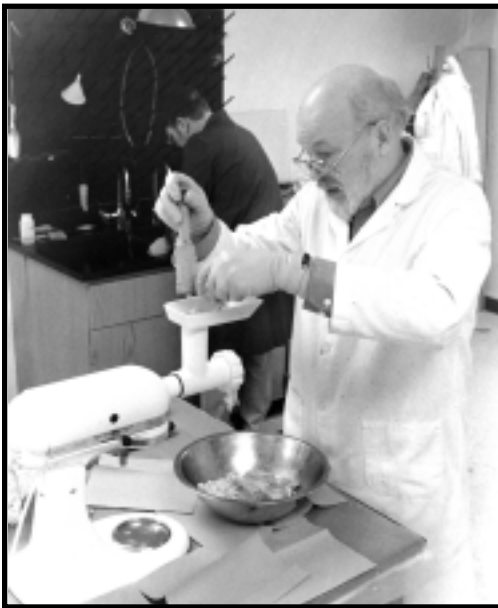
Brooke, Senior Scientist at UW-Superior's Lake Superior Research Institute (LSRI), delivered his findings to doctors from St. Mary's Hospital and the Duluth Clinic on January 10. Reviewing mercury-exposure symptoms to general guidelines for fish consumption, Brooke related a wealth of information useful in both diagnosing problems and preventing them.

"Lake Superior is still quite clean compared to many inland lakes," Brooke said. "You really need to consider what young children and women are consuming from the lake. Big old fish that basically eat other large fish should be avoided."

Contaminants like mercury tend to build up in the bigger fish, notably siscowet or "fat" trout. Other Lake Superior fish sampled in the study, including herring, whitefish and lake trout, had significantly lower chemical concentrations. Brooke recommends that fishermen and other consumers choose smaller, younger fish for the dinner table.

Through LSRI Brooke has collaborated with GLIFWC since the early 1990s to monitor ceded territory fish populations for mercury contamination. More recently, he has joined GLIFWC's efforts to determine the level of chemicals in wild rice, clams and snails.

The GLIFWC publication, "**How to Enjoy Fish Safely: Facts about Fish and Nutrition**," highlights the results and recommendations from studies conducted on Lake Superior as well as inland lakes. It is available through GLIFWC's Public Information Office, 715-682-6619 or e-mail pio@glifwc.org.



Toxicologist Larry Brooke grinds fish tissue samples for a GLIFWC-sponsored contaminant study at UW-Superior's Lake Superior Research Institute. (Photo by Charlie Otto Rasmussen)

Prestigious STAR grant awarded to GLIFWC

GLIFWC has been awarded a STAR grant from the Environmental Protection Agency (EPA) to update its mercury-in-walleye maps.

Kory Groetsch, GLIFWC environmental biologist and co-author of the grant said, "This research will allow us to respond to recent scientific developments regarding mercury, ensuring our color-coded maps are based on the most current science."

STAR, which stands for Science to Achieve Results, is funded by the National Center for Environmental Research (NCER). NCER's mission is to support high-quality research by the nation's leading scientists that will improve the scientific basis for decisions on national environmental issues. NCER, as a part of EPA's Office of Research and Development, supports extramural research in exposure, effects, risk assessment, and risk management.

New WDNR Secretary Scott Hassett meets VITF reps



Voigt Intertribal Task Force (VITF) representatives introduced themselves to newly appointed Wisconsin Department of Natural Resources (WDNR) Secretary Scott Hassett during their March 6th meeting at Lac du Flambeau. Hassett indicated he looks forward to maintaining and strengthening ties with the tribes and the Great Lakes Indian Fish and Wildlife Commission. He said he has a strong commitment to the North Country and that mercury contamination issues are especially high on his agenda. VITF representatives each had an opportunity to share some tribal concerns, including fishery management issues and need for improved communications. WDNR staff at the table are: Jack Sullivan, Acting Administrator for the Division of Enforcement and Science; Secretary Scott Hassett; Deputy Secretary Bill Smith; Mike Lutz, attorney. Sitting in the back is Mike Bartz, Northern Regional Enforcement and Science leader. (Photo by Sue Erickson)

GLIFWC finds successful reproduction of White River lake sturgeon

By Bill Mattes, GLIFWC Great Lakes Biologist

Odanah, Wis.—The Great Lakes Indian Fish & Wildlife Commission's (GLIFWC) 2002 lake sturgeon project addressed an issue identified as a high priority by both the Aquatic Community Committee of the Lake Superior Binational Program and the Lake Superior Technical Committee of the Great Lakes Fishery Commission.

The project's goal was to determine the current population status and abundance of lake sturgeon in Lake Superior tributaries where spawning occurred historically and to quantify sturgeon spawning habitat in those streams.

This project found evidence of adult lake sturgeon successfully using the upper reaches of the White River, a tributary stream to the Bad River, by the capture of drifting larval lake sturgeon near State Highway 13.

Habitat data for depth and substrate were collected in the areas where interviews with anglers indicated lake sturgeon were spawning.

This work was accomplished through a grant from the Environmental Protection Agency's Coastal Environmental Management Program.



Julie Nelson and Ben Basley, GLIFWC fishery aides, are pictured examining the contents of a drift net set in the White River above the Highway 13 bridge. They are looking for juvenile lake sturgeon like the one pictured to the left.

Four larval lake sturgeon were captured in five nights of sampling.

Siscowet numbers problematic in Lake Superior?

Lake trout recovery in Lake Superior includes the recovery of the native siscowet, or fat, lake trout. Minnesota Sea Grant's publication, *Seiche*, December 2002 edition, reports that fishery researchers and fishermen find siscowet numbers are copius in the big lake—"about 100 million according to one estimate—of these plump native fish."

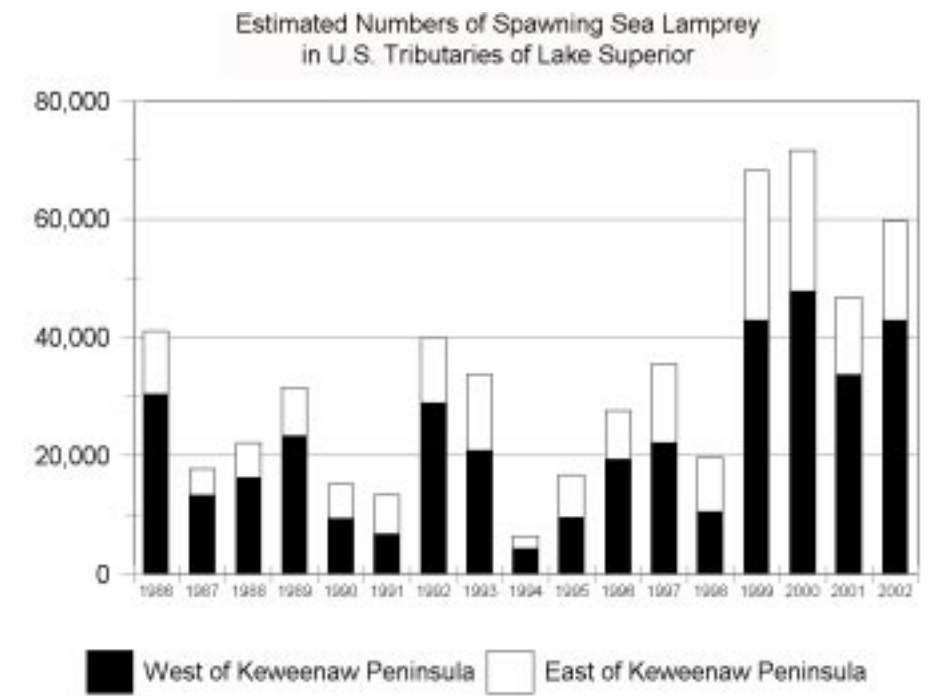
According to James Kitchell, professor of zoology, UW-Madison, the siscowet numbers certainly indicate a huge success in restoration of native species. "If the goal is to restore an ecosystem that supports important recreational and commercial fisheries similar to those of the past, then we have a plague," he says.

Among problems with the hefty siscowet population is the impact on the food chain. "Siscowet among smelt are like sharks among tuna," Kitchell notes. Also, there is little demand for siscowet as a commercial catch, although siscowet are rich in omega-3 oils.



Winter's work at GLIFWC's main office in Odanah, Wisconsin, includes recording data from samples collected during the spring, summer and fall fisheries assessment work. For the Great Lakes section staff, otoliths (ear bones) taken from Lake Superior fish provide ageing information. Above, Nate Bigboy, (left) fishery technician, and Casey Bigboy, fisheries aide, use the "crack and burn" technique to study otoliths. The tiny bone is cracked in half and then held over the flame of a small alcohol burner before being examined through a microscope. The burning darkens the otolith, making age lines easier to determine. (Photo by Sue Erickson)

2002 data shows rise in sea lamprey numbers



The Great Lakes Indian Fish & Wildlife Commission (GLIFWC) annually works with the U.S. Fish & Wildlife Service's Sea Lamprey Control Program to estimate lamprey populations in the U.S. tributaries of Lake Superior.

Unfortunately, 2002 figures indicate a rise in sea lamprey numbers across the board. In the western U.S. waters of Lake Superior the 2002 estimate was 42,806 and in the eastern U.S. and Canadian waters of the big lake, the estimate was 67,858, bringing the total to 110,664 estimated spawning lamprey in Lake Superior.

This spring and summer, GLIFWC crews will once again return to tributary rivers to continue monitoring the sea lamprey population—a population that once devastated the lake trout fishery in Lake Superior.

2002 Lake Superior estimated lake trout mortalities



Spears, decoys and tepees

LdF youth brave frigid temps to spear muskie on Deer Lake

By Sue Erickson, Staff Writer

Deer Lake, Wis.—Temperatures dipping into winter's cellar did not stop Lac du Flambeau's (LdF) Youth Council from fishing muskie on Deer Lake the weekend of March 8-9. Guided by Frank Mitchell Sr. and Ray LaBarge Sr., both from LdF, the fishing party did well spearing muskie with decoys at Deer Lake. The youth brought home a total of nine nice sized muskies and a good dose of traditional knowledge on how to spear through the ice with decoys.

In charge of the group for the weekend was Azael Meza, Activity Coordinator for the LdF Outdoor Education and Recreation Program. He drove the van, which provided transport for bodies and gear and, importantly, some temporary harbor from a whistling wind across the lake and subzero temperatures. The program, funded through the Administration for Native Americans, acquaints tribal youth, grades 6-12, with both natural resource management activities and a wide variety of outdoor recreation and harvest opportunities.

The 2003 Youth Council ice fishing expedition departed from LdF reservation about 4:30 a.m. Saturday morning. By the time they arrived at Deer Lake (near Turtle Lake, Wis.) and finished cutting ice holes through a substantial layer of ice, it was noon before fishing actually got underway.

Nevertheless, the group managed to bring up four nice looking muskies that afternoon.

On Sunday morning, they headed back to Deer Lake for another round, but fishing holes had to be re-opened with an ice chisel, and floating ice pieces scooped from the hole before fishing could begin.

The tepees also had to be re-constructed. LaBarge and Mitchell made sure the youth understood the hows and whys of ice-fishing tepee construction.

Four branches made the pyramid frame for the tepee over the fishing hole—supported with ice at the base and the tops tethered at the peak. Then a layer of balsam boughs was laid carefully around the hole. The boughs serve a dual

purpose: they help keep the blankets dry, and they darken the area around the hole, so it cannot be easily detected from below.

Once the boughs are down, several layers of blankets are placed over them for the fishermen to lie on. Next, the fishermen place several more layer of blankets over the tepee's frame, and finally, they cover it all with a large canvas tarp.

The youth gladly wiggled in under the layers of blankets, escaping the icy blast above, to begin fishing in the dark, protected environment. Only a few boot bottoms protruding from beneath the canvas revealed the presence of anyone.

The youth used hand-carved decoys to lure the muskie. In fact, decoy carving began in December as part of the Youth Council's pro-

gram, according to Meza, so the youth had an opportunity to try out their own, handmade decoys.

Once four youth were set-up inside a tepee with decoys and spear, the guides went to the next hole and got another foursome involved in setting up their tepee, and then on to the next.

The day yielded another five muskies for the group before they took-down around 2:30 p.m. and headed home after a hard, but successful fishing weekend.

Besides facilitating the Youth Council activities and meetings, the LdF Outdoor Education and Recreation Program also provides environmentally based activities and internships for both high school and middle school students.

The range of activities is broad, including hands-on work with water quality testing and environmental clean-up, dogsledding, and a variety of traditional, Ojibwe skills like making maple sugar. The intent is both to encourage students' interest in natural resource management professions and to pass on traditional knowledge on how to best use and preserve the resources.



Guides Frank Mitchell Sr. and Ray LaBarge Sr. demonstrate how to construct an ice-fishing tepee. They begin by laying balsam boughs around the open hole, both as protection from the wet and cold and to darken the hole. (Photo by Sue Erickson)



Vinney Wolf and Terry Doud, Lac du Flambeau, begin to wrap their tepee frame with layers of blankets for protection. (Photo by Sue Erickson)



Four fishermen shared this hole in the ice to fish for muskie with decoys and spears. The shelter afforded protection from the subzero windchills and also darkened the hole so it is not detected from below. (Photo by Sue Erickson)

Ceded territory news briefs

Moose calf born in Wisconsin

Nobody actually saw her, but...

For the last couple of years, cow moose "5155" (who sports a radio collar) has been a seasonal transient to the land of cheese, making an annual warm weather trip to northern Forest County from winter digs about 45 miles north in Michigan's Upper Peninsula. Aerial surveys showed the animal was in Wisconsin during the birthing season, but heavy vegetation prevented any visual observations from being made. However, during a survey back in the UP in mid-December, Michigan DNR biologists spotted 5155 with a calf at her side. According to Adrian Wydeven of the Wisconsin DNR, this is probably the strongest documentation in over a century of a moose calf being born in the state.

Wandering Wisconsin wolf found in Michigan

Back in May of 1995, Wisconsin DNR biologist Bruce Kohn trapped a healthy, roughly 85 pound wolf near the Wisconsin/Michigan border. Bruce dubbed him "Phil" and equipped him with a radio collar. Unfortunately, contact was lost with him in November of the same year. With his last radio-location being just across the St. Croix River from Minnesota, biologists assumed he had likely headed west. Now fast-forward to February 1, 2003, and move about 240 miles to the east, where Doug Wagner of the Michigan DNR was helping a trapper in Dickerson County release a wolf inadvertently caught in a coyote set. Guess who! Phil, now at least 10 years old, was showing signs of his age, including well-worn teeth and patches of mange. He crossed to the spirit world a couple of weeks later, but not before providing biologists with this final gift of information about wolf ecology.

Osprey populations subject of concern

The Wisconsin Department of Natural Resources (WDNR) used remote cameras to monitor Iron County osprey nests in 2002, according to the WDNR 2002 Shareholders Report. Several years of declining osprey reproduction in Iron, Oneida and Vilas Counties prompted the investigation. As it turned out, 2002 was a better reproductive year for osprey, and investigators observed reasonable success in the nests. The report indicates that the overall production in all Iron County nests was 1.2 young fledged per active osprey nest and 1.9 fledged per successful nest. Investigators did find that the birds had no difficulty supplying sufficient food for the chicks and also did not observe enough interactions with eagles to suspect them as a factor in a declining osprey population.

Pros & cons of wild turkey range expansion topic at Minnesota meeting

By Peter David, GLIFWC Wildlife Biologist

Odanah, Wis.—Biologists from across the northern extent of North America's turkey range recently met in Bloomington, Minnesota to share thoughts and perceptions on turkey management along the northern fringe of their distribution. The participants in this workshop, arranged by the Minnesota Department of Natural Resources and the National Wild Turkey Federation, were largely pulled together by a shared question: What is the appropriate way to manage a species that is existing well north of its "ancestral" range?

Of course, even this apparently straight-forward question has its complications, including the definition of "ancestral" range. Over great time periods, the northern range of turkeys has probably vacillated with environmental conditions. However, there is general agreement that turkeys have expanded northward since the arrival of Europeans on the North American continent (see figure). Wisconsin's turkey distribution can be used as a case in point.

