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A Chronicle of the Lake Superior Ojibwe
Published by the Great Lakes Indian Fish & Wildlife Commission
Fall 2005

Elk numbers stall after spike in mortality

Agency biologists to address feeding problems and land use

By Charlie Otto Rasmussen
Staff Writer

Clam Lake, Wis.—After nearly a decade of steady population growth, a series of deaths plagued Wisconsin elk over the last year, raising concern that the herd may see tough times ahead. Wildlife Biologist Jonathan Gilbert said that while it's too soon to know if the elk losses are part of a developing trend, the deaths will slow growth rates and delay achievement of population goals.

Moreover, Gilbert added that a management proposal under consideration by the state elk committee may pose an increased health threat to the herd in the years ahead.

According to Department of Natural Resources (DNR) Elk Ecologist Laine Stowell at least 15 animals died from predation, accidents and illness caused by parasites. In perhaps the most unusual incident, three bulls drowned after breaking through the ice on the west fork of the Chippewa River. Stowell and DNR staff managed to rescue a fourth elk struggling downriver—Cow 14—on a separate occasion. Since elk were reintroduced to the state in 1995, an average of only four or five animals perished annually.

"A significant portion of the elk have been collared since the reintroduction, and we've only had one other drowning incident like this occur, and that was early on," Stowell said. "It's probably more common in some other regions with elk range, like Ontario, where there are more riverways used by elk."

The loss of the two and three-year old-bulls to the Chippewa River, however, did not appear be a random circumstance, Stowell said.

"Both areas where the elk went through the ice are close to feeding operations where permanent residents live," he explained. "It looks like feeding [hay and corn] is a major factor." Stowell said feeding in close proximity to highways creates additional threats to elk. Collisions with vehicles tops the elk mortality list.

One feeding site identified last winter near the Chippewa River's west fork contained forty collared elk located within a half-mile radius, Stowell said. That's an impressive number considering the entire population in the Clam Lake region is estimated at around 120 animals.

Elk in northern Wisconsin experienced an unusually high death rate over the last year. The herd remains at around 120 animals. (Photo by L. Arnold & R. Mosley)

DNR officials are making preparations to contact households known to feed elk and request voluntary compliance with state wildlife feeding laws. Residents are currently limited to a two-

(See Biologists, page 18)

GLIFWC recognized as an "Invader Crusader"

Port Washington, Wis.—Wisconsin's land and water is continually threatened by the spread of invasive species. The battle against these invasive species has been fought for many years. One of the key leaders in the crusade against invasive species has been the Great Lakes Indian Fish & Wildlife Commission (GLIFWC). GLIFWC was selected to receive one of the inaugural Invader Crusader Awards presented by the Wisconsin Council on Invasive Species.

GLIFWC was one recipient of the 2005 Invader Crusader Awards presented in Port Washington, Wisconsin. From the left are: Miles Falck, Great Lakes Indian Fish & Wildlife Commission biologist; Governor Jim Doyle; DNR Secretary Scott Hassett; Department of Tourism Secretary Jim Holperin; and Peter Murray, Chair of the Wisconsin Council on Invasive Species. (Photo submitted)

The Invader Crusader Award was created to honor Wisconsin citizens and organizations for their significant contribution to the prevention or eradication of invasive species that harm Wisconsin's land and waters.

GLIFWC's mission is to help ensure significant off-reservation harvests while protecting the resources for generations to come. Though GLIFWC's focus has been directed primarily towards the ceded territories, the impact of GLIFWC's activities, particularly its website and educational materials, has reached many interested organizations and individuals throughout the nation and has the potential to impact the entire state of Wisconsin.

"It is important that we acknowledge the growing threat from invasive species to our natural resources and work to find solutions," said Governor Jim Doyle. "Fortunately, invader crusaders, such as the GLIFWC, and other award recipients are part of the solution. They are dedicated to protecting our environmental resources and raising awareness of this critical issue."

Some of GLIFWC's activities range from comprehensive inventory and monitoring to the control and eradication of plants, such as purple loosestrife and leafy spurge. In fact, their most visible control efforts for loosestrife occurred on the Fish Creek Sloughs, near Ashland, Wis. where a sea of purple has returned to native wetland plants.

GLIFWC has also developed an informational website, *www.glifwc.org/epicenter/*, which contains 19 comprehensive and detailed species accounts with visuals, as well as interactive distribution maps, educational materials and a slide library.

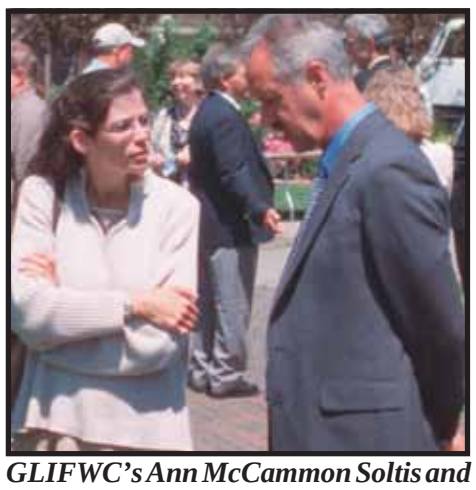
"The Great Lakes Indian Fish and Wildlife Commission has been a leader in addressing non-native terrestrial and aquatic invasive species issues," stated Wendy Stein, GLIFWC's nominator, who works for the Chequamegon-Nicolet National Forest. "I work with GLIFWC, particularly Miles Falck, as members of the Northwoods Weed Ini-

(See Invader Crusader, page 2)

United restoration effort on Great Lakes planned

By Charlie Otto Rasmussen, Staff Writer

Duluth, Minn.—The U.S. Environmental Protection Agency (EPA) and a diverse group of regional leaders unveiled a draft plan on July 7 to unify Great Lakes restoration and protection efforts. Following drum songs and a feast hosted by the Fond du Lac Band, EPA Assistant Administrator Ben Grumbles introduced the proposal created by the Great Lakes Regional Collaboration (GLRC), a partnership of tribal, federal, state and local governments. Representatives from major stakeholders stressed the importance of making aggressive moves to counter aquatic invasive species, pollution, and a list of growing problems that negatively impact the lakes.