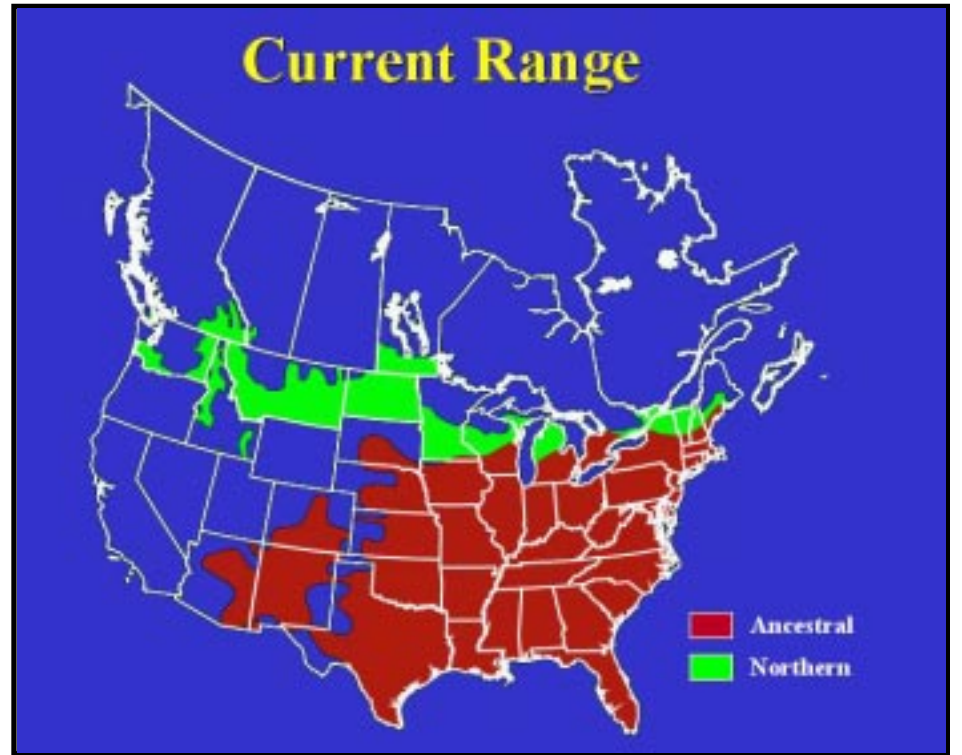
An often-referenced figure of Wisconsin's historic turkey distribution was compiled by Wildlife Biologist and Historian A.W. Schorger. Schorger's research indicated that prior to their extirpation from the state in the late 1800s, turkeys existed largely south of a line that extended from Prairie du Chien to Green Bay. As a result of this information and other factors, most of the initial effort in Wisconsin's successful turkey restoration program was centered in the southwest part of the state. But all along their northern border, turkeys have continually surprised biologists with their ability to persist under conditions once thought beyond their limit.

Once the sites deemed most suitable for turkey releases were filled in, transplants continued in Wisconsin to sites which were thought to be less suitable, but which the birds themselves began to show an ability to survive in. Today, turkeys now can be found in some abundance over about three-fourths of the state, and the expansion may not be over.

This raises some interesting ecological questions. For example, does this expansion reflect a simple adjustment by turkeys to changing land-use patterns (such as the conversion of land to agriculture) and/or environmental conditions (such as global warming), or are these birds little more than exotic species, invading a new habitat where they do not belong? And does the answer to that question depend to a degree upon how we choose to manage the birds in these new areas?

Biologists across the northern range did tend to reiterate some common experiences and some common management approaches:

▶▶ Northern turkeys are more limited by access to food than directly by snow or cold. Turkeys have relatively low metabolic rates and can conserve energy by behavioral adaptations. In addition, they are omnivores, or generalists, when it



The North American range of wild turkeys is expanding north. (Map created by Bob Wright, MN DNR GIS specialist.)

comes to food. Given access to a suitable food source, they can make it through some pretty nasty winters.

▶▶ Along the northern edge of their range, turkeys tend to become dependent upon agriculture waste grain or outright food handouts (such as bird or deer feeders) in order to survive harsh winter conditions.

▶▶ Where expansion of populations is desired, it is critical to use true wild birds for translocation.

The states and provinces present generally viewed the range expansion positively and consider it largely a product of changes in land use (i.e. agriculture) and environmental conditions. And although there are concerns about possible negative effects from turkeys (such as herbivory on native or domestic plants, or competition with native species for resources like acorns), there was little hard evidence indicating ecological problems currently exist. At the same time, there was broad agreement that state or provincial governments should not promote the development of food plots or encourage artificial feeding of turkeys to help them survive in areas that would not otherwise support them.

One final take-home message from this workshop was also clear: turkeys still have much to teach us. Despite all of the work that has been done with this species, it can still be difficult to answer a question as fundamental as "how far north can turkeys survive?" But to those biologists who love studying this extraordinary species, that's a very reassuring thought.



GLIFWC Wildlife Technician Dan North attaches an off-reservation registration tag on a fisher. Carcass tags and registration are mandatory for fisher, bobcat and otter in the Wisconsin ceded territory. (Photo by Charlie Otto Rasmussen)

2002 off-reservation deer harvest by tribal registration station

Registration Station	Antlerless	Antlered	Totals
Bad River	129	82	211
Fond du Lac	20	24	44
Lac Courte Oreilles	219	157	376
Lac du Flambeau	234	188	422
Lac Vieux Desert	24	12	36
Mille Lacs	58	46	104
Mole Lake	117	72	189
Red Cliff	93	132	225
St. Croix	227	194	421
Totals	1121	907	2028

An island of waawaashkeshiwag



Armed with a plastic bag, GLIFWC Warden Vern Stone collects deer pellets from a bedding area on Oak Island in February. (Photo by Charlie Otto Rasmussen)

As surveyors worked through the center of the island, Doolittle's plane frequently droned above the treetops. He made sweeping passes near our positions and over to Sand Island farther off to the west.

It was hard to walk very far without encountering deer sign and taking time to pencil in the data. We traversed better than one quarter of the island on a heading that led us to the north shore. Despite the easy pace, I managed to belt out a few quarts of perspiration with assistance from my insulated boots, wool pants and lots of uphill walking. The field wise and rightly-dressed biologists, technicians and wardens I regrouped with were left to wonder if I had somehow fell into open water.

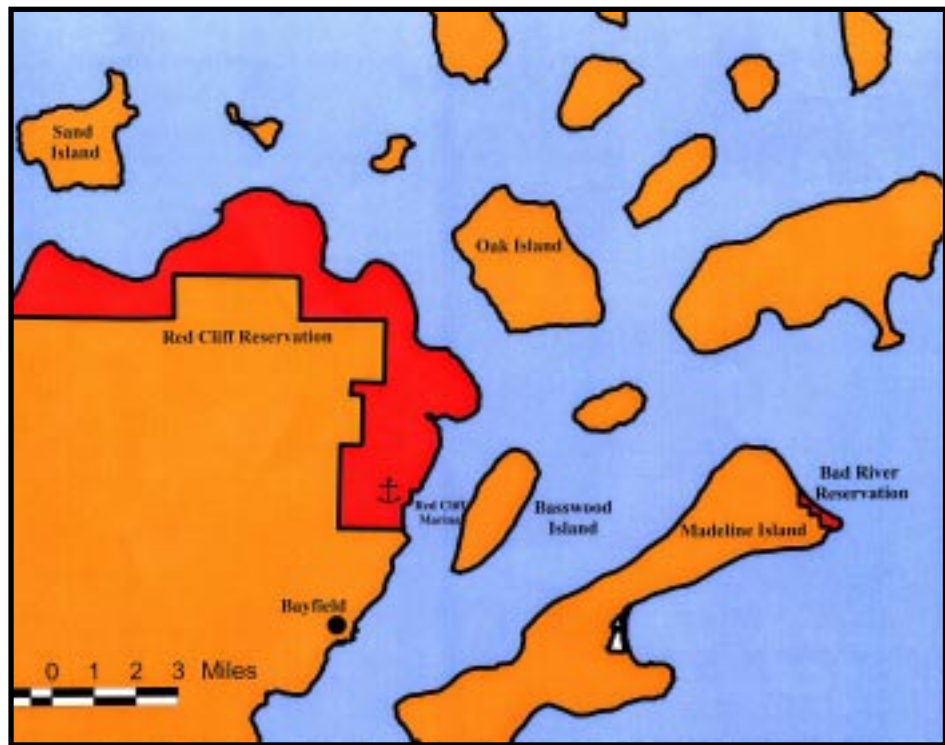
Continued from page 1
beds and scat. Gilbert also armed everyone with plastic baggies to gather deer scat—better known by name and appearance as “pellets”—for potential DNA analysis.

A foot of snow and a steep, sometimes slippery slope greeted many surveyors as we entered the woods more or less simultaneously. Although mature trees dominate the forest, a significant understory of hemlock, maple and deciduous shrubs emerged from the snow cover.

Deer tracks were abundant and became more frequent as I climbed into the interior. Varying amounts of snow appeared in the older tracks and roughly one-half of the 60 tracks I crossed were fresh. One bounding track that cut to the southeast featured a long, splayed print. I later imagined that it belonged to the large, still-antlered buck reported by two NPS staff at the rendezvous point atop the volcano-shaped island.

Overall, people saw varying amounts of deer sign. Many of the experienced deer hunters on the survey commented that deer sign on Oak Island was as good or better than their mainland hot spots. A line of buck rubs appeared on everything from cigar-sized shrubbery to six-inch diameter cedar trees along my route through the island. Scrapes, unused since last fall appeared as sunken circles in the snow with the tell-tale licking branch hanging broken and mangled from an overhanging branch. Bedding areas accommodating any number of deer took root under mature stands of hemlock across the upper portion of the island. Nipped maple and hemlock branches and acorn casings lying on the ground among overturned oak leaves revealed wintertime food sources.

Although Gilbert indicates that it's nearly impossible to calculate Oak Island's deer population with the initial data, it is clear that tribal deer hunters will once again find harvestable numbers when they take to the island next fall.



Oak Island lies off the northernmost tip of Wisconsin and is part of the Apostle Islands National lakeshore. (Map by Jon Gilbert.)

So far no CWD found in ceded territory deer Prevention and sound management still a must

By Jonathan Gilbert, Ph.D.
GLIFWC Wildlife Biologist

Odanah, Wis.—It has been more than a year since chronic wasting disease (CWD) was discovered in three white-tailed deer near Mt. Horeb, Wisconsin. This marked the first time that CWD was found east of the Mississippi River and in a deer population as dense as 20–30 deer per square mile. Naturally, there was a great deal of concern over this disease outbreak. It spurred immediate reaction by the Wisconsin Department of Natural Resources (WDNR). They conferred with other states, which have been dealing with CWD for many years; they reviewed the scientific literature on CWD and developed short-term control strategies for the Mt. Horeb area.

One of the first questions asked was—“Is chronic wasting disease confined to the Mt. Horeb area or is it found elsewhere in the state?” To answer this question a very large testing program was developed and implemented during the fall deer hunting season.

Researchers estimated that 500 deer would need to be sampled from each county in the state in order to have a very high probability of detecting the disease if present. This would require 36,000 deer to be collected and tested.

The member tribes of the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) were concerned about CWD, and they wanted to participate in the testing process. As co-managers of natural resources in the ceded territories, it is important that the tribes participate in CWD surveillance efforts.

GLIFWC developed a sampling scheme and began collecting deer heads to be tested at the start of the 2002 off-reservation treaty deer season. Tribal hunters submitted a total of 350 deer.

Tissue samples were extracted from these deer heads according to agreed upon protocols and submitted to the National Veterinary Diagnostic Lab in Ames, Iowa. Nearly half of the usable samples have been tested with no positive results. Plans are to continue testing into the 2003 hunting season.

None of the deer tested by WDNR in the ceded territories has shown any positive results. This coupled with the negative tests from tribal deer is good news. The more deer which are tested with no positive results, the more confident we can be that CWD is not present in the ceded territories. We all hope this continues to be the case.

This is not to say that we should all sit back and relax. There is much to do to prevent the outbreak of disease in deer in the ceded territories. CWD is just south of the ceded territories; Bovine tuberculosis is present in the lower peninsula of Michigan, and cranial abscessation syndrome has been found in southern Wisconsin. Hemorrhagic disease and foot and mouth disease are also threats to ceded territory deer.

Perhaps the single most important management action is to keep the deer populations in the ceded territories in balance with the northern ecosystems. Maintaining deer populations which are above the management goals established by the WDNR and the tribes is the single greatest threat to the ceded territory deer herds.

Wildlife biologists and managers

must continue to advocate for large harvests of deer, especially does. It is the harvest of antlerless deer (does), which is the population control mechanism for ceded territory deer herds.

However, harvesting large numbers of deer from public lands, while maintaining excessive deer populations on private lands will not solve the problem. Harvests must be distributed on all land ownerships. All too often tribal deer hunters correctly observe that deer are scarce on public lands, while many deer are observed on the private fields and woodlots in the ceded territories.

The second most important management action which should take place is a severe restriction on the importation and movement of captive deer and elk. CWD jumped to Wisconsin from the nearest occurrence, nearly 1,000 miles. It did not do this without the help of humans. We do not know the proximate cause of CWD in Wisconsin, but the ultimate cause was the importation or movement of captive deer and elk. We must get this practice under control. GLIFWC will be working with WDNR and U.S. Department of Agriculture—Animal and Plant Health Inspection Service to ensure protection of ceded territory deer herds from this threat.

The WDNR has developed an Environmental Impact Statement on Rules to Eradicate Chronic Wasting Disease from Wisconsin's Free-Ranging White-tailed Deer Herd. This EIS is a thorough document in many respects. It brings together much of the state-of-the-knowledge on CWD from the scientific community. The EIS concentrates its focus on southern Wisconsin, outside of the ceded territories, near the area where

CWD has been found. However, it does propose some actions, which would be implemented in the ceded territories.

The first is a statewide ban on baiting and feed of deer. Deer baiting is an allowable hunting practice under the tribal, off-reservation conservation codes approved in the *Voigt* litigation, and the State is enjoined from enforcing its ban on deer baiting against tribal members exercising treaty rights under those codes. A ban on tribal deer baiting would have little preventative impact on the spread of transmissible diseases because estimates are that less than 1% of the tribal deer hunters use bait while hunting off-reservation. Tribal ceded territory deer baiting does not significantly contribute to the congregation of deer and does not increase the likelihood of disease transmission.

However, the same is not true for state-hunters. Baiting and feeding does concentrate deer into unnaturally large and dense groups. This can facilitate the spread of infectious diseases, like CWD. In addition to congregating deer, feeding deer reduced over-winter mortality, thus increasing the size of the deer population. This makes it harder to keep the deer herd within population goals. It is hard enough to control deer populations, but to vastly reduce one form of mortality would make this job even more difficult. For this reason, deer feeding should be banned.

Disease is a part of the circle of life. They are present in many wildlife populations. Diseases only become a problem when exacerbated by human activities. We need to manage our wildlife populations so that they are in balance with our ecosystems.

Tribes weigh in on Wisconsin's "Land Legacy" Report

Seek shared vision for protecting northern Wisconsin

The Wisconsin Department of Natural Resources (WDNR) has a 50-year vision for protecting over 225 places and associated natural resources that it sees as vital for Wisconsin's conservation and recreation needs. But, according to Great Lakes Indian Fish & Wildlife Commission's (GLIFWC's) Voigt Intertribal Task Force (Task Force), the state's vision will not be complete until it includes the tribes' vision.

The WDNR's Steven Miller presented the state's draft Wisconsin Land Legacy Report at the Voigt Intertribal Task Force's February 2003 meeting at Mille Lacs. Miller said the report attempts to identify the "footprint" of important natural areas that should be preserved well into the future from the pressures of ever increasing population growth and development.

The Task Force welcomed the state's vision, but questioned whether it is broad enough to match a tribal vision. "Maybe the state's footprint isn't the same as the tribes' footprint," Task Force Chair Tom Maulson told Miller. Maulson noted that the state's draft plan was developed without tribal input, either for the ceded territory or for on-reservation places.

He wondered how it could be considered complete. Miller agreed and welcomed further dialogue.

A number of Task Force representatives echoed Maulson's sentiments, noting that the state's draft report did not take into account tribal subsistence or cultural needs.

Concerns also were raised about including sites within reservations without notifying the tribe. Bad River Representative Matt O'Claire noted that the state's report would include the Kakagon Sloughs but that the WDNR had not talked to the tribe. O'Claire said that the tribe is primarily responsible for protecting the Sloughs and already has an extensive program to do so.

Miller said that the WDNR is not attempting to assert state authority over tribal lands or to undercut tribal off-reservation treaty rights. This should not be a report about authority and jurisdiction, according to Miller, but about mutual state and tribal interests in protecting natural areas against the pressures of overuse and development.

He committed to working with GLIFWC staff to correct deficiencies in the draft report and also agreed to talk with Bad River about its concerns.

The Task Force adopted a motion

recognizing the need to work with the WDNR to protect important natural areas and directed GLIFWC staff to submit the Task Force's comments on the draft legacy report.

According to GLIFWC Policy Analyst James Zorn, who summarized the Task Force's comments in a February 21, 2003 letter to the WDNR, "Although the Voigt Task Force was critical of how the state failed to consult with tribes, it welcomed a shared tribal/state vision for preserving important locations and resources not only for 50 years from now, but for many future generations."

The Voigt Task Force's comments delineated several major oversights in the draft legacy report, most importantly that it was not "developed in partnership with Tribes" and it ignores "their current role in natural resource management as well as [their] subsistence, economic, cultural, medicinal, and spiritual needs."

The Task Force commented on a number of places identified in the WDNR's draft report to illustrate its concerns. For example, the state's report identified the Chippewa Flowage as a legacy place, yet it failed to mention the Flowage's importance to the Lac Courte Oreilles Tribe or the comprehensive joint Chippewa Flowage Management Plan adopted by the tribe, the WDNR and the US Forest Service.

The Task Force placed a high premium on protecting a number of other places identified in the state's report but not necessarily for the same reasons.

As places in need of special pro-

tection, the Task Force highlighted a pipestone quarry in the Blue Hills area of Barron and Rusk Counties, Swamp Creek in the Upper Wolf River watershed near the Sokaogon reservation, and the Powell Marsh near the Lac du Flambeau reservation.

The Task Force's list also included wild rice lakes throughout the ceded territory, especially waters located in national and state forests and a number of specific lakes including the Totogatic Flowage in Bayfield County, Clam Lake in Burnett County, and Spur Lake and the Thoroughfare in Oneida County.

So far, the WDNR has been responsive to the Task Force's concerns. "Its final report will include a new section addressing tribal issues, and maps will be changed to include the ceded territory boundary and to show all Wisconsin's Indian reservations," Zorn said. "The WDNR also has consulted with the Bad River Tribe and worked out agreed upon language for the Kakagon Sloughs area." Zorn notes that many places identified in the report, such as national forests, already receive extensive protection under existing laws and policies. But for other places, the Land Legacy Report is but a first step in a long land use management process that will involve the state, tribes, local governments, and private landowners.

"This report does not deal with how or when identified places will be protected or who will be responsible for protection initiatives," Zorn said. "Those issues will be dealt with in the future as the realities of time, money and politics will allow."

Ma'iingan reclassified as threatened species

Lethal controls authorized

By Charlie Otto Rasmussen, Staff Writer

Washington, DC—Under a federal rule change, tribal, state and federal resource officials may lethally control gray wolves that attack or kill domestic animals in the ceded territory. Tribes in Wisconsin and Michigan may also salvage dead wolves within reservation boundaries without a federal permit.

The U.S. Fish & Wildlife Service (USFWS) has reclassified the gray wolf—or ma'iingan—from endangered to threatened in the western Great Lakes region and across much of the contiguous United States. The threatened status enables authorized government employees to kill or capture problem wolves to reduce conflicts with humans.

Since wolves received federal protection under the Endangered Species Act in 1974, their population has recovered throughout much of the ceded territory as packs from northeast Minnesota recolonized heavily forested areas of Wisconsin and Upper Michigan. Wolves number well over 3,000 animals in the western Great Lakes region, according to Ron Refsnider, USFWS wildlife biologist.

Reduced protection for gray wolves will likely produce mixed reactions in tribal communities. Ma'iingan figures prominently in Ojibwe culture and cosmology. Some tribal members belong to the wolf clan, and ma'iingan is noted as Original Man's first companion on the earth in Ojibwe creation stories.



Harvest opportunities ahead

Upcoming off-reservation, treaty seasons

For specific information and dates regarding any off-reservation treaty seasons, tribal members should contact their reservation conservation department or the on-reservation Great Lakes Indian Fish and Wildlife Commission satellite enforcement office or registration station.

Seasons may vary some from state to state, or from tribe to tribe. However, some of the opportunities for off-reservation hunting, fishing and gathering in April through June 2003 are as follows:

Wisconsin 1837, 1842 Treaty ceded territory

- Spearing
- Netting
- Hook and line fishing
- Small game hunting, seasons vary by species
- Spring turkey season
- Maple sap gathering

Minnesota 1837 Treaty ceded territory

- Spearing
- Netting
- Hook and line fishing
- Small game hunting, seasons vary by species
- Spring turkey season
- Maple sap gathering

Michigan 1836, 1842 Treaty ceded territory

- Spearing
- Netting
- Hook and line fishing
- Small game hunting, seasons vary by species
- Maple sap gathering

Treaty commercial fishing in Lake Superior, Michigan and Wisconsin waters
(Consult with tribal codes for specific quotas, units and dates.)

Transport of eagle items within North America

Background

The U.S. Bald and Golden Eagle Protection Act has long prohibited anyone from entering or leaving the United States with eagles, eagle parts, or eagle feathers. In 1999, the U.S. Fish and Wildlife Service (FWS) introduced eagle transport permits to accommodate enrolled members of U.S. federally recognized tribes who travel internationally with eagle items for religious use. Special procedures allowing U.S. tribal members to take such items into Canada and Mexico without transport permits were introduced in 2000.

Existing FWS regulations and enforcement policies did not allow Indian people from Canada and Mexico to bring eagle items into or out of the United States. Many of these individuals, however, routinely travel to the United States to participate in religious and cultural ceremonies involving the use of eagle items.

The U.S. Fish and Wildlife Service has worked successfully with the Canadian Wildlife Service and other authorities from Canada to resolve this problem. The FWS continues to work with the government of Mexico to find a way to accommodate Indian people who visit the United States from that country.

Action

The U.S. Fish and Wildlife Service is implementing a new policy that will allow Indian people from Canada to bring personally owned, legally possessed eagle items into the United States for religious and cultural use. Existing FWS policies that allow U.S. tribal members to take lawfully acquired eagle items to Canada or Mexico without permits remain in effect.

Transport of eagle items by Indian people from Canada

As of February 1, 2003, Indian people from Canada who are recognized by the Canadian Government under that country's Indian Act may legally travel to and from the United States with their personally owned eagle parts and eagle feathers for religious and cultural use.

When visiting the United States with eagle items, these individuals must:

- ◆ Carry and present a "Certificate of Indian Status" card issued by the Federal Government of Canada.
- ◆ Declare all eagle items to the U.S. Fish and Wildlife Service or U.S. Customs Service by filing an FWS Form 3-177 (Declaration for Importation or Exportation of Fish or Wildlife). A declaration must be filed when entering or leaving the United States at border crossings and airports.
- ◆ Transport only personally owned and lawfully possessed eagle items that will be used for religious and cultural practices.
- ◆ Enter and leave the United States with the same eagle items.

Transport of eagle items by U.S. Native Americans traveling to Canada and Mexico

Under a U.S. policy implemented in 2000, Indian people living in the United States may travel to Canada and Mexico with personally owned, legally possessed eagle items. While these individuals do not need to obtain an eagle transport permit from the Fish and Wildlife Service, they must meet the following requirements:

- ◆ Be an enrolled member of an Indian tribe recognized by the U.S. government under 25 U.S.C. 479a-1.
- ◆ Declare all eagle items to the U.S. Fish and Wildlife Service or U.S. Customs Service by filing an FWS Form 3-177 (Declaration for Importation or Exportation of Fish or Wildlife). A declaration must be filed when entering or leaving the United States at border crossings and U.S. airports.
- ◆ Transport only personally owned and lawfully possessed eagle items that will be used for religious and cultural practices.
- ◆ Leave and return to the United States with the same eagle items.

U.S. tribal members who travel to Mexico with eagle items should be aware that Mexican law officially requires permits for all wildlife items entering or leaving that country.

U.S. tribal members who want to travel to countries other than Canada and Mexico with eagle items for religious use must obtain an eagle transport permit from the FWS. See our public bulletin on Native American Travel Overseas with Eagle Items.

For more information contact the U.S. Fish & Wildlife Service Office of Law Enforcement (703) 358-1949; (703) 358-2271 (fax); or visit their website at: www.le.fws.gov.



Two key feather cases are bounced back to lower court

By Jeff Hinkle
American Indian Report

A recent decision by the 10th Circuit Court of Appeals may force federal authorities to rethink their policy regarding Indians and eagle feathers.

Federal law mandates that only enrolled tribal members may possess bald and golden eagle feathers for ceremonial reasons, but federal judges have announced three verdicts that could ultimately ease those restrictions.

Two of the verdicts involve non-Indian Utah men who say they possessed eagle feathers as part of their long-held religious beliefs.

In separate incidents, Raymond Hardman and Samuel Wilgus Jr.—both of whom say they practice traditional Indian forms of worship—were each convicted of illegally possessing feathers. In 1996 a tribal police officer on the Uintah and Ouray Reservation seized a medicine bundle belonging to Hardman that included eagle feathers.

Two years later a Utah state trooper confiscated a box of feathers that belonged to Wilgus. Both men claimed their feathers had religious significance, but because neither was Indian they were each found guilty of violating federal law.

But in August the 10th Circuit rejected those earlier verdicts and sent the two cases back to the U.S. District Court in Salt Lake City. The appellate judges told prosecutors that they were unsatisfied with the federal government's argument. Now it is up to the government to prove that its feather policy is the best way to protect eagles and religious rights while stepping as lightly as possible on the U.S. Constitution.

The policy even has some legal scholars scratching their heads.

"It's very complicated," says Hardman's attorney, Cindy Barton-Coombs. "I told one of the 10th Circuit judges the more I learn about this law, the less I understand it. He said, 'I know what you mean.'"

And the judge is not the only one puzzled by the regulation. Barton-Coombs says when she put the Ute police officer who arrested Hardman on the stand, she asked if he possessed eagle feathers. He admitted he did. When she asked whether he had a permit for the feathers, the cop told her that he did not need a permit because he is an Indian—a common misperception.

The law—which strives to perform the highwire act of guarding endangered birds and preserving religious rights—states that American Indians

can possess feathers, but only after they perform a bureaucratic two-step. First, lengthy documentation and verification is required. Then applicants are put on a wait list for feathers, a requirement that can last three years. It is a process that leaves many Indians complaining.

"The requirements are odd," says Barton-Coombs. "You must provide proof that you are enrolled in a federally recognized tribe. You must also show a certificate from a religious leader saying that you intend to use the feathers for religious reasons. And you have to sign a form saying the feathers are non-transferable."

One of those requirements unraveled into a legal Catch 22 in August 2002 when it was scrutinized by the 10th Circuit judges as they considered a third eagle case that had come before them.

The case involved the 1996 arrest of Joseluis Sanenz, a New Mexico resident and descendent of the Chiricahua Apaches—a tribe the federal government no longer recognizes. The lower court ruled that Sanenz was an Indian and therefore entitled to feathers, but federal authorities challenged that verdict, saying his non-recognized status disqualified him from possessing the eagle remains. But last summer the ap-

pellate judges sided with Sanenz and upheld the earlier finding.

"The Sanenz decision showed there are problems with the law," says Barton-Coombs. "He is an Indian, but he is not a member of a federally recognized tribe and the law states he has to be federally recognized. But judges said his Indian status entitled him to the feathers."

Now it is up to federal prosecutors to fine-tune their legal arguments as they prepare for their upcoming cases for Hardman and Wilgus. They must prove that the federal policy regarding eagle feathers is in everyone's best interest—the birds', the Indians', and the Constitution. There is no word yet on when the new hearings will occur.

Not all Indians are thrilled with the news. Although many complain that the current procedure is too slow, they also worry that loosening the restrictions may make things worse. A three-year wait list may grow if non-Indians are allowed to apply.

"I want the eagle protected as much as anyone," Barton-Coombs said. "But requiring someone to have a piece of paper so that they can practice their religion—that's not what America is about."

(Reprinted with permission from *American Indian Report*, October 2002.)



Cold-water rescue training



GLIFWC's enforcement officers walk out on Lake Superior as part of their annual ice rescue or cold water rescue training. The training simulates an in-water rescue situation. (Photo by Sue Erickson)



A cold-water rescue nearly complete. Taking turns being the victim and the rescuer, each GLIFWC officer goes through the entire rescue procedure. Rescue gear, purchased with a 2001 Community Oriented Policing Services (COPS) grant, U.S. Department of Justice, keeps the crew warm despite the icy temperatures. The cold water rescue training is taught by John Mulroy and Mike Soulier, GLIFWC conservation officers both certified as cold-water rescue instructors. (Photo by Sue Erickson)



Getting acquainted with new laptop computers, Enforcement Chief Gerald White and GLIFWC District Supervisors Ken Rusk, Tim Tilson and Vern Stone, get some tips on their operation from Lee Cloud, GLIFWC's network administrator. A 2002 Community Oriented Policing Services (COPS) grant from the U.S. Department of Justice funded the new equipment, which will help alleviate paperwork. Reports and other documents from satellite offices located on GLIFWC member reservations will be electronically filed with GLIFWC's main office on the Bad River reservation. (Photo by Sue Erickson)

GLIFWC wardens complete re-certification training at Fort McCoy

Odanah, Wis.—Nine Great Lakes Indian Fish & Wildlife Commission wardens attended a twenty-four hour re-certification training at the Wisconsin State Patrol Academy at Fort McCoy last February. All were wardens from GLIFWC's Wisconsin satellite offices.

According to Central District Supervisor Vern Stone, Bad River, the training had dual purposes. For one, it satisfied the 24 hour in-service requirement of the Wisconsin Department of Justice's Training and Standards Board, and it also met the Wisconsin Department of Natural Resource's requirements for cross-deputization.

Some GLIFWC wardens stationed in Wisconsin are cross-deputized with

the state, and others are pursuing cross-deputization, Stone says.

The training was geared towards deputy wardens. One session provided instruction in search warrants, subpoenas and legal updates. Another discussed self-protection from blood born pathogens (BBPs). Officers can be exposed to BBPs at the scene of accidents, Stone says, and it is important to protect yourself from communicable disease carried in the blood or saliva. One suggested prevention is a Hepatitis B vaccine.

The session also included firearms training with both pistol and shotgun and review of Defense Arms & Arrest Tactics (DAAT). GLIFWC wardens attend this training annually.