GLIFWC's Ann McCammon Soltis and Wisconsin DNR Secretary Scott Hassett. (Photo by COR)

"We are blessed to have this opportunity to have an impact on our collective future," said Frank Ettawgeshick, tribal chairman of the Little Traverse Band of Michigan. "The plan will only be as good as the work that goes into it."

A series of public meetings and other opportunities are planned to solicit input from citizens around the Great Lakes on the draft plan. Once GLRC authorities collect and review comments from government officials and citizens, a final action plan is due out on December 12, 2005.

"Tribal and public input are needed particularly to identify the top priorities for action," said Ann McCammon Soltis, GLIFWC policy analyst. "These priorities will be used to direct funding and specific programs into the future, so it is important for those with a stake in Lake Superior to make their voices heard."

A specialist on Lake Superior issues, McCammon Soltis said the GLRC recognizes and builds upon the work that has been done in various regions, from Lakewide Management Plans to Areas of Concern. Although these efforts are well established, they have not been brought together on a Great Lakes-wide basis until now, nor have priority actions been firmly established from that perspective, she said.

In May 2004, President George W. Bush signed an executive order directing the EPA to lead a regional collaboration for the Great Lakes. Over the following months, more than 1,500 people from government and nongovernmental organizations helped develop the draft plan. Planners estimate the cost to implement Great Lakes restoration and protection efforts ranges from $18 to $20 billion.

The July 7 GLRC gathering at Duluth's Leif Erickson Park included government representatives from across the eastern United States. The Hope Lake Traditional Drum, made up of tribal members from Fond du Lac and Ontario, played a series of songs prior to the feast which included moose steaks, venison stew, wild rice, fry bread, and corn.

Calming troubled waters

To prioritize improvement and preservation measures for the Great Lakes, strategy teams issued recommendations to the GLRC Executive Committee. These specific areas for action, highlighted below, form the foundation of the Great Lakes plan.

➢ Aquatic invasive species—an immediate stop to the spread and invasion of species that move in ship ballast water, through canals and waterways.

➢ Habitat conservation and species management—improve conditions for plants and animals in wetland, riparian and upland areas.

➢ Near-shore drinking water—control pollution in coastal areas where communities get their drinking water supply.

➢ Areas of concern—take action on the 31 most contaminated sites, or areas of concern, identified by the United States and Canada 15 years ago.

➢ Non-point pollution—facilitate better management of farms and livestock operations that pollute the watershed.

➢ Toxic pollutants—prevent or reduce the amount of toxic substances that enter the Great lakes, like mercury, PCBs and pesticides.

➢ Research and monitoring—coordinate information management between the public, decision makers and everyone involved in the Great Lakes system.

➢ Sustainability—adapt and maintain programs that promote sustainability in areas like land use, agriculture, forestry, transportation, and industry.

Frank Ettawgeshick, Little Traverse Bay tribal chairman comments on the GLRC plan as Duluth Mayor Herb Bergson looks on. (Photo by Charlie Otto Rasmussen)

The Hope Lake Traditional Drum played songs during opening ceremonies in Duluth, Minnesota. (Photo by Peter Johnson, Council of Great Lakes Governors)

GLRC public meetings

The public comment period for the Great Lakes Regional Collaboration (GLRC) draft action plan opened on July 7 and runs through September 9. Public meetings offer the opportunity to meet with members of the GLRC, to hear more about the plan and to provide valuable input. Written comments will be accepted at these meetings. All meetings are scheduled to run from 6:30 to 9:00 pm.

August 4: Superior, Wisconsin—Yacht Club on Barker's Island
August 18: Detroit, Michigan—Cobo Hall, room W262
August 23: Cleveland, Ohio—location to be determined
August 30: Buffalo, New York—location to be determined

Commenting on-line

Internet users can comment at *www.glrc.us*. The site contains the strategic plan and instructions for submitting comments.

Mailing written comments

USEPA GLNPO
77 W. Jackson Blvd. (G-17J)
Chicago, IL 60604

Invader Crusader Award

(Continued from page 1)

tiative, which is a group of local, state, federal and tribal entities as well as non-profits and local landowners, whose focus is to collaborate on non-native invasive plant issues in northern Wisconsin and Michigan. Leafy spurge has been our most recent focus."

Although this was the first year of the award, the response was very positive. "We received 31 nominations for 22 different people or groups," explained Becky Sapper with The Nature Conservancy and Invasive Species Council member. "There are so many that deserve recognition for their efforts to control invasive species in Wisconsin. We have high hopes that the number of nominations will continue to grow."

For more information on the Wisconsin Council on Invasive Species or the Invader Crusader Award, call 715-682-5789.

On the cover

A bull elk in northern Wisconsin. (Photo by Charlie Otto Rasmussen)

Fifteen years of joint fisheries assessment work in Wisconsin

"Partners" welcome KGB

By Charlie Otto Rasmussen
Staff Writer

Lac du Flambeau, Wis.—Natural resources officials from across Wisconsin gathered last June for the annual Partners in Fishing event, marking the fifteenth anniversary of cooperative fishery management in the ceded territory.