Tribal registration stations

Tribes	Registration Clerk	Address	Phone	Fax	Office Hours
Red Cliff	Vicky Leask Brendon Deragon	Route 1, Box 101 Bayfield, WI 54814	(715)779-5182	(715)779-5152	10:00 a.m.-8:00 p.m. everyday
St. Croix	Ardie Stream	P.O. Box 287 Hertel, WI 54845	(715)866-8126	(715)866-7030	8:00-4:00 p.m. everyday
Lac Courte Oreilles	Pauline LaRonge	LCO Conservation Dept. 13394 W. Trepania Road Building #1 Hayward, WI 54843	(715)865-2329	(715)865-3516	8:00 a.m.-4:00 p.m. Monday-Friday
Lac Courte Oreilles	Audrey Adams	2020 Bloomington Ave. S. Minneapolis, MN 55404	(612)813-1610	No Fax	8:00 a.m.-5:00 p.m. Monday-Friday
Bad River	Maggie Kolodziejski Milton Barbano	Route 2, Box 355 Ashland, WI 54806	(715)682-7155	No Fax	8:00 a.m.-8:00 p.m. Monday-Friday 8:00 a.m.-4:00 p.m. Saturday
Lac du Flambeau	Gerry Mann	P.O. Box 67 Lac du Flambeau, WI 54538	(715)588-9615 or (715)588-3303	(715)588-3207	7:00 a.m.-6:00 p.m. Monday-Friday 10:00a.m.-2:00 p.m. Saturday & Sunday
Mole Lake	Marcy McGeshick	Route 1, Box 625 Crandon, WI 54520	(715)478-7614	(715)478-5695	8:30 a.m.-5:00 p.m. Monday-Friday 8:00 a.m.-1:00 p.m. weekends & holidays
Mille Lacs	Maxine Sam	Mille Lacs Govt. Center 43408 Oodena Drive Onamia, MN 56359	(320)532-7498	(320)532-4209	8:00 a.m.-5:00 p.m. Monday-Friday Possibly weekends
Mille Lacs	Monica Dominick District 2	East Lake Comm. Center RR 2, Box 58 McGregor, MN 55760	(218)768-3311	(218)768-3903	8:00 a.m.-4:30 p.m. Monday-Friday
Mille Lacs	Gladys Bedausky District 3	Lake Lena Comm. Center RR 2, Box 233 Sandstone, MN 55072	(320)384-6240	(320)384-7353	8:00 a.m.-4:30 p.m. Monday-Friday
Mille lacs	Pat Clark Urban	Urban Office 1413 E. Franklin Avenue Room 7C Minneapolis, MN 55404	(612)872-1424	(612)872-1257	8:00 a.m.-2:30 p.m. Monday-Friday
Lac Vieux Desert	Joyce Hazen	Box 473 Watersmeet, MI 49969	(906)358-0244	(906)358-4315 Warden Fax	9:00 a.m.-5:00 p.m. Monday-Friday (out of residence)

Enforcement bolsters staff numbers to monitor spring spearing and netting

Odanah, Wis.—GLIFWC's Enforcement Division's busiest season is fast approaching. The off-reservation, treaty spring spearing and netting season opens with ice-out on lakes scattered throughout the ceded territories, and each open landing requires the presence of GLIFWC enforcement staff.

In Wisconsin alone, thirty-five to forty landings may be open on one night. On Mille Lacs Lake in Minnesota, there are four landings often open nightly, depending on weather. Landings on other Minnesota inland lakes may also be open for spearing.

In order to properly staff all open landings during the season, the Enforcement Division hires forty to fifty temporary staff to assist full-time wardens in monitoring the spring fishing season.

Many temporary wardens have assisted GLIFWC in previous seasons, so are familiar with the job's expectations and responsibilities.

Meetings will be held March 26 in Minnesota and March 27 in Wisconsin to orient temporary enforcement staff hired to help during the hectic spring season.

Cooperative Mercury Sampling of Surface Waters Near the Site of the Proposed Crandon Mine

John Coleman, Great Lakes Indian Fish and Wildlife Commission, John DeWild and David P. Krabbenhoft, U.S. Geological Survey-Water Resources Division

ABSTRACT

As part of a monitoring program in the vicinity of the proposed Crandon Mine in Forest County, Wisconsin, we developed a cooperative sampling project to assess water quality of small local streams. Water quality is important to local Indian tribes because of direct use of the waters and the wild rice and other aquatic resources that occur in the watershed. Results from 1999 water quality monitoring using bryophytes in Swamp Creek suggested that there may be variation among tributaries in the input of metals to Swamp Creek. To further investigate the observed metal levels, in 2001 and 2002 the USGS and Great Lakes Indian Fish and Wildlife Commission sampled water of tributaries in the Swamp Creek watershed and adjacent Rolling Stone Lake watershed for total and methyl mercury. Tributaries flow from lakes, groundwater fed wetlands and perched wetlands in the watershed. Results of testing show large variation in levels of total and methyl mercury among tributaries and among sampling dates. However, consistent spatial patterns of mercury concentration are discernable. Waters discharging from large wetlands had the highest levels of total mercury and waters primarily from groundwater discharges had the lowest total mercury. In some cases, sites that had relatively high total mercury had relatively low methyl mercury. Total mercury appeared to be associated with waters of lower pH.

INTRODUCTION

In order to predict the impacts of a large industrial project such as the proposed zinc and copper deep mine south of Crandon in Forest County, Wisconsin extensive background information is needed. During the permitting process the mining permit applicant has collected a wide variety of data but in some areas the data are inadequate to characterize this complex site. Of particular concern to the tribes in the local area has been the effects that a deep mine could have on water quantity and quality. As part of a broader environmental sampling program, beginning in the mid-1990s, the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) and other tribal resource agencies started collecting and analyzing water and aquatic biota samples from the watersheds near the proposed mine (Fig. 1). Analysis by tribes of samples collected in the early and mid-1990s by the permit applicant, the WDNR and the tribes suggested that the water quality in the watershed is very good and that resident biota may be sensitive to changes in water quality. Because of the variety of jurisdictions in the area, the only effective way to collect water quality data has been cooperation and data sharing between agencies and tribes.

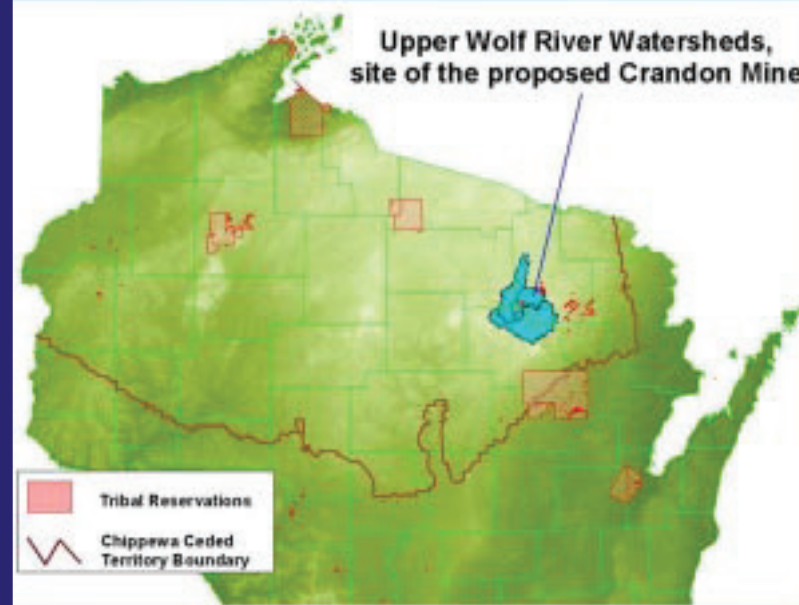


Figure 1. Chippewa ceded territories in northern Wisconsin. Tribal reservations are in light red.

METHODS

In 1999, in cooperation with GLIFWC, the U.S. Geological Survey Midcontinent Ecological Science Center and Colorado State University placed lab reared bryophytes at 6 locations in the stream channel of Swamp Creek. These bryophytes were sampled at approximately 30 day intervals for one month and tested for metals accumulation. Analysis of these data indicated that accumulation of metals varied between sites and that tributaries to Swamp Creek may contribute different amounts of metals to the main channel. In order to determine the source of metals in Swamp Creek, GLIFWC established a cooperative project with the USGS Water Resources Division to sample the water of tributaries to Swamp Creek and Rolling Stone Lake. Sampling was scheduled to coincide with sampling by the Wisconsin Department of Natural Resources (WDNR) for basic water parameters and other metals and to coincide with Mole Lake Sokaogon Chippewa Community sampling of water in the main channel for metals.



Bryophyte sampling indicated that the water quality in the upper and lower end of the Swamp Creek watershed may be higher than that in the middle of the creek (Fig. 2). Based in part on those results, GLIFWC decided to expand on clean technique water sampling done previously by the WDNR and USGS. Twenty two sites were selected for water sampling based on their contribution to flow in the Swamp Creek and Rolling Stone Lake watersheds. Focus was on discharges from surface-water fed and groundwater fed wetlands because of suspicion that wetlands might be a significant source of metals, particularly mercury. The cooperative grab sampling by GLIFWC and USGS focused on total and methyl mercury while simultaneous sampling by the WDNR focused on general water parameters and other metals. In 2001 and 2002 grab samples were collected at 22 locations in small tributaries in the Swamp Creek and Pickerel Creek watersheds twice yearly (Fig. 3). Clean sampling technique was used so that the low levels of constituents in the creeks could be detected. Sample dates were chosen to correspond with significant hydrologic events, such as spring snow melt, intense storms, dry periods or post leaf-fall runoff so as to develop a data set covering the range of expected conditions.

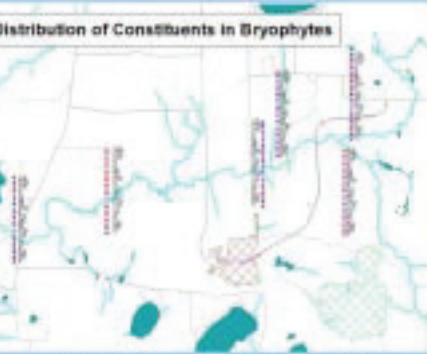


Figure 2. Relative concentrations of elements in bryophytes. Blue = low concentration, red = high concentrations. Comparisons are between sites.

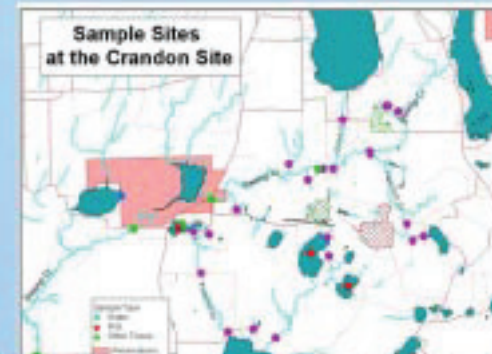


Figure 3. Location of water and biota sampling conducted in cooperation with the USGS, the WDNR and the Mole Lake Sokaogon Chippewa

RESULTS

Preliminary analysis has begun on the samples collected in 2001 and 2002. Early scoping analysis of the mercury and copper data is presented here. In 2001, grab samples were collected from 22 sites in the Swamp Creek and Rolling Stone Lake watersheds. May sampling found water in all the tributaries that had been targeted for sampling. Late August sampling found water at only 16 of the sites. In 2002, adequate water was found at all sample sites. Spring samples during both years had higher levels of total mercury than did late summer or fall samples. Spring sample concentrations of total Hg had a mean of 7.9 ng/L and methyl Hg had a mean of 0.37 ng/L. Late summer and fall sample concentrations of total Hg had a mean of 2.5 ng/L and methyl Hg had a mean of 0.31 ng/L (Table 1).

In spring, methyl mercury made up 3 to 9% of the total mercury in the samples. In the late summer and fall methyl mercury made up 11 to 19% of the total mercury in the samples. The spring samplings were during periods of high flow while the late summer and fall sampling was during low to moderate flows.

The distribution of total and methyl mercury within the watersheds shows a moderate number of tributaries with high total mercury (Fig. 4). These are generally small tributaries that originate in peat wetlands. Those same locations that showed low total mercury were groundwater fed springs and outlets from groundwater fed lakes.

pH of the samples in 2001 ranged from just below 4 to a little over 8 with the lower pHs in waters discharging from upland precipitation fed wetlands and lakes. Means of the two copper samples collected in 2001 at the 22 sites ranged from the level of detection (0.058 ug/L) to 1.59 ug/L. Two of the sample sites with higher copper readings were also sites with low pH but one high copper reading was anomalous (Fig. 4). This very high copper concentration reading was in Outlet Creek which discharges from Lake Metonga where copper based aquatic plant control may be or have been historically practiced.

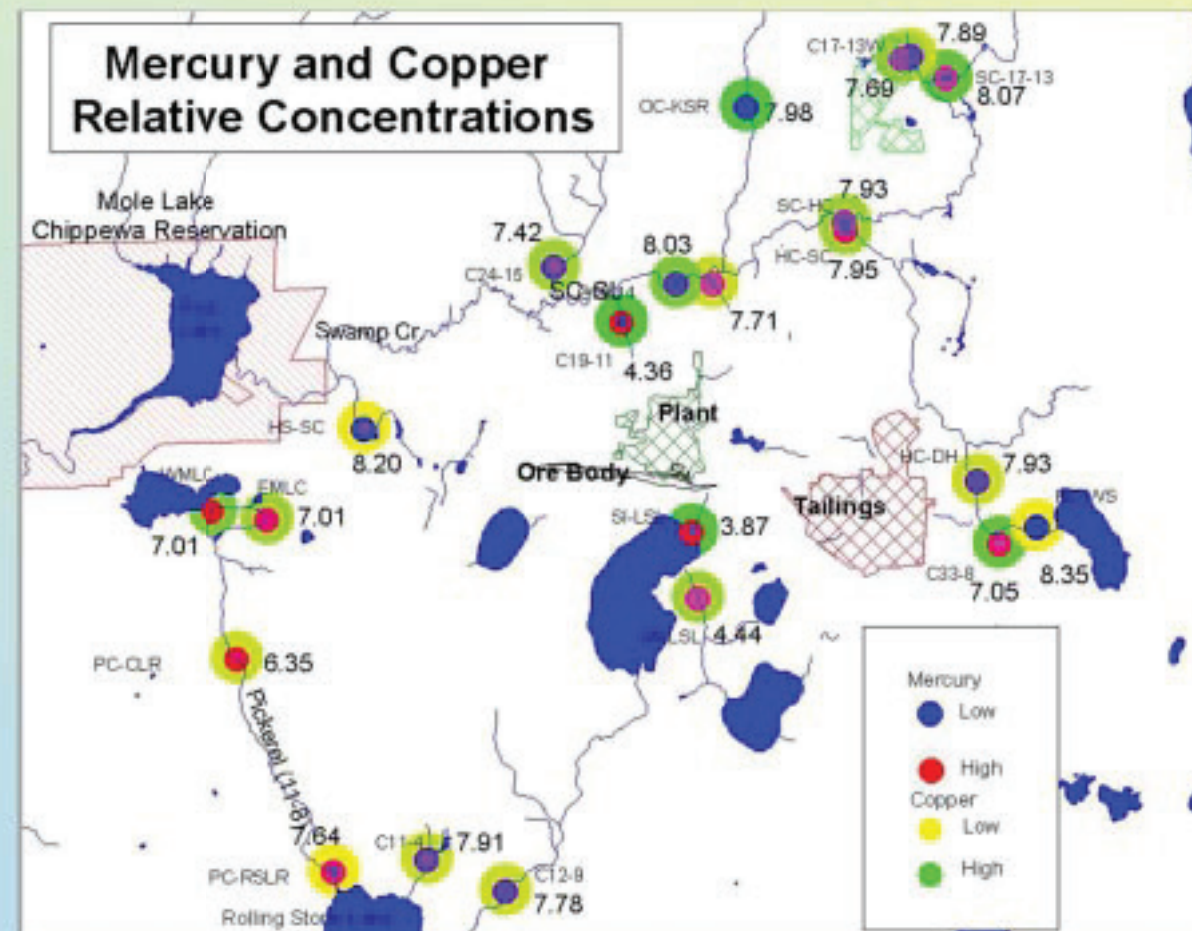


Figure 4. Relative concentration of Copper, and Total and Methyl Mercury among sample sites. Based on means of samples taken twice yearly for two years.

Mean Concentration (ng/L) of Mercury at Sample Sites			
Year	Spring		No. Samples
	Total	Methyl	
2001	5.05	0.44	22
2002	10.78	0.30	21
Summer-Fall			
2001	1.31	0.21	16
2002	3.74	0.41	22

Table 1. Mean concentrations of Total and Methyl Mercury by year and season.