Born out of a ballooning public hysteria, a team of federal, tribal and state fishery professionals known as the Joint Assessment Steering Committee formed to study the impacts of treaty spearfishing in the Wisconsin ceded territory.

The big question: were fish populations harmed by tribal harvests as incensed protestors claimed in the media and at boat landings? Absolutely not, the committee reported in its 1991 publication, *Casting Light Upon the Waters*. A decade and a half later, this is still true.

"Through our collaborative efforts, we've maintained healthy fish populations despite shoreline development, habitat degradation and increased fishing pressure," said Robert Jackson, Committee Chairman and Bureau of Indian Affairs (BIA) Biologist. "There's certainly a better understanding of fish populations by all the governments involved."

Representatives from the BIA, U.S. Fish & Wildlife Service, Department of Natural Resources, Great Lakes Indian Fish & Wildlife Commission, and Wisconsin's six Ojibwe tribes annually coordinate monitoring and assessment responsibilities for important species like walleye and muskellunge in ceded territory waters.

In 1990 Senator Daniel Inouye (D-Hawaii), noting a "campaign of misinformation regarding the impact of Indian treaty fishing," spearheaded Congressional support for a cooperative fisheries management program. Pooling their technical resources with federal funding, interagency fisheries managers launched the most in-depth study ever conducted of fish populations and harvest trends in northern Wisconsin lakes.

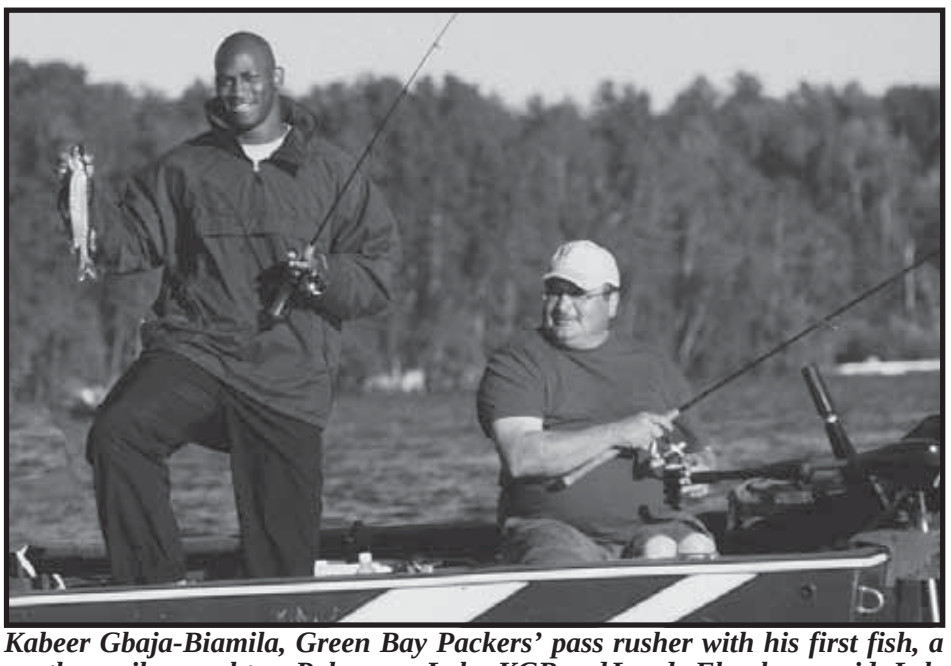
Collaborative spring and fall assessments have become commonplace each year, as crews from each agency fan out across the region gathering fisheries data. Back at offices in Madison, Odanah and elsewhere, survey data is compiled and shared with fisheries professionals around the state to help make management decisions like stocking hatchery-raised fish and setting safe harvest levels.

"The lines of communication have really opened up over the years. There's a strong working relationship between the parties so it's a win-win situation, and the resource benefits from it," Jackson said.

Wise guides and a fish Packer

Joint Assessment Committee members took time from everyday management duties June 16-17 for the informal interagency event, Partners in Fishing, on the shores of Lac du Flambeau's Pokegema Lake. With the addition of fisheries biologists and a number of agency leaders, nearly 80 people participated in the two-day fishing event.

Among the fishers on the Lac du Flambeau lake chain, Green Bay Packers' Kabeer Gbaja-Biamila joined the Partners gathering as this years' special guest. The Los Angeles native and outstanding pass rusher hooked into several northern pike, the first fish of his newfound angling hobby. Fisheries officials took turns casting lines in the boat with Gbaja-Biamila—better known by his nickname KGB—while others paired off with local guides.



Kabeer Gbaja-Biamila, Green Bay Packers' pass rusher with his first fish, a northern pike caught on Pokegama Lake. KGB and Lac du Flambeau guide Lyle Chapman took part in the annual Partners in Fishing event. (Photo by COR)

The coupling of staff employed by different agencies and governments presented a unique opportunity to build upon professional relationships and discuss management issues in a casual setting. Those conversations, moreover, help local fishing guides better understand how ceded territory fish populations are managed.

"One of the biggest benefits of Partners is the number of guides we've educated in the Lac Courte Oreilles and Lac du Flambeau regions over the years," Jackson said. "Guides are able to pass on accurate information about fish management and harvest." Several dozen guides are hired each year, providing fishing boats, tackle and their expertise at locating fish.