Mean Metal Levels in Creek Water

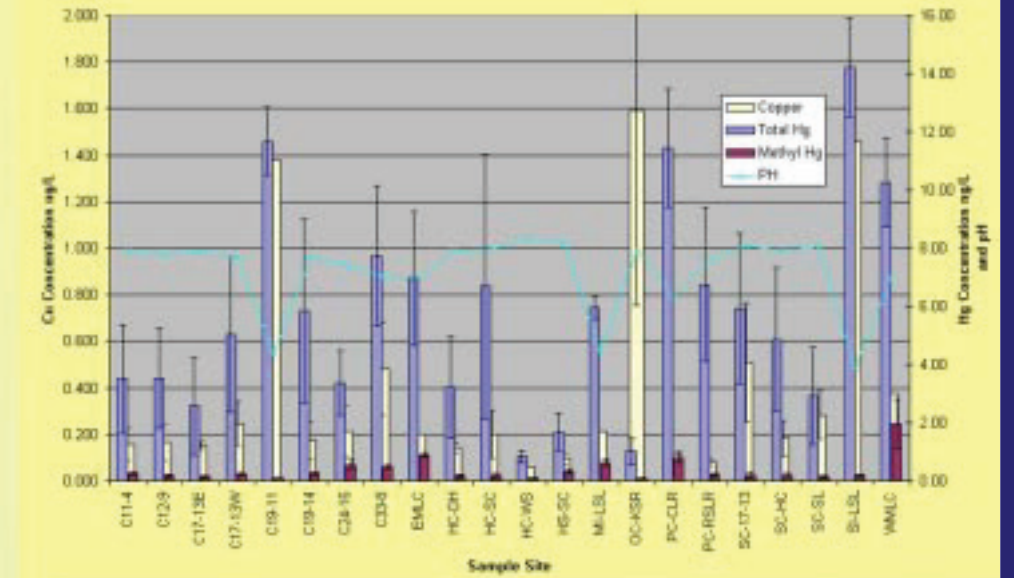


Figure 5. Concentrations of Copper and Mercury at sample sites in the Swamp Creek and Rolling Stone Lake watersheds. Values are means of the samples collected in two years. pH readings are from the spring of 2001.

CONCLUSION

Analysis of the data is still in its preliminary stages. In the next six months the mercury data will be compiled with other water quality data collected simultaneously by the WDNR and by the Mole Lake Sokaogon Chippewa Community. The spatial and temporal distribution of metals will be investigated for correlations with other water parameters and with source characteristics. These data sets will permit a more thorough characterization of the flowing waters near the proposed mine and possibly the determination of the sources of metals in the main stream channels. The extensive surface water quality and quantity data that are being developed during this mine project review and the extensive characterization of groundwater flow and chemistry that has been conducted provides a ideal background for basic research on surface and ground water chemical interactions.



Chemical and biological data sharing among governments and agencies is allowing development of a more complete picture of the aquatic chemistry near the proposed mine.

ACKNOWLEDGEMENTS

This research was funded by a grant from the U.S. Environmental Protection Agency. The USEPA also provided advice and guidance in development of sampling procedures. Chris Carlson of the Wisconsin Department of Natural Resources provided advice and logistical support to the USGS for sampling and processing of samples. Logistical support for sampling was also supplied by the Mole Lake Sokaogon Chippewa Community. Data sharing by the Mole Lake Sokaogon Chippewa Community and the Wisconsin Department of Natural Resources has allowed integration of water quality and quantity data from a variety of sources.

The above poster was presented by Dr. John Coleman, GLIFWC environmental section leader, at the 27th annual meeting of the American Water Resources Association—Wisconsin Section at Lac du Flambeau in February. Also presenting a poster at the conference was GLIFWC's Esteban Chiriboga, GIS mining assistant, whose poster illustrated the development of a tribal fish consumption advisory based on inter-agency data sharing.

Anishinaabe Wi Yung conference provides four-day foray into Anishinaabe experience

By Barbara Sanchez
Northland College Intern

Carlton, Minn.—Anishinaabe Wi Yung means “We are Anishinaabe/We are the first people.” The 5th Annual Anishinaabe Wi Yung Conference offered participants an opportunity to immerse themselves in being Anishinaabe by offering a broad array of Anishinaabe experiences. Held at Black Bear Casino and Hotel, Carlton, Minnesota, from March 5–8, participants left more knowledgeable and inspired.

Credit goes to Conference Coordinator Laurie Harper, who was assisted by Larry “Amik” Smallwood, Hazel Hindsley, Leslie Harper, and Lee Staples.

The event was comprised of hands-on activities, discussion, language, and informational/educational workshops. Some workshop topics included drum and birch bark basket making, history of legends and the importance of the Ojibwe language, and Ojibwe language curriculums for teachers. Other workshops revolved around the preservation and celebration of Ojibwe culture.

Jim St. Arnold, Administration for Native Americans (ANA) program director, Great Lakes Indian Fish & Wildlife Commission (GLIFWC) found Amik’s (Larry Smallwood) presentation on Waynaboozhoo particularly delightful as did GLIFWC’s Sharon Nelis.

“Amik’s Waynaboozhoo stories were terrific and humorous. And I could

pick up the enough words to follow the meaning when he was speaking Ojibwe,” Nelis commented. “The conference was great because you could hear people chattering in Ojibwe all around you.”

Exposure to continuous use of Ojibwemowin (Ojibwe language) was central to the event, designed to be an immersion experience.

During lunch breaks, speakers entertained as well as enriched the minds of the conference participants, including teachers, students, elders, parents, and youth.

Some of the attendees took advantage of this time to meet with friends and relatives who had been “hibernating” during winter and were out and about for this particular event. The tightening of community ties was definitely a plus for everyone, as well as one of the intentions of the language conference.

According to Laurie Harper, part of the conference’s mission was to make “everyone aware that they have resources in the way of first speakers and language teachers.” These are the people to whom they can address their questions. She also believes the conference helps assure language teachers that attend the conference that there are people interested in learning the Ojibwe language.

While parents or teachers attended workshops, students of the Ojibwe language were given the opportunity to prepare for the Anishinaabe Quiz Bowl Competition that was held on Saturday afternoon.



Elders were valuable resources during the Anishinaabe Wi Yung Conference at the Black Bear Casino & Hotel, Cloquet, Minnesota on March 5-8. The conference immersed participants in language and culture. (Photo by Barbara Sanchez)

The first round was a competition for a small cash prize. Because the competition took less time than expected, it was opened up to the audience. Students learning Ojibwemowin at the University of Minnesota, Fond du Lac Community College and the UW-Stevens Point impressed the audience with how much they actually knew. Contestants were given thirty seconds to translate a given sentence or phrase, and the elders in the audience served as judges. Last year’s competition focused on terms, this year’s on sentence structure.

Although the conference has established itself as an annual event, Harper says that this is only a step in the right direction towards the finish line. At the end of the race, she hopes to have created a model immersion school where

only Ojibwemowin is spoken, and teachers are educated in all subjects. In order to get there, a language curriculum needs to be written, teachers trained, students found, and funding for parents and the program made available. That’s a good list of challenges ahead!

In addition to the support of the organizers, speakers and presenters, there was much appreciated patronage from the Leech Lake Education Division, the Mille Lacs Band of Ojibwe, the Mille Lacs Corporate Commission, and the St. Croix Tribal Council.

If you are interested in contributing to the success of the Anishinaabe Wi Yung Conferences yet to come, or are simply interested in more information on the event itself, contact Laurie Harper at P.O. Box 1420; Cass Lake, Minnesota 56633.



Michelle Willis, Red Cliff Ojibwe residing at the Bay Mills Indian Community, Brimley, Michigan (right) get hands-on experience constructing a birch bark (wiigwaas) basket (mukak) during a workshop at the Anishinaabe Wi Yung Conference. (Photo by Barbara Sanchez)

Ojibwe phrases

Awenen dinowa giigoonh wa’aw.—What kind of fish is this?

Maaskinoozhe wa’aw.—This is a muskie.

Awenen dinowa giigoonh gaa-debibinad.—What kind of fish did you catch?

Ogaa (ingii-debibinaa).—(I caught) a walleye.

(Reprinted from *An Introduction to Ojibwe*, by John D. Nichols and Edward Barber.)

“Who is Waynabozho?”

Waynabozho is a Manido, the son of the “Creator.” This is why we always offer tobacco to him in our prayers.

He was sent here, physically, on earth to live with the Ojibwe Anishinababay, to live as an anishinababay man. A man with spiritual powers. He lived on earth from infancy to adult hood. He was raised by his grandmother, as many of our older Ojibwe people are today.

Before the big flood, Waynabozho roamed the Old World showing the anishinababay people how to live, showing the people by example of himself.

Waynabozho was honest, dishonest, foolish, sensible, good, bad, smart, stupid. He was all the things a normal human being could possibly be. After all he was and is a manido. This is why he was able to do these spiritual and physical changes.

After the great flood he created the New World and this is where he told anishinababay people the prophecies and the teachings. He assigned plants and animals various duties as to how they could and should help anishinababay people to survive.

The stories told about Waynabozho are for a purpose, to teach the young what would happen if they did something or acted and behaved in certain ways. Everything we do has consequences.

The stories are called “legends.” I don’t like this word. I think we should use the word “teachings,” after all this is the purpose of “Who is Waynabozho?”

(Editor’s note: This is what Amik (Larry Smallwood) told his young son when asked, “Who is Waynabozho?” It is reprinted with Amik’s permission.)

Do Indians still live in tepees?

Symposium addresses Native American cultural issues

By Sue Erickson, Staff Writer

Lac Courte Oreilles, Wis.—"Do Indians still live tepees?" This is but one of many questions or comments directed to the Public Information Office at the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) since its inception in 1984 that belies a certain public ignorance about contemporary Indian life in our country. Or consider—"The Ojibwe do not exist anymore because the Chippewa ate them."—a fact uttered by a middle school student.

Confronted by such lack of knowledge and understanding, the need for improved public education on the real facts of American Indian history and contemporary Indian life and issues remains apparent and pressing.

It was encouraging to see over 200 participants from all over Wisconsin attend the Native American Cultural Issues Symposium at the Lac Courte Oreilles Ojibwe Community College (LCOOCC) on February 28th.

Co-sponsored by the UW-Superior Continuing Education program and UW-Superior's Center for First Nations Studies and hosted by LCOOCC, the symposium reached out to educators and social service agencies that routinely interact with tribes. The object was to educate, create a cultural sensitivity, break down stereotypes and promote dialogue by sharing Native American history and real life stories.

GLIFWC Executive Administrator James Schlender began the daylong session with a keynote presentation that highlighted the U.S. policies towards Indian nations throughout history. His account revealed many facts not found in popular US history textbooks and underscored the various federal policies over the centuries that sought by one means or another to destroy Indian populations and culture, whether by conquest, removal, assimilation, breaking treaties or termination. He pointed to a trail of policies adopted by state and federal governments that have been deleterious to Indian people and that lead right into contemporary life and current treaty struggles.

The symposium continued to break into topical workgroups on cultural, educational issues and family issues and concluded with life stories from Indian people, which included a dynamic presentation from successful Indian entrepreneur "Famous Dave" Anderson.

Act 31

The implementation of Wisconsin's Act 31 (legislation passed in the early 1990s requiring public schools in Wisconsin to teach Native American history, culture and treaty rights) was a subject of concern for Gary Johnson, director, First Nations Studies, UW-Superior. While Act 31 is a positive impetus for improving public understanding of Indian history, sovereignty and culture, Johnson is concerned about how effectively it is being delivered throughout the education system.

To provide assistance to educators UW-Superior's First Nation Studies Center has assembled a working group called the Act 31 Coalition to provide resources and training for educators. The Coalition's web address is www2.uwsuper.edu/fns/act%2031.htm.

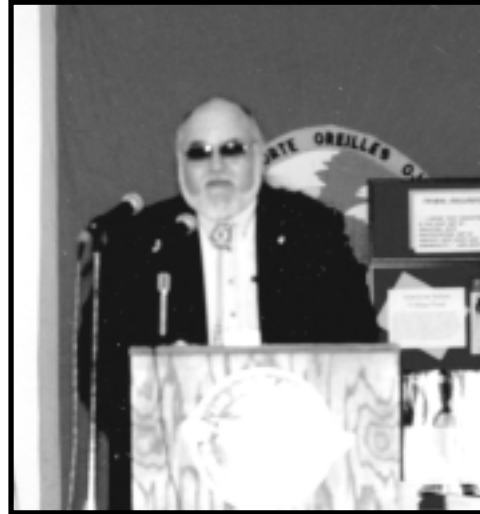
The Coalition has a survey on the website attempting to elicit information from educators on how they implement Act 31 in the classroom and what resources could be helpful. However, Johnson has had limited success getting responses to the survey.

Johnson believes Act 31's effectiveness may be impaired because many teachers have grown up and been trained with limited information on Indian issues.

Johnson feels a conference focusing just on Act 31 should probably be the next step towards assisting teachers obtain the resources and information necessary to adequately present Indian curriculum. UW-Superior currently offers a summer class in cultural awareness that provides resources for teachers to incorporate into their curriculum.



Issues in education came up for discussion during a break-out session of the Native American Cultural Issues Symposium at the Lac Courte Oreilles Ojibwe Community College this winter. Panelists (from the left) Denise Sweet, UW-Green Bay; Sharon Cloud, UW-Stevens Point; Odawa White, UW-Eau Claire, and facilitator Gary Johnson, UW-Superior, each shared some of their unique experiences and insights. (Photo by Sue Erickson)



James Schlender, GLIFWC executive administrator.

did live in tepees. Their homes were birch bark wiigiwaams in the past, but today they live in houses, dress and work just like everyone else, while also participating in their own unique cultural activities.

A resource produced by the University of Wisconsin Extension Native American Task Force was available at the symposium. A booklet entitled *Native Americans in Wisconsin: A Guide to Understanding History, Culture and Common Ground* by Donna Ganson provides a great synopsis of Wisconsin tribes, their history within the state and a good resource list.

Hopefully, with continued education and improved delivery of Act 31, Wisconsin's children will understand tribal sovereignty and have some appreciation of tribal culture and history.

Hopefully, they will know that the Ojibwe, also known as the Chippewa, are alive and well and never

Needed – A response from teachers

The UW-Superior First Nation Studies program and the Act 31 Coalition needs a response to the following survey to help them assess how to better assist teachers implementing Act 31 in Wisconsin. Please help out by responding to the following survey, which can be found on the web at www2.uwsuper.edu/fns/survey.htm.

1. What is your current method for teaching about American Indian culture, sovereignty and treaty rights? (i.e. units, subject matter, content, length, examples etc.)
2. What would increase the effectiveness of your implementing Act 31 materials? (Audio/visual, print, human resources; teaching strategies/methods; training-cultural knowledge; workshops/classes etc.)
3. Given the proper cultural knowledge and/or resources, what do you think would be the effectiveness of integrating American Indian culture into your current curriculum and learning environment? Would it engage American Indian students into the learning process? Would it affect cultural awareness for the non-American Indian students?

Send to: Gary Johnson, Director, First Nations Studies Center
P.O. Box 2000, Belknap and Catlin Avenues, Superior, WI 54880



HONOR to reside in Twin Cities

The regional office of Honor Our Neighbors Origins and Rights (HONOR) recently moved from the Red Cliff reservation in Wisconsin to the Twin Cities area and hired a part-time staff person, Beth Brownfield, to carry out the program there.

According to Sharon Metz, HONOR treasurer and co-founder, HONOR has noticed that anti-sovereignty groups are particularly active in Minnesota. This is one motivation for the move. "HONOR plans to address that in Minnesota like we did in Wisconsin during the days of protest over spring spearfishing," she says.

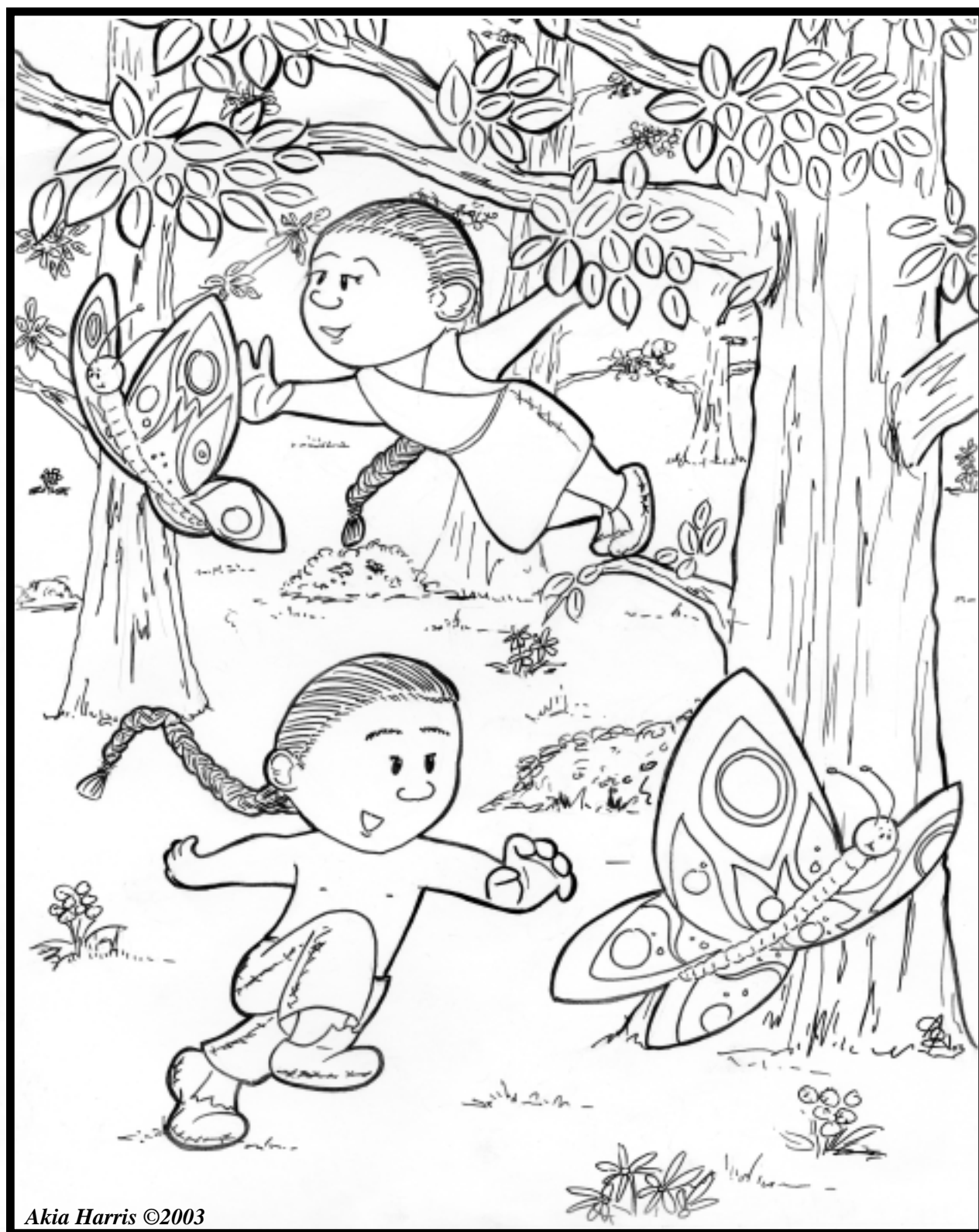
Brownfield brings to HONOR a long history of working with Indian communities, church communities and peace and justice organizations. "We hope to expand our coalition with non-Indian and Indian people and will be providing public education on Indian issues as we have in the past," Metz says.

Historically based in Wisconsin, some HONOR activities continue at Red Cliff where Rose Soulier and Mardi Medawar will continue with the writing and production of the HONOR Digest. Coordination of the Intern Program and administrative and bookkeeping functions also remain at Red Cliff.

HONOR is in the process of securing an office site in the Twin Cities region and hopes to be established in an office shortly. Currently, Brownfield can be contacted at (612) 824-7213. HONOR can also be contacted at (715) 779-9595 in Red Cliff.



color me memengwaag (butterflies)



Akia Harris ©2003



Memengwaag

By Barbara Sanchez
Northland College Intern

A long time ago (mewinzha), Spirit Woman gave birth to twins (niizhoodenyag). The animals (awesiinyag) took care of the babies (biibiiyag).

The dog (animosh) was their guard.
The bear (makwa) kept them warm.
The wolf (ma'iingan) hunted their food.
The doe (onijjaaniw) gave what milk she could.
Bathed by muskrat and beaver
(wazhashk and amik),
they listened to the birds' (bineshiinyag) music.

But the twins didn't walk or run and play
so Nanabush came and saved the day.

Great Spirit (Gichi Manido) told Nanabush to collect sparkling stones along the slopes of a mountain (wajiw). Some stones were purple (miinande), some red (miskwaa), some blue (ozhaawashkwaa), and some yellow (ozaawaa).

Nanabush tossed the stones (asiniig) in the air,
Some dropped down, most stayed up there.
He watched (gii ganawaabandan)
the stones in awe:
they became butterflies (memengwaag)
that's what he saw!

Nanabush led the butterflies back to the twins.
They smiled at the butterflies, but they were too high for them to reach.

The twins were impressed but out of luck
they had to crawl until they walked.
Then finally (gegapii), the twins
could play and run,
Chasing the first butterflies and having fun!

Kiwehzi Macdonald Gitigaan Ogi Ayaan (Old MacDonald Had a Farm)

Submitted by Dana Jackson, Bad River Education Coordinator

kiwehzi Macdonald gitigaan ogii ayaan, ii yay, ii yay, o
gitigaaning od ayaawaa gookoosh, ii yay, ii yay, o
minawaa oink oink omaa, oink oink awidi
omaa oink, awidi oink miziweshkaa oink oink

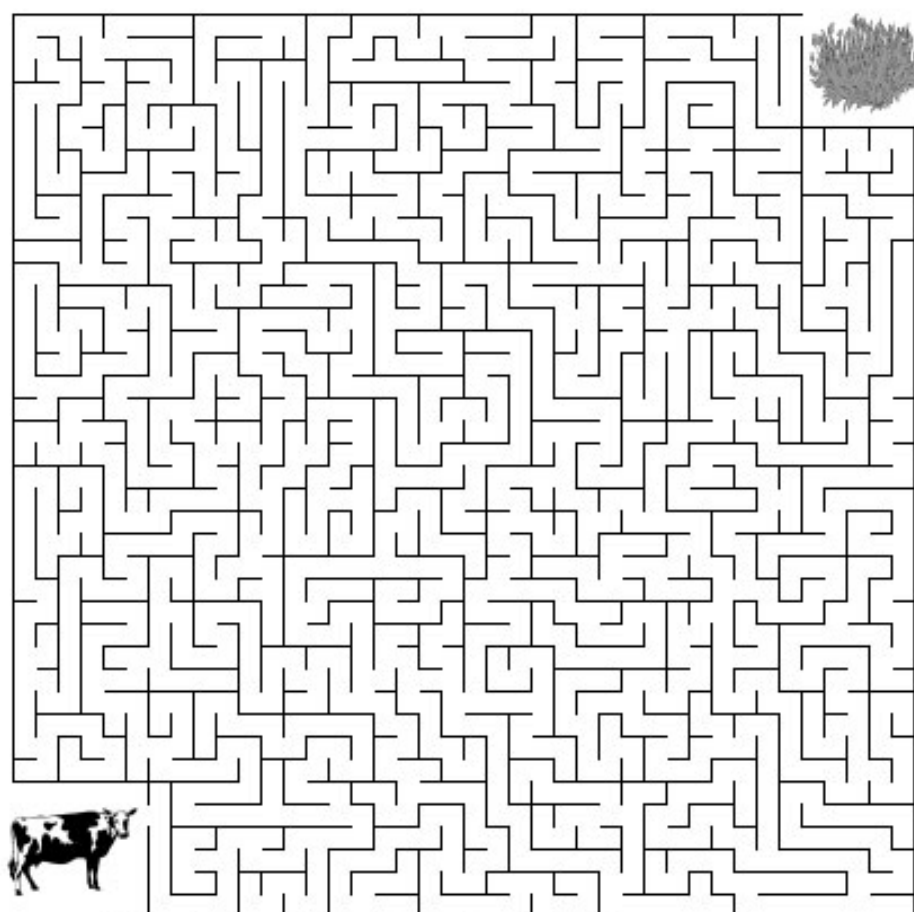
kiwehzi Macdonald gitigaan ogii ayaan, ii yay, ii yay, o
gitigaaning od ayaawaa zhiishiib, ii yay, ii yay, o
minawaa quack quack omaa, quack quack awidi
omaa quack, awidi quack, miziweshkaa quack quack

kiwehzi Macdonald gitigaan ogii ayaan, ii yay, ii yay, o
gitigaaning od ayaawaa baaka'aakwe, ii yay, ii yay, o
minawaa cluck cluck omaa, cluck cluck awidi
omaa cluck, awidi cluck, miziweshkaa cluck cluck

kiwehzi Macdonald gitigaan ogii ayaan, ii yay, ii yay, o
gitigaaning od ayaawaa bizhiiki, ii yay, ii yay, o
minawaa moo moo omaa, moo moo awidi
omaa moo awidi moo, miziweshkaa moo moo

kiwehzi Macdonald gitigaan ogii ayaan, ii yay, ii yay, o
gitigaaning od ayaawaa bebeshigogazhii, ii yay, ii yay, o
minawaa wihihihii omaa, wihihihii awidi
omaa wihihihii, awidi wihihihii, miziweshkaa wihihihii wihihihii

kiwehzi Macdonald gitigaan ogii ayaan, ii yay, ii yay, o



Help Bessy the bizhiiki find her way to the grass.

Waadookodaading: The place where we help each other

Ojibwe immersion school brings language to life

By Sue Erickson, Staff Writer

Hayward, Wis.—Like Alice stepping through a mirror into Wonderland, stepping through the door of Waadookodaading school brings you into another world—a bright, cheery, contemporary Ojibwe world, only Ojibwemowin (Ojibwe language) is spoken here. The walls are alive with illustrations and colorful posters all in Ojibwemowin. Ojibwemowin is scrawled on flip charts as teachers go through their lessons, and the dialogue between student and teacher is in Ojibwemowin. The language is heard and seen everywhere. This is an Ojibwe language immersion school.

Housed in a large room in the Hayward Elementary School, Waadookodaading currently teaches twelve students grades K-3 using Ojibwemowin as the primary language. English is the secondary language taught for about one hour in the day through reading.

The school is reaching back to the Ojibwe language to preserve not only the language, but also the culture, the teachings and the traditions that the language expresses for the future generations of Ojibwe people.

The dedication of the staff to Waadookodaading and the teaching of Ojibwemowin arises from simple, startling facts, according to Jennifer Bunker, Waadookodaading administrator. “On our rez, Lac Courte Oreilles (LCO), only a few people are fluent in the language. This is also true of other reservations, and as elders walk on, the numbers decline even further,” she says

Reminiscent of the old, two-room schoolhouse, several classes operate simultaneously in the large cheery room. Brian McInnes teaches the K-1st grade children in one-half of the room, while Keller Paap instructs the second and third graders on the other side. Waving hands pop up from students in both sections anxious to answer questions. Despite the potential for distraction, the teachers keep their children focused on them and their learning, using a lot of interaction and student participation in the process.

An elder, Rose Tainter, LCO, fluent in the language, and one teacher aid, Sidney Keller, assist the teachers.

The charter school is in its second full academic year. The school was started in 2001 as a pilot program through an Administration for Native Americans (ANA) language grant teaching only kindergarten, according to Bunker. The school was granted a charter by the Hayward Community School Board to operate a K-12, Ojibwe immersion school, and 2002 witnessed the first full academic year for the school serving K-3rd grade.

Waadookodaading teaches a mainstream curriculum, emphasizing the “three Rs” —reading, writing and arithmetic—but it’s all taught in Ojibwemowin. “When the kids are doing math, they’re also learning Ojibwemowin,” Bunker notes.

And therein lies the big challenge for two of the world’s most busy teachers—they must develop curriculum in Ojibwemowin and create their own materials as they teach. There are no ready-made curriculum materials available to buy. The challenge has the teachers at work early in the morning before school starts and into the evening after school closes. They are pioneering in the world of education, developing new avenues to keep Ojibwemowin alive and meaningful in the lives of Ojibwe people.

To date, over a 100 books have been translated into Ojibwe, listening centers have been created at the school, and PowerPoint books developed. The school is actually creating a literate tradition for an oral language.

The school’s goal is to graduate students who are fluent in Ojibwemowin, Bunker says. She points out that research indicates bilingual students actually perform at or above level in English. Other benefits of the bilingual program include fostering a sense of pride in their identity as Ojibwe and opening doors through language to learning culture. “It teaches them the good way of life,” Bunker says.

Waadookodaading does not seek to isolate its students. The kids join other elementary students on the playground and at lunch, so have plenty of opportunities to socialize outside their classroom. The program focuses on young children



Brian McInnes holds the attention of K-1st graders at the Waadookodaading, an Ojibwe immersion school in Hayward, Wisconsin, now in its second full year. (Photo by Sue Erickson)



Using only Ojibwemowin (Ojibwe language), Keller Paap presents a lesson to second and third grade students at Waadookodaading. The teachers not only present lessons, but also create all new curriculum because none exists in Ojibwemowin (Ojibwe language). (Photo by Sue Erickson)

because younger children are very open to learning language, Bunker says. The teachers use lots of movement, gestures and hands-on learning techniques. They also use a lot of repetition to encourage the language to come naturally.

Another important aspect of the school is parental involvement, an aspect Bunker would like to see develop even further. Currently, parents are asked to participate for four hours every month, and the school will be having regular monthly parent meetings. In 2002, the school was proud to have 100% participation in parent-teacher meetings.

The school also uses four immersion camps during the year, like ricing camp in the fall or a sugarbush camp in the spring. These combine hands-on cultural activities with the use of the language.

Dr. Mary Hermes, University of Minnesota professor, has worked with the school since its inception as a grant writer. Waadookodaading relies on grants from federal, private and state foundations, so the challenge of funding is ever present. There is no tuition because it is a public charter school.

Hermes holds a doctorate in education and curriculum instruction, so “wears many hats” as she supports the efforts of the school. The school hopes to include both pre-school and fourth grade next year, and gradually go up the grade levels through the twelfth grade.

Only a few such schools exist to Bunker’s knowledge. The Mohawk’s operate a language immersion school in the United States as do the Hawaiians, and in New Zealand, the Maori also provide the opportunity of a bilingual education.

A six-member Board of Directors, composed of one elder, one community member, two teachers and two parents, administers the school. During their monthly meetings they set policy and direction for the school and provide long-term planning.

The product of vision, energy, talent and stalwart dedication, Waadookodaading is a small but powerful start to helping children go back to their language and carry it with them into the future. Probably the greatest reward for school staff is the student’s motivation and hunger for the language. The children’s enthusiasm continues to fuel plans and commitment for a continuing Ojibwe language immersion program.



Everywhere you look at Waadookodaading the cheerful environment reflects the language. (Photo by Sue Erickson)

Summer harvest opportunities

Introduction

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

In this issue, the harvest guide is devoted to those plants that may be gathered for non-medicinal uses during the upcoming summer months of ode-imini-giizis, time for picking strawberry moon (June); aabita-niibino-giizis, half way through the summer moon (July); and manoominike-giizis, ricing moon (August).

Fruits and Nuts

raw, jams, jellies, pie fillings, breads, pancakes

miskominan—raspberries
 oshkizhaanimuk—dewberries
 odatagaagominag—blackberries
 miinan—blueberries
 ode'iminan—strawberries
 gozigaakominag—juneberries
 bibigweminan—elderberries
 datgaagminan—thimbleberries
 *black haw berries
 ookweminan—black cherries
 asasaweminan—choke cherries
 bawe'iminan—pin cherries
 sewa'kominan—sand cherries
 zhaabominan—currants
 bagwaji bagesaanag—wild plums
 bagaan—hazelnuts

Packing Materials

for berry gathering

waagogan—ferns
 aasaakamigoon—mosses

Grains

casseroles, soups, breads, pancakes

Grains

casseroles, soups, breads, pancakes
 manoomin—wild rice

Roots

roasted, sauteed, steamed, boiled

bagwaji zhigaagawinzhiig—wild leeks
 bagwaji zhigaagananzhiig—wild onions
 apakweshkway ojibikan—cattail roots
 anaakanashk ojibikoon—bulrush roots
 anaakanashk ojibikoon—rush roots
 doodooshaaboojibik ojibikan—dandelion roots
 namepin ojibikan—wild ginger roots



*Bagwaji zhigaagawinzhiig, wild leeks (left). (Photo by Robert W. Freckmann)
 Waasakonek, goldenrod flowers. (Photo by Kenneth J. Sytsma)*

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



Greens

raw, sauteed, steamed, boiled

*watercress leaves
 *pigweed leaves
 *aster leaves
 *beach peas
 anajjiminan—wild peas
 *wild asparagus stems

Tea

namewashkoons aniibiishan—spearmint leaves
 *peppermint leaves
 ozaawaaskined aniibiishan—horsemint leaves
 sasap kwanins aniibiishan—wild bergamont leaves
 miskomin(an) aniibiishan—raspberry leaves
 ode'imin aniibiishan—strawberry leaves
 odatagaagomin aniibiishan—blackberry leaves
 miinan aniibiishan—blueberry 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
 nessibag waabigwaniin—clover flowers
 sasap kwanins waabigwaniin—wild bergamont flowers
 doodooshaaboojibik waabigwaniin—dandelion flowers
 miskominan—raspberries
 ode'iminan—strawberries
 sewa'kominan—sand cherries
 apakwaanaatig miinesan—sumac fruits
 asasaweminan—choke cherries
 mishkomin mitigosan—raspberry stems
 ookwemin nagek—black cherry bark
 asasawemin wategwaan—choke cherry twigs
 wiinzik—yellow birch bud tips
 wiigwaas mitig—white (paper) birch bud tips
 manoomin—wild rice (ground up)
 gagige bag—princess pine
 jjisens ojibikan—ginseng roots
 doodooshaaboojibik ojibikan—dandelion roots
 wiigob ojibikan—basswood roots

Wine

doodooshaaboojibik waabiginiin—dandelion flowers
 mashkiigiminag—cranberries
 bibigweminan—elderberries
 asasaweminan—choke cherries
 zhaabomin—currants

Photos are reprinted with permission from the Wisconsin State Herbarium: University of Wisconsin-Madison.