The 2005 guides and their clients experienced differing degrees of success on two sunny days of fishing on the seven-lake Flambeau Chain. While most anglers were after walleye, they landed just about every species in the lakes except sturgeon.

Some of those catches, along with shore lunch back at on the lawn of Lake of Torches Hotel, were filmed by Discover Wisconsin for a forthcoming *"Casting Light"* television special. Film crews also captured footage for a youth-oriented program, "Into the Outdoors," on Ojibwe treaty rights in northern Wisconsin.

Eyes on Kentuck Lake walleye fishery

Managers hope to keep walleye population stable

By Sue Erickson
Staff Writer

Odanah, Wis.—Wisconsin Department of Natural Resources (WDNR) and Great Lakes Indian Fish and Wildlife Commission (GLIFWC) conservation officers agreed to cooperatively keep a close eye on fishing activity on Vilas County's Kentuck Lake this fall. This consensus came during a July 14 meeting of fishery management agencies, Mole Lake tribal representatives, township representatives, and citizens concerned about Kentuck Lake.

The effort to keep a watch on the lake comes in anticipation of a relaxation of state angling regulations on the lake and the potential for fairly intense fishing pressure on the recently rehabilitated walleye fishery there, according to GLIFWC's Chief of Enforcement Fred Maulson.

Considerable effort has been expended to restore the lake's walleye fishery, after it underwent a dramatic decline in the 1990's due to a still-unexplained series of year class failures.

Kentuck Lake was established as one of GLIFWC's long-term walleye study lakes in 1989. Since 1990, GLIFWC has conducted both spring adult walleye population estimates and fall juvenile walleye surveys at Kentuck Lake each year except 1998, when the lake was sampled by WDNR, according to Joe Dan Rose, GLIFWC inland fisheries section leader.

Assessments over the past several years have indicated the walleye fishery has been restored and that natural reproduction has been successfully re-established. The 2005 population estimate for the lake indicates an above average density of fish, Rose says. Assessment results also indicate much of the adult population is between 14 and 18 inches in length.

Historically, Kentuck Lake has been speared by the Mole Lake Band. The Lac du Flambeau Band also speared the lake in 1994. However, the tribes voluntarily stopped spearing in 1998 as tribal concerns about the walleye population mounted. Following the implementation of rehabilitation efforts and a subsequent rebound of the population, spearing resumed again in 2004.

Rehabilitation of the fishery took place over a period of five to six years, involving intensive stocking in 1999 and 2000. Working cooperatively on the stocking effort were the Mole Lake, Red Cliff and Lac du Flambeau tribal hatcheries as well as the Genoa National Fish Hatchery. Fisheries staff from GLIFWC and the US Fish and Wildlife Service assisted with the stocking efforts.

Beginning with the 2000 season, WDNR enacted a 28-inch minimum length limit with a daily bag limit of one for state anglers. This fall it is expected that the walleye angling regulation will be relaxed to no minimum size limit with only one fish over 14 inches and a daily bag limit determined in response to tribal declaration and harvest.

According to WDNR creel surveys conducted in 1992 and 1998, annual total angler effort was 69 and 72 hours per acre respectively, making Kentuck Lake one of the more popular destinations in Vilas County. October is also expected to be a popular walleye fishing month, hence the concern about a potentially high angling impact on the lake's walleye fishery.

The July 14 meeting was convened to address this concern and other considerations related to the change in regulations. With a shared vision for a stable walleye population in mind, the group discussed the need for adequate enforcement, strategies to prevent user conflicts, and monitoring of the state angler catch.

Rose would like to see an angler creel survey performed at Kentuck Lake that coincides with the liberalization of angling harvest regulations. With all

(See Kentuck Lake, page 16)

2005 GLIFWC spring fish population surveys

By Michele Wheeler, GLIFWC Inland Fisheries Biologist

Odanah, Wis.—Similar to last year, it was another fast and furious season for survey crews conducting fish population estimates this spring. The warm weather and resulting quick thaw made for a short survey season. One Mole Lake/Sokaogon Band (MLK), one St. Croix Band (STC), two US Fish and Wildlife Service (USFWS) and four Great Lakes Indian Fish & Wildlife Commission (GLIFWC) crews surveyed ceded territory lakes via nighttime electrofishing from April 11 to April 21, 2005. Fyke-nets were also used at Kentuck Lake in Vilas County.

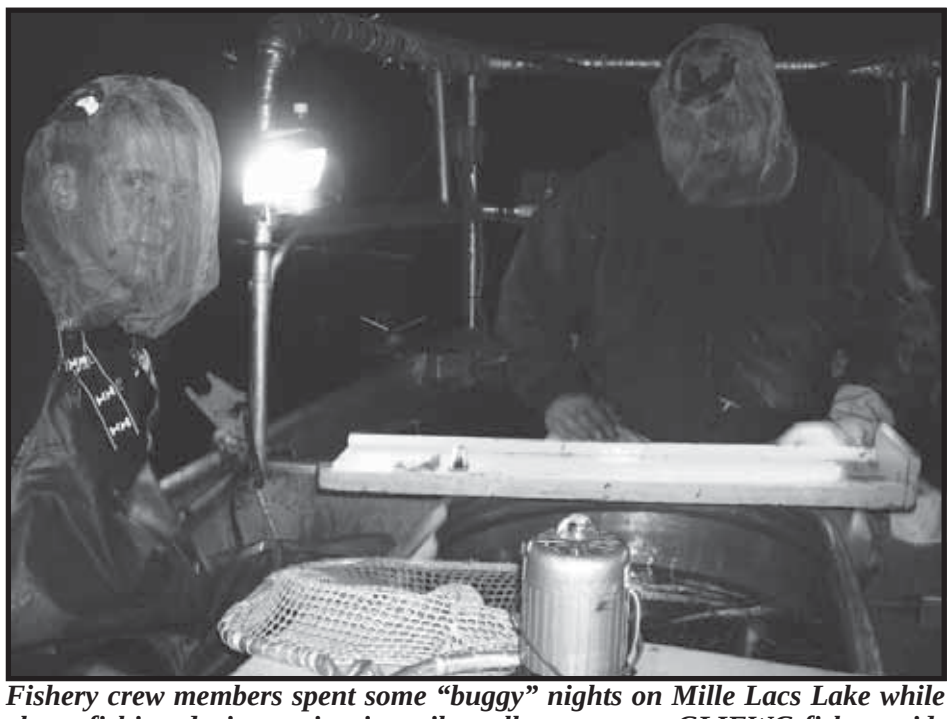
Population estimates consist of one or more nights of marking fish with a temporary fin clip or a floy tag. After an adequate number of fish have been marked, a recapture run is conducted by traveling one time around the entire shoreline. The ratio of marked to unmarked fish is used to estimate the total adult population size in the lake.

Adult walleye population estimates were completed on one Michigan and 17 Wisconsin lakes (Table 1). Survey crews put in many long nights to complete so many surveys in such a short period of time. Survey data will be entered and summarized this summer in preparation for the August Technicial Working Group meeting, when GLIFWC and the Wisconsin Department of Natural Resources exchange results and approve population estimates. In addition, survey crews collected mercury samples from 12 lakes in Wisconsin and 10 lakes in Michigan (Table 2).

On Minnesota's Mille Lacs Lake, during the spring and early summer, GLIFWC and tribal fishery assessment crews participated in a northern pike population estimate and conducted an electrofishing survey for juvenile walleye.

During March and April, Minnesota Department of Natural Resouces (MnDNR), GLIFWC and Fond du Lac Band (FDL) fishery assessment crews collectively captured, tagged, and released over 7,000 northern pike during the marking phase of a northern pike study. The recapture phase of this study was conducted during May and June where crews used graded-mesh gill nets and captured and released over 1000 northern pike. Data will be analyzed and results will be presented at the January meeting of the Minnesota 1837 Ceded Territory Fisheries Committee.

The day after Memorial Day, GLIFWC and STC fishery assessment crews began a three night electrofishing survey of Mille Lacs Lake for juvenile walleye.



Fishery crew members spent some "buggy" nights on Mille Lacs Lake while electrofishing during spring juvenile walleye surveys. GLIFWC fishery aids Travis Neebling and Bill Soulier donned protective nets as they worked. (Photo by Nick Milroy)

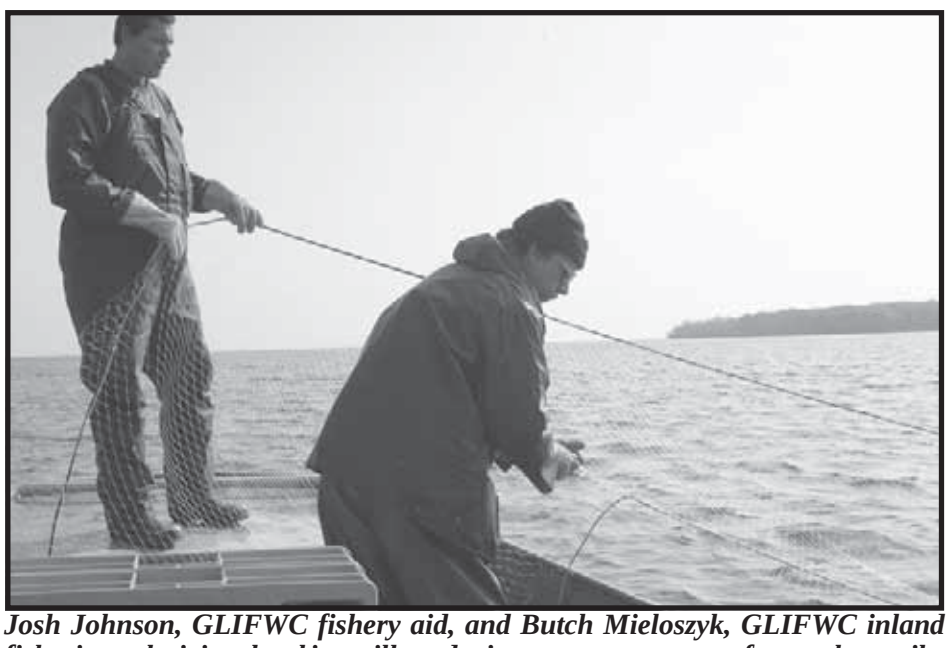
This survey has been conducted by the bands since 2000 and enables fishery biologists to estimate the strength of juvenile year classes of walleye. After collecting biological data, all fish were released alive. Survey data was entered, summarized, and presented at the July meeting of the Minnesota 1837 Ceded Territory Fisheries Committee.

These surveys generate sound scientific data that help in the understanding and management of ceded territory fish populations.

Thank you to the fishery assessment crews from GLIFWC, Mole Lake, St. Croix, Fond du Lac, and USFWS for contributing to these fish surveys.

State	County	Lake	Acres	Shore Miles	Marking Dates	Recap Date	Number of Hg walleye
MI	Gogebic	Pomeroy L	314	4.85	4/16-4/17	4/18/2005	
WI	Bayfield	SISKIWIT L	330	4	4/11/2005	4/12/2005	7
WI	Chippewa	Long L	1052	13.99	4/11-4/12	4/13/2005	11
WI	Forest	BUTTERNUT L	1,292	8	4/17-4/18	4/19/2005	12
WI	Oneida	Dam L	744	7.69	4/16-4/17	4/19/2005	12
WI	Oneida	Sand L	540	4.8	4/16-4/17	4/18/2005	
WI	Oneida	SQUIRREL L	1,317	13.2	4/14-4/15	4/17/2005	13
WI	Vilas	ANNABELLE L	213	2.9	4/13/2005	4/14/2005	12
WI	Vilas	Big Muskellunge L	930	10.2	4/18-4/19	4/20/2005	12
WI	Vilas	High L	734	9.4	4/14-4/15	4/16/2005	
WI	Vilas	KENTUCK L	957	6	4/16-4/19	4/20/2005	12
WI	Vilas	L Laura	599	4.8	4/15-4/16	4/17/2005	
WI	Vilas	Presque Isle L (Chain)	1571	15.8	4/18-4/20	4/21/2005	12
WI	Vilas	SHERMAN L	123	2.2	4/12-4/13	4/14/2005	12
WI	Vilas	SQUAW L	785	9	4/13-4/15	4/16/2005	
WI	Sawyer	Chetac L	1,920	17.5	4/11-4/12	4/13/2005	12
WI	Washburn	BASS/PATTERSON	188	2.9	4/12-4/13	4/14/2005	12

Table 1. Spring adult walleye population estimates were conducted in the above lakes in Michigan and Wisconsin in 2005. GLIFWC's long term study lakes are noted with capital letters.



Josh Johnson, GLIFWC fishery aid, and Butch Mieloszyk, GLIFWC inland fisheries technician, haul in a gill net during recapture surveys for northern pike in Mille Lacs Lake. (Photo by Nick Milroy)

GLIFWC crew members

Caine Heffner
Shane Cramb
Duane Soulier
Sam Quagon
David Moore
Richard L. Nelis
Steve Nelis
Chuck Smart
Ron Parisien Jr.
Dennis Soulier
Louis Plucinski
Greg Smart
Bill Soulier
Mitch Soulier
Richard A. Nelis
Travis Neebling
Bill Nelis
Michele Wheeler
Butch Mieloszyk
Ed White
Kris Arbuckle
Josh Johnson
Nick Milroy

Mole Lake crew members

Mike Preul
Scott Polar
Tom Ols
Allen McGeshick

St. Croix crew members

Donnie Taylor
Travis Taylor
Tony Havarnek
Tom Frye

Fond du Lac crew members

Brian Borkholder
Sean Thompson
Archie Villiard
Mike Kesner

USFWS crew members

Scott Yess
Dave Wedan
Frank Stone
Jonathon Pyatskowit

Lake	County	Date Surveyed	Number of Hg walleye
Beatons	Gogebic	4/16/2005	12
Cisco	Gogebic	4/17/2005	12
Marion	Gogebic	4/21/2005	8
Tamarack	Gogebic	4/15/2005	12
Brule	Iron	4/18/2005	12
Indian	Iron	4/19/2005	10
James	Iron	4/15/2005	12
Ottawa	Iron	4/18/2005	12
Ste. Kathryn	Iron	4/18/2005	12
Winslow	Iron	4/18/2005	12

Table 2. Fish were collected from the above ten lakes in Michigan during spring 2005 for mercury (Hg) testing.

Bad River hatchery addresses yellow perch decline

Miigwech to USFWS grant dollars

By Sue Erickson
Staff Writer

Odanah, Wis.—The 2010 walleye fishing prediction looks good for the Bad and Kakagon Rivers and Chequamegon Bay, according to Bad River Wildlife and Fisheries Specialist Tom Doolittle. The hatchery stocked 178,000 walleye fingerlings in the Bad River and 312,000 into the Kakagon River in June following a very successful hatch of both walleye and yellow perch at Bad River's Raymond Couture Fish Hatchery.

An additional 90,000 fingerlings were held over in the hatchery's newly renovated rearing ponds for extended growth to be stocked as three-to-four inch fish in July and August.

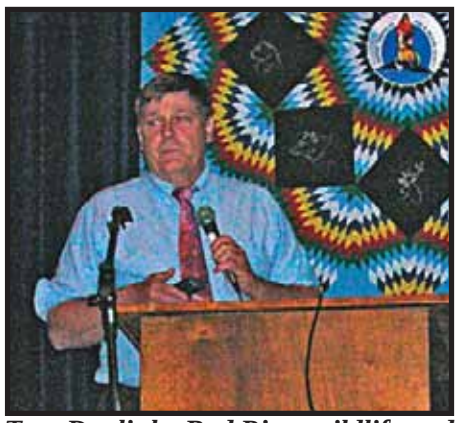
The hatchery's production in the 2005 season totaled an estimated 580,000 fish in addition to 12 million walleye and 1.5 million perch sac fry, which were stocked into the river systems early in the summer. The hatchery also provided fertilized yellow perch eggs to the new aquaculture center located on the Red Cliff Reservation. Those fish, Doolittle says, will be returned to the tribe as fingerling and extended growth yellow perch for stocking in Lake Superior tributaries.

In 2010 many of these fish will be 15 to 17 inches, just right for a healthy dinner, says Doolittle, who encourages consumption of smaller rather than the larger fish that are likely to contain higher levels of contaminants.

He attributes part of the hatchery's success to the completion of necessary renovations to the hatchery and its rearing ponds, thanks to a $147,000 grant from the U.S. Fish and Wildlife Service's (USFWS) Tribal Wildlife Grants Program.

The dollars enabled the tribe to purchase and install a new liner in one of the rearing ponds and repair a second rearing pond, as well as finish significant landscaping work around both ponds. They also purchased round tanks for rearing yellow perch, repaired the water chiller, expanded the head box, which gravity-feeds water to the hatchery, and installed a new ultra violet sterilizer to combat bacteria developing in the eggs as they incubate.

New equipment also included a video dissecting scope used to determine developmental stages of embryonic fish and, as Doolittle explains, note food abundance and richness in the rearing ponds. They also purchased a new stainless steel battery system, which is a Bell jar trough and water receiving tank to hatch walleye and sucker eggs and installed a solar aeration system in both rearing ponds.



Tom Doolittle, Bad River wildlife and fisheries specialist, delivers a presentation at the Native American Fish & Wildlife Society's National Conference in Choctaw, Mississippi on May 25, 2005. (Photo submitted)

Providing equipment and training that will serve tribes into the future and build their internal capacity is one goal of the USFWS's Tribal Wildlife Grant Program, according to John Leonard, USFWS tribal liaison. Leonard praised Bad River's hatchery program for it's early completion of the clear, achievable grant goals, the first of 21 grant programs in the region to be completed.

The grants, he says, are highly competitive, with only two million dollars available to tribes nationwide. The USFWS looks for tribes to target a species of fish, wildlife or plants that are meaningful to both the economics and culture of the tribal community. Bad River targeted walleye and yellow perch and met a need that can't be fulfilled by the existing habitat, especially for yellow perch at this time, Leonard says. Importantly, the hatchery grant had tribal endorsement through a tribal council resolution as well as a match of $16,500 from the tribe.

While the primary target for hatchery production has historically been walleye, this year yellow perch were added to the list. Doolittle points out that yellow perch have been on the decline in the Bad and Kakagon River systems as well as in Chequamegon Bay. The tribe is targeting yellow perch both for subsistence harvest opportunity and for ecological reasons, he says, noting that the yellow perch is directly tied to the Atlantic ellipteo, a mollusk which is the primary, benthic (bottom) biomass and filtering organism in the river systems.

The Atlantic ellipteo depends on the yellow perch as a reproductive host. If yellow perch decline, so do the mollusks—and Mother Nature's water filtration system in the rivers becomes less efficient. "The nutrient gradient in the river systems is controlled by these mussels that act like filters," Doolittle says, "and the mussels are host to a species of sponge that also act like filters. Loss of these shell fish could change the nutrient gradient in the rivers enough to impact the wild rice stands over time."

One of these small mollusks filters hundreds of liters of water per day, so a bed of mollusks can literally filter millions of liters in a day, making a significant impact on the water system. The hatchery's goal is to boost the yellow perch population in order to sustain the essential mollusk population. Doolittle attributes the decline of yellow perch to a combination of reasons. For one, the increased populations of popular predatory fish, such as walleye, smallmouth bass and northern pike, that feed on yellow perch may be impacting perch populations.

But also perch forage has declined. He describes the problem as something of a domino effect. As Chequamegon Bay became cleaner, the amount of nutrients in the bay declined. This negatively impacted the plankton, insects and bait fish—all the forage of yellow perch—because they feed on the nutrients. Other contributors to the decline may include cormorant predation, habitat changes due to nearshore structures and increased fishing pressure, he says.

The hatchery will boost the river perch population with stocked yellow perch fry and fingerlings this year in an attempt to counter the apparent decline. "This also demonstrates that the hatchery can provide an ecological service to the wider community, along with better fishing opportunities for tribal fishermen and as well as sport anglers who fish in the Chequamegon Bay region," he says.

For walleye, the hatchery's long term goal is to restore the spawning walleye population to about 7,000 adult spawning fish in the river systems, essentially restoring the numbers necessary to sustain natural reproduction.

The hatchery's electrical needs are supplied almost entirely through wind and solar energy. In fact, energy stored

(See Bad River, page 16)

Walleye fingerlings hatched, reared and stocked by Bad River's Raymond Couture Fish Hatchery. (Photo by Sue Erickson)

There they go!! 178,000 walleye fingerlings rush out of Bad River's holding tank as it is emptied into the Bad River by hatchery crew members Ed Leoso and Ed Wiggins. The fingerlings were reared in one of the hatchery's rearing ponds. An additional 312,000 walleye fingerlings were stocked into the Kakagon River in June, and 90,000 were kept in the ponds for extended growth. (Photo by Sue Erickson)

Gathering wiigwaas for the elders

Keeping Ojibwe traditions alive

By Karen Danielsen, GLIFWC Forest Ecologist

On one particularly hot and muggy day in July, Leonard Sam drove from Mille Lacs in Minnesota to the Chequamegon-Nicolet National Forest in Wisconsin to gather wiigwaas (birch bark) for tribal elders, who now have difficultly negotiating the forest terrain. Leonard has been providing this assistance to Mille Lacs elders for over twenty years.

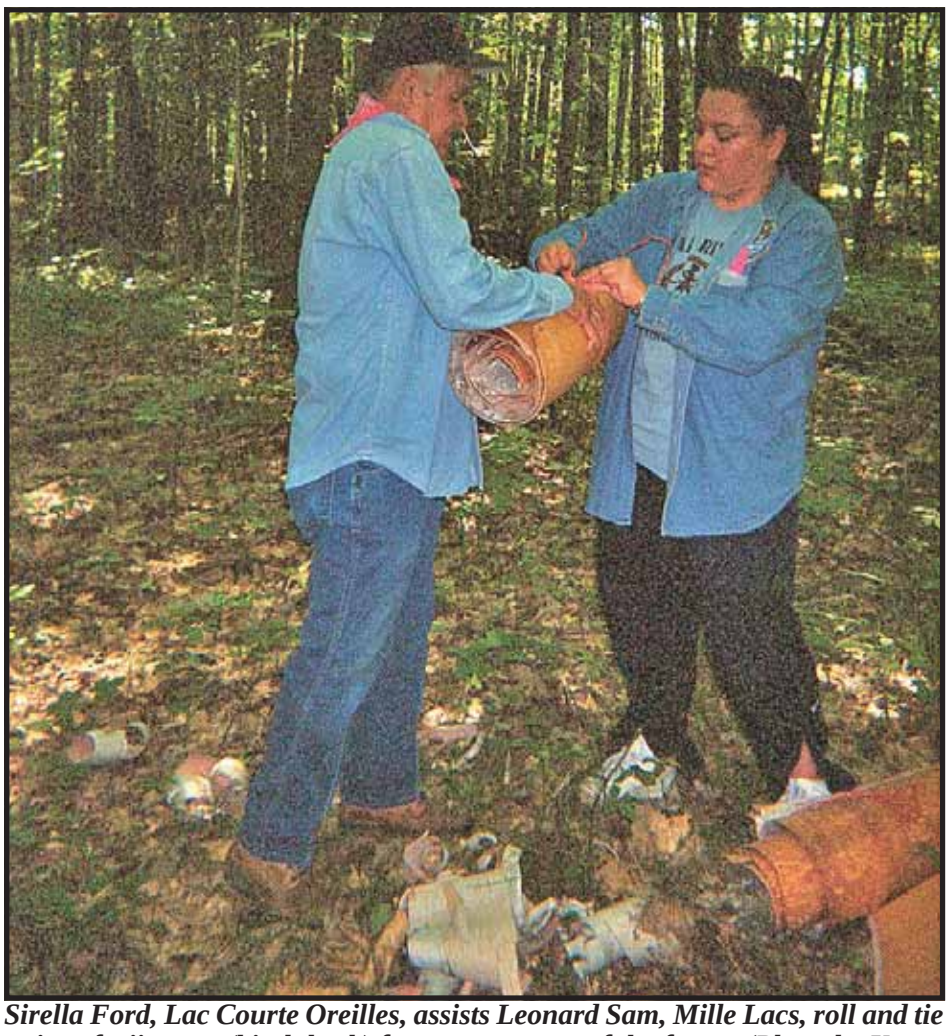
Along for this trip was Don Wedll to assist with the toting of equipment, rolling birch bark, and ultimately with the distribution of bark to the elders.

Sirella Ford, a GLIFWC employee and Lac Courte Oreilles member, also accompanied and helped them with the gathering. She appreciated learning from them and hearing the stories of past harvesting trips.

Before gathering, they offered asemaa (tobacco), showing their respect to wiigwaasi-mitig (the paper birch tree). Then they searched for trees from which to gather. In particular, they hoped to find smooth wiigwaas with few or very minute black lines, referred to as lenticels. Wiigwaas with too many or large lenticels loses flexibility and tends to crack.

Once Leonard located a suitable tree, he made a tiny nick with a knife to determine the readiness of the wiigwaas for gathering. Generally, as summer temperatures rise, typically during June and July, wiigwaas easily separates from the trunk. But, the timing varies from year to year and from tree to tree; hence the practice of testing a small section on each tree before attempting to peel off a larger section.

To peel a larger section, Leonard made a cut down the length of the selected tree only as deep as the width of wiigwaas, a depth which avoids injury to the tree. Regrettably, novice harvesters occasionally cut too deeply, often killing trees. For this reason, no one should attempt gathering wiigwaas without the guidance of more experienced harvesters.



Sirella Ford, Lac Courte Oreilles, assists Leonard Sam, Mille Lacs, roll and tie strips of wiigwaas (birch bark) for transport out of the forest. (Photo by Karen Danielsen)

"I have never worried about being without supplies in the forest. I grew up in a family that depended upon the forest. We hunted, fished and gathered plants. The forest provided most everything we needed."

—Leonard Sam, Mille Lacs tribal member

Don carried along a ladder so that Leonard could reach farther up on the trunks to the more desirable wiigwaas. Commonly, the rougher and less preferred wiigwaas tends to occur closer to the trunk bases. The ladder, though exhausting to lug about on such a blistering hot day, proved to be indispensable.

After Leonard peeled the wiigwaas, it was rolled and tied up for easier transport. When they ran out of nylon twine for tying up the rolls of wiigwaas, Leonard gathered wiigob (the inner bark of basswood) which worked as well, and even better, than the twine.

Leonard said, "I have never worried about being without supplies in the forest. I grew up in a family that depended upon the forest. We hunted, fished and gathered plants. The forest provided most everything we needed."

Sirella Ford gently handles a piece of freshly peeled wiigwaas (birch bark). (Photo by Karen Danielsen)

He remarked that he has been gathering wiigwaas since childhood. At that time, gathering for his mother, he did not use a ladder to reach the upper trunk portions. Instead, he climbed the trees! Nowadays, he prefers using a ladder.

By mid-afternoon, wiigwaas had been gathered from a few dozen scattered trees—a very successful day. Even the heat