Wild berries star in summer harvest

Cold juices and drinks

miskominan—raspberries
 odatagaagominag—blackberries
 miinan—blueberries
 ode'iminan—strawberries
 asasaweminan—choke cherries
 bawe'iminan—pin cherries
 mushkigominag—cranberries
 bagwaji bagesaan—wild plums
 bagwaj zhoominan—wild grapes
 zhaabominan—currants
 apaakwaanaatig miinesan—sumac fruits
 ozaawaaskined nibi—honeysuckle flower nectar

Tobacco

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

Perfumes

namewashkoon aniibishan—spearmint leaves
 wiingushk aniibishan—sweet grass leaves

Lipstick

bibigweminan—elderberries (mixed with tallow)

Hair Conditioners

sasap kwanins—wild bergamont
 waasakonek—goldenrod flowers
 mashkodewashk aniibishan—wild sage leaves
 giizhik aniibishan—white cedar leaves
 gibaim'e'nuna'gwus aniibishan—sweet fern leaves (keeps hair black)
 bagwaji zhoomin biimaakwadoon—wild grape vines



Identified uses for ookweminan, black cherries, are: raw, jams, jellies, pie fillings, breads and pancakes. Black cherry bark can also be used to make tea. (Photo by Kitty Kohout)

Insect Repellants

namewashkoon aniibishan—spearmint leaves
 *peppermint leaves
 sasap kwanins aniibishan—wild bergamont leaves
 giizhik aniibishan—white cedar leaves
 miskwaabiimizh waaboo—red willow sap

Dyes

odatagaagominan—blackberries (dark blue)
 miinan—blueberries (dark blue, purple)
 gozigaakominag—juneberries (dark red)
 bagwaji bagesaanag—wild plums (purple)
 bawe'iminan—pin cherries (dark red)
 miskominan—raspberries (pink)
 ode'iminan—strawberries (red)
 asasaweminan—choke cherries (dark red)
 bibigweminan—elderberries (purple, red)
 zhaabominan—currents (red)
 waasakonek—goldenrod flowers (yellow)
 *blue iris flowers (purple)
 miskondibed waabigwan—Indian paintbrush flowers (red)
 *lily flowers (orange)
 miskwijiibikan—bloodroots (red, orange, yellow)
 waagogan—ferns (green, brown)
 aasaakamigoon—mosses (green, brown)
 *lichens (orange, purple)

Weaving Materials

mats, baskets, twine
 apakweshkway aniibishan—cattail leaves
 anaakanashk inaskoon—rush stems
 anaakanashk inaskoon—bulrush stems
 wiingushk aniibishan—sweet grass leaves
 aagimaak misan—black ash wood
 wiigob—basswood inner bark

Wiigwaas—Paper (white) Birch Bark

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

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



Elder identified uses for sewa'kominan, sand cherries: raw, jams, jellies, pie fillings, breads, pancakes and tea. (Photo by Hugh H. Iltis.)

Elders participate in language planning grant

By Barbara Sanchez, Northland College Intern

Odanah, Wis.—Under a one-year planning grant from the Administration for Native Americans (ANA), GLIFWC is developing a language plan and strategy for collecting the Ojibwe names of individual fish, animals and bird species and the traditional names of locations within the ceded territories. This project has the potential to benefit not only the ecology of the area, but also Ojibwe culture and language.

A planning committee has already met several times to develop a strategy to implement the project. Participating at committee level are elders from Bad River, Lac Courte Oreilles, Mille Lacs, and Red Cliff who share their knowledge of the land, language, and the interconnectedness of the two. With these elders as teachers, advisors and guides, GLIFWC is working toward preserving a culture starting with the accumulation of Ojibwe language resources and speakers.

Once the plan and strategy are developed, GLIFWC will submit a grant application to implement the plan.

Disclaimer

While the list identifies those plants that can be harvested during the summer 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.

Gathering summer fruits

By Karen Danielsen
GLIFWC Forest Ecologist

Lac Courte Oreilles, Wis.—Two summer's ago, Lac Courte Oreilles elder Rose Tainter, along with her husband Ken and brother-in-law Art, spent a day with half-a-dozen children gathering *asasaweminan* (choke cherries). The activity resulted in buckets full of *asasaweminan*, fingers stained purplish-red, and tired, giggling kids.

Back at home, Rose taught the youngsters how to turn the *asasaweminan* into a tasty jelly. She used Sure-Jell™, adding extra sugar—given the slightly bitter flavor of *asasaweminan*. Afterwards, everyone received at least one jar of the homemade jelly.

Rose remembers, before the advent of Sure-Jell™ and easy-to-start gas stoves, when canning the fruits of summer required much more time and labor. Growing up in Obashiing (Ponemah, Minnesota), her family gathered *asasaweminan*, *bawa'iminaan* (pincherries), and *miinan* (blueberries) and prepared them for winter storage.

After gathering, they would mash and cook the fruits, seeds and all, with sugar, over a wood stove. Often, boil-

ing took all day and wood had to be constantly added to the stove. The finished product was stored in the cellar.

Throughout the winter, they would eat spoonfuls of fruit, spitting out the seeds that had not been removed during the canning process. With a family of three daughters and five sons, a lot of fruit had to be canned to keep everyone satisfied and healthy.

She remembers being poor and working hard. However, she enjoyed her childhood and never went hungry. Her mother gathered medicinal plants to keep her children healthy. The woods always seemed to provide enough for her family.

She met her husband in 1967 and moved to Minneapolis. Five years ago, they moved to Lac Courte Oreilles to be near Ken's family. Rose continues to practice traditional ways, speaking Ojibwemowin fluently, gathering wild plants, and achieving the second degree order in the Midewewin Lodge.

She hopes tribal youth will learn traditional ways. She teaches them Ojibwemowin at Waadookodaading, an immersion school at Hayward Elementary School. She also teaches them the little things, like how to gather and prepare *asasaweminan*.



Lac Courte Oreilles elder Ken Tainter (far right) gathers *asasaweminan* with area youth. (Photo by Jim St. Arnold)



After gathering the *asasaweminan*, Rose Tainter, Lac Courte Oreilles elder, turns the fruit into jelly. (Photo by Jim St. Arnold)

Arapaho/Shoshone Chokecherry Gravy

2 cups chokecherries (fresh or dried into patties)
2 tbsp.flour
sugar or sugar substitute to taste
water

Soak dried chokecherry patties in warm water until crumbly. Drain and place in a large saucepan with 1 1/2 cups boiling water. Turn down to medium heat. Mix flour with 1/2 cup cool water until pasty and add to chokecherries. Add sugar or sugar substitute to taste. Stir frequently so it doesn't stick, cooking until it is thickened into a gravy. Add more water or flour if necessary. Serves four.

—submitted by Charles Myers

Lakota Wasna

1 cup chokecherries or raisins
2 strips dried buffalo meat (can substitute deer, elk, antelope, etc.)
1/4 cup canola oil
1/4 cup sugar (optional)

Cook dry meat in oven at 350° for 5-10 minutes to soften. Remove from oven and cool in cold water for five minutes. Dry on a towel, then pound with a hammer, mortar and pestle, or with stones. Pound fruit and mix with oil and meat. Texture should be grainy. Add sugar to taste. This was used on long trips and also as a sacred food in ceremonies. Serves four.

(Editor's note: The above recipes are reprinted from Wisdom of Elders: Traditional American Indian Food and Recipes, published by the National Society for American Indian Elderly (NSAIE). For more information contact NSAIE at (602) 307-1865, 2214 North Central Avenue, Suite 250, Phoenix, Arizona 85004, via e-mail at info@nsaie.org or visit them on the web at www.nsaie.org.)

Cultural workshops

Drum making

This is not so much a workshop as a journey to another way of life. Rose Fredlund is both a very traditional and a very nontraditional native person. She has become both a drummer and a medicine woman—achievements that are open to the men of her culture, but not usually the women. Her life work is driven by a belief in her culture and her urge to pass it on to the generations to follow.



Rose Fredlund

In this workshop, you will learn not only how to make a traditional drum, but that making a drum is a journey towards respect for your fellow classmates and the elements the drum will be made of. There will be healing, music, ceremony, and celebration.

Working with skins, wood, and native plants; and learning traditional medicines, foods, and celebrations are all part of the world of Rose Fredlund, keeper of traditions of the Dene Nation in Canada's Northwest Territories. Meals are included in this workshop, and each evening, Rose will prepare dinners made of traditional native food.

Kemp Field Station, Lake Tomahawk
Saturday & Sunday, June 21-29
9 a.m.—3 p.m. daily
Fee \$430—Class # 1453

Fee with lodging: \$570—Class # 1454 This is a bargain! Kemp Lodge is a magnificent 1920's style log structure nestled into the shores of Lake Tomahawk.

Traditional sewing

Join Rose and learn traditional sewing methods working with moose, caribou and deer hide, furs, seed beads, and other natural materials. Traditional designs, colors, stitches, and beading methods and tools will be covered while participants make slippers, purses, mittens, earrings, and other traditional items. This course will take place in the evenings after a day of drum making.

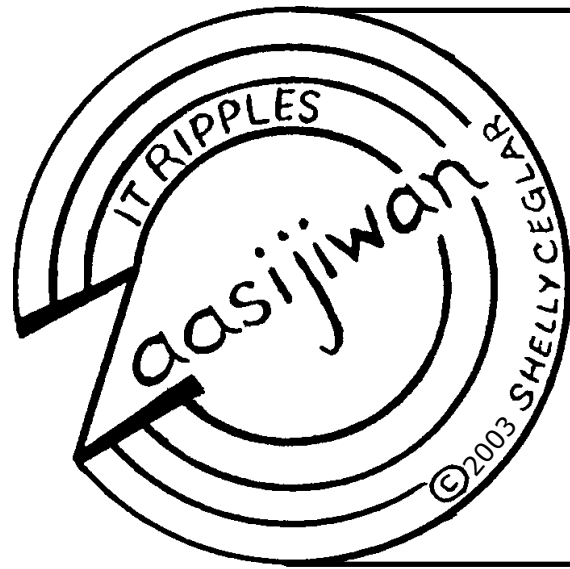
Sunday & Saturday, June 22-28 7-9 p.m.
Kemp Field Station, Lake Tomahawk
Fee for Drumming Participants: \$30

Please register before June 9th—Class # 1455

Fee for Non-Workshop Participants: \$125

Registration for non-workshop participants will begin June 9th
Class # 1456

Please call 1-800-585-9304 or (715) 356-6753 for registration information. Workshops are being offered as part of the Nicolet College Outdoor Adventure Series.



Ziigwan—It is Spring

Aabawaa. Awesiiyag ondaadziikewag. Wii-kizhaawasowag.
 Goon da-ningizo dash wii-kimiwan. A'aw aandeg wii-piidwewidam.
 Makwag wii-koshkoziwag. Anishinaabeg wii-iskigamizigewag.
 Ginzhizhawiziwag. Gichi-aya'aag wii-manidookewag.
 Biboonagad. Mino-oshki-gikinooonowin!

(It is warming. Wild animals they give birth. They will protect their young.
 Snow s/he will melt and it will be raining. That crow will come speaking.
 Bears will wake up. Ojibwe people will make maple sugar.
 They are hard workers. Elders they will conduct ceremonies.
 A year (winter) passes. Happy new year!)

Bezhiig—1

OJIBWEMOWIN (Ojibwe Language)

Double vowel system of writing Ojibwemowin.

—Long vowels: AA, E, II, OO

Aandeg—as in father

Bineshii—as in jay

Zhiishiiib—as in seen

Biboong—as in moon

—Short vowels: A, I, O

Idash—as in about

Imaa—as in tin

Opichi—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.

Diminutives

Adding these endings to most mean young or small “-ns, -ens, -yens, -oons, -iins, or -ans” (*add the plurals after that)

- bear—makwa, cub(s)—makoons(ag)
- bird—bineshii, bineshiiyens(ag)
- fly—oojii(g), oojiins(ag)
- crow—aandeg(wag), aandegoons(ag)
- robin—opichi(yag), opichiins(ag)
- kettle—akik(oog), akikoons(ag)
- paper—mazina'igan, mazina'igaans(an)
- shoe—makizin(an), makizinens(an)

Niizh—2

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

- A. Waawaashkeshiiyens gema gidiga akoons.
- B. Makoonsag gii-ondaadziwag gii-piboong.
- C. Nindo zhitoonan abinoojiyens-makizinensan.

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

D. Daga naazh a'aw akik idash akikoons iwidi waaka'iganing.

E. A'aw opichi odayaawaan niso-opichiinsan wadiswaning.

F. Amikoons odamino agamiing.

G. Naasanaa! Ezigaans bimoodewag.

Niswi—3

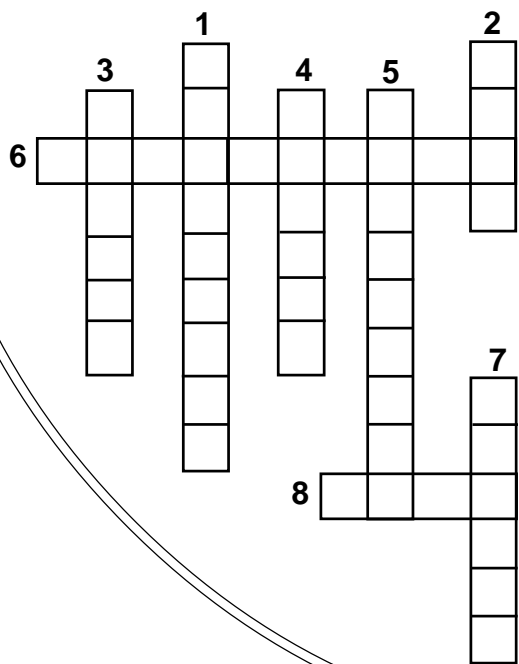
IKIDOWIN ODAMINOWIN (word play)

Down:

1. Duck.
2. And.
3. Crow.
4. Eagle.
5. Butterfly.
7. S/he is swimming.

Across:

6. Little shoe.
8. Porcupine.



Niiwin—4

Diminutive Usage

- zhiishiiib(ag)—duck(s), zhiishiiibens(ag)
- migizi(wag)—eagle(s), migiziins(ag)
- ogaa(wag)—walleye(s), ogaans(ag)
- iskigamizigan(an)—supar camp(s)
- iskigamizigaans(an)—little sugar camp
- memengwaa(g)—butterfly, memengwaans(ag)
- gaag(wag)—porcupine, gaagoons(ag)

Goojitoon! Try it!
Translation below.

1. Niwaabamaa a'aw memengwaa_____.
2. Inashke! Gaag_____ ayaagichi-miikanaang.
3. Bezhiig zhiishiiib_____ bagizo.
4. Niwii-pimosemin ina iwidi iskigamiziga_____ing?
5. Niizho migiz_____ bimisewag zaaga'iganing.

Translations:

Niizh—2 A. A young/baby deer or little spotted one (fawn). B. Bear cubs they were born when it was winter. C. I make them those baby moccasins. D. Please fetch that pail and little kettles there by the house. E. That robin has three young robins in the nest. F. Little beaver is playing on the shore. G. Look out! Little ticks are crawling about.

Niswi—3 Down: 1. Zhiishiiib 2. Dash 3. Aandeg 4. Migizi 5. Memengwaa 7. Bagizo Across: 6. Makizinens 8. Gaag
 1. I see that little butterfly. 2. Look! A little porcupine is there on the highway. 3. One little duckling is swimming. 4. Can we walk there to the small sugar camp? (-ing is the locative (location, to the)). 5. Two young eagles they are flying by the lake.

There are various Ojibwe dialects; check for correct usage in your area. Note that the English translation will lose its natural flow as in any foreign language translation.

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St. Croix zebra mussel task force submits 2003 Action Plan

Background

The introduction of nonindigenous aquatic nuisance species into Minnesota and Wisconsin waters threatens not only the ecology of the region's and states' water resources, but also may harm industrial, recreational and subsistence use of the infested waters.

Minnesota and Wisconsin have been subject to the invasion of aquatic nuisance species since the settlement of the region by Europeans. While many human activities have the potential to spread exotic species, on the St. Croix River the main potential pathway has been determined to be recreational boats and other vessels that carry adult or larval zebra mussels.

The zebra mussel is a small exotic bivalve introduced into the United States in the Great Lakes region in the late 1980's. It has since rapidly spread to connected water bodies, primarily through attachment onto commercial traffic in more than 19 states. It has also expanded into inland waters mainly through recreational boat traffic.

This exotic has been documented to kill native unionid mussels, disrupt ecosystems, possibly impact fisheries, damage municipal water supply and industrial intakes, and damage or impact boats and water recreation. There are no environmentally safe control methods once it is established in a water body.

In response to the threat of this exotic, the St. Croix River Zebra Mus-

sel Task Force (Task Force) was formed in 1992. A Zebra Mussel Response Plan prepared in 1993 was the initial plan to try and keep the zebra mussel from spreading into the St. Croix River.

The primary focus in the first years of the Task Force was to enlist public support through voluntary boating restrictions. However, the discovery in 1994 of boats moored in the river with attached zebra mussels resulted in the decision that voluntary actions were not sufficient to prevent movement of the mussel.

The National Park Service (NPS) enacted emergency travel restrictions for the 1995 season, preventing northbound traffic past the Arcola sandbar unless the owner met specific conditions.

Beginning in 1994, zebra mussels have been found singularly on substrate such as native mussels and rocks and on boats within the lower twenty-five miles of the river. However, during the summer of 2000, the settlement of juvenile zebra mussels from reproducing adults was discovered in the last 16 miles of the Lower St. Croix National Scenic Riverway.

Minnesota regulations prohibit transport of zebra mussels either via the waterways or overland. The state has a legal definition of infestation and aquatic nuisance species. The state of Wisconsin has enacted legislation making it illegal to transport zebra mussels into the lower St. Croix. NPS regulations

Before leaving a boat launch

- ✓ Inspect your boat, trailer, and boating equipment and remove any visible plants and animals.
- ✓ Drain water from the motor, livewell, bilge, and transom wells while on shore and before leaving any waterbody.
- ✓ Dump unused bait in the trash. Never release live bait into a waterbody, or release aquatic animals from one waterbody into another.
- ✓ Spray your boat and boating equipment with high-pressure water or leave it in the sun to dry for 5 days.

also prohibit zebra mussel transportation into the lower St. Croix River.

Due to the reproduction of zebra mussels downstream of Stillwater, the State of Minnesota legally declared this portion of the river infested in 2001, which controls the transportation of water from the St. Croix River into the State. The State of Wisconsin does not currently have such regulations. NPS regulations, as published in the Federal Register on June 23, 1997, remain in effect for the federally administered zone of the St. Croix River, including waters designated by the state of Minnesota as "infested."

In 1998, the Governors of Minnesota and Wisconsin, and Chairpersons from Chippewa tribes signatory to the 1837 Treaty, submitted a comprehensive interstate management plan for the prevention and control of nonindigenous aquatic nuisance species (ANS) to the Federal ANS Task Force to obtain federal funding. The plan was approved and the states and tribes have received federal funds to implement the ANS management plan.

St. Croix Zebra Mussel Task Force

The purpose of the St. Croix Zebra Mussel Task Force is to help agencies and stakeholders slow the spread and prevent new population of zebra mussels further upstream in the St. Croix River and other waters in Minnesota and Wisconsin.

The Task Force tries to accomplish this by developing strategies, assessing the effectiveness of strategies that are implemented, recommending tools to use against the zebra mussel and linking agencies and stakeholders in this effort. Participants on the Task Force include: NPS, U.S. Fish and Wildlife Service (USFWS), Wisconsin and Minnesota Departments of Natural Resources (WDNR, MDNR), Northern States Power Company (NSP), University of Minnesota Sea Grant Program (UMSG), Macalester College, Biological Resources Division of the US Geological Survey (BRD), Coast Guard (USCG), U.S. Army Corps of Engineers (ACoE), Great Lakes Indian Fish & Wildlife Commission (GLIFWC), Minnesota Sea Grant (MN Sea Grant), and the St. Croix Marinas Association.

2003 Action Plan

This plan outlines strategies and actions proposed by the participating agencies for the 2003 season to help accomplish the Task Force's purpose

and implement actions from the St. Croix Scenic Riverway Comprehensive Interstate Management Plan.

The goals of this Action Plan for 2003 are designed to address 1) the spread of zebra mussels and other ANS populations to the St. Croix River; and 2) the colonization of zebra mussel populations within the St. Croix River, including the harmful impacts resulting from colonization.

This plan does not preclude other actions by agencies or stakeholders to assist this purpose.

Risk identification & prioritization

Determine the aquatic nuisance species that have the potential to infest the St. Croix River. Identify existing and potential transport mechanisms that are likely to introduce these species.

Regulations & enforcement

Publicize and enforce regulations to prevent introductions into the St. Croix River.

Monitoring for zebra mussels

Develop/maintain monitoring programs in the St. Croix River watershed to provide for the early detection of infestations for use in management decisions and actions.

Information & education

Continue an effective information/education program on the prevention of ANS introductions into or within the St. Croix River.

Control

Establish mechanism to ensure that the control strategies developed and implemented are: a) done so in coordination with state and federal agencies, tribal authorities, local governments, inter-jurisdictional organizations, and other appropriate entities; and b) are based on the best available scientific information and conducted in an environmentally sound manner (NANPCA, Section 1202). (MDNR, MN Sea Grant, NPS, USFWS, WDNR)

Research

Monitor/support/coordinate scientific research between state and federal agencies and academic institutions that investigate possible environmentally safe control methods to use against zebra mussel and other ANS populations. (MDNR, MN Sea Grant, NPS, USFWS, WDNR, others)

Greg Fischer hired to manage Aquaculture Demonstration Facility

Superior, Wis.—Greg Fischer, a 15-year fisheries and wildlife veteran, is the new manager of the Aquaculture Demonstration Facility planned for a site near Red Cliff, Wis.

The University of Wisconsin System, University of Wisconsin-Superior, the Red Cliff Band of Lake Superior Chippewa, the Wisconsin Aquaculture Association and other partners are working together to build and operate the Aquaculture Demonstration Facility adjacent to the Red Cliff Band's fish hatchery. The \$3 million facility, funded entirely by gaming revenue, is dedicated to teaching people how to effectively raise, process and market freshwater fish for human consumption.

Before accepting his new post, Fischer was director of the Red Cliff Tribal Natural Resources Program and Fish Hatchery Program. In that role, he was named the 2001 Tribal Biologist of the Year in the Great Lakes Region by the Native American Wildlife and Fisheries Society.

Fischer earned a bachelor's degree in fisheries and wildlife management from Lake Superior State University in Sault Ste. Marie, Mich.

His certifications from the U.S. Fish and Wildlife Service include Fish Health Inspector, Cold and Cool Water Fish Culture, and Use of Chemicals and Drugs in Fish Culture.

Fischer said he's looking forward to the challenges of the new facility. "The Aquaculture Demonstration Facility will provide northern Wisconsin, northern Minnesota and northern Michigan with a facility to train people and demonstrate the viability of responsible northern aquaculture practices," he said. "It will be an important step in the economic development for our region and in establishing a sustainable use of our natural resources."

Groups or individuals seeking more information about the planned Aquaculture Demonstration Facility or wishing to see a presentation about the facility can contact Fischer at (715) 373-1047 or gfischer@uwsuper.edu.



Greg Fischer.

GLIFWC staff day combines fun & business



Sharon Nelis, planning & development secretary.



Mike Plucinski, Great Lakes fisheries technician.



Ron Parisien, wildlife technician.



Ed White, inland fisheries technician (front) and Peter David, wildlife biologist.

Laughter lightens the business of Staff Day

Odanah, Wis.—One of the few occasions the entire GLIFWC staff gathers together is for the annual Staff Day—a day that deals with the routinely dry, but important organizational business, like retirement plans and health insurance. But it's also a day to find out what everybody has been up to in the various GLIFWC divisions and a time to recognize staff for their contributions and years of service.

The staff was honored to have Tobasonakwut Kinew, Ojibways of Onigaming, present for opening ceremonies and prayers. As usual, he started the day off in a good way.

In 2003, GLIFWC's Staff Day Recognition Committee, composed of Jim Zorn, Peter David and Joe Dan Rose, decided to recognize stalwart staff members who are not often in the limelight, but who work hard behind the scenes. They also decided to have a little fun in the process, relying on "inside info" about those chosen for recognition. The result was the award presentations depicted in the photos above and some good laughs.

Staff Day also included five excellent Power Point presentations by staff, highlighting specific aspects of their programs. Bill Mattes, Great Lakes fisheries section, provided an overview of the depth-temperature tagging study in Lake Superior and the section's fisheries modeling work. John Mulroy, Enforcement, presented on cold water rescue training and techniques and Miles Falck, wildlife section, provided an update on the status of the invasive plants program. From GLIFWC's Madison satellite office, John Coleman, GLIFWC environmental section leader, talked about sampling in the ceded territory with a focus on the Crandon area, and Esteban Chiriboga, GIS mining assistant, explained the Federal Energy Regulatory Commission (FERC) study.

—Story & photos by Sue Erickson



Vern Stone, central district supervisor/Bad River area warden.



Jim Zorn, policy analyst (left) and Butch Mieloszyk, inland fisheries technician.



GLIFWC members who reached, or will reach in 2003, 5-10-15-20 year employee status were, from the left (back row) Jim St. Arnold, 15 years; John Mulroy, 15 years; Bill Mattes, 10 years; Neil Kmiecik, 20 years; Gerald W. White, 15 years; and Esteban Chiriboga, 5 years. Front row: Vern Stone, 15 years; Leanne Thannum, 15 years; Lynn Plucinski, 20 years; and Ann McCammon Soltis, 10 years. (Photo by Sue Erickson)

New staff

By Barbara Sanchez, Northland College Intern

Odanah, Wis.—On November 18, 2002, Gina Nelis became a part of GLIFWC's Intergovernmental Affairs division. Secretary for policy analysts Jim Zorn and Ann McCammon Soltis, she helps keep the office organized while being responsible for printing the agenda, preparing meeting packets and taking minutes for the Voigt Intertribal Task Force.

Before she joined the GLIFWC staff, Gina worked with tribal operations, gaining years of secretarial experience as a Contract Health Services Clerk and a Social Services general assistance caseworker at the Lac Vieux Desert reservation in Michigan.

A Bad River Band member, she values being employed by an organization that works for all Anishinaabe people. This, in turn, gives her the opportunity to work for her people and community as well.

When out of the office, she enjoys spending her free time with her sons—James, 14; Darren, 13, and Loren, 1. Gina also participates in outdoor activities, such as hunting, fishing, golf, and softball. She also attends pow-wows, feasts and other traditional Ojibwe ceremonies.

Gina enjoys the busy work schedule that her job provides. In fact, she adds that she is one of the few fortunate people who actually enjoys waking up each morning, ready to conquer a new day at work. Gina only hopes that one day, when she retires, it will be a retirement from her career at GLIFWC.



Gina Nelis. (Photo by Barbara Sanchez)



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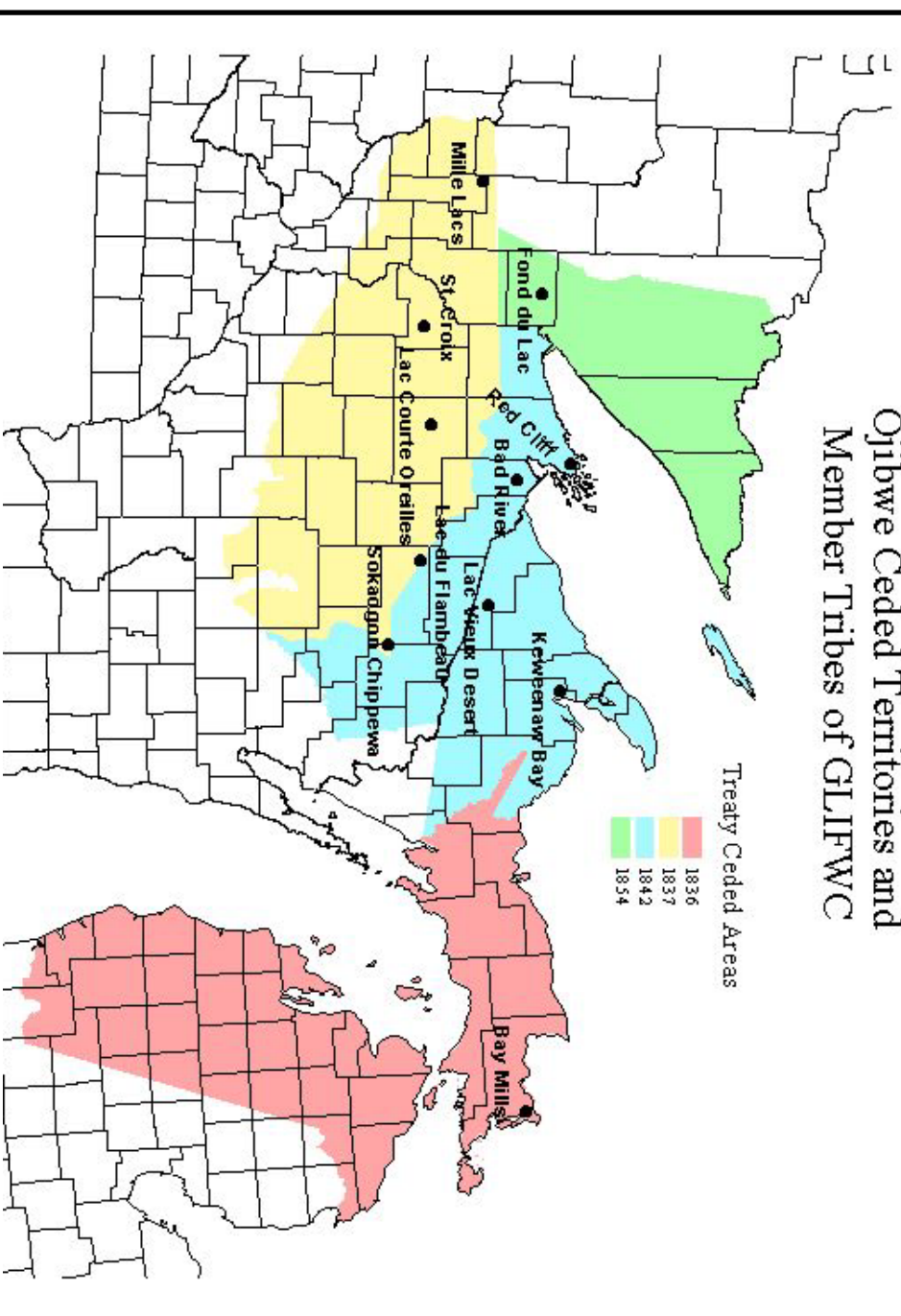
informed if you are planning to move or have recently moved so we can keep our mailing list up to date.

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**Ojibwe Ceded Territories and
Member Tribes of GLIFWC**



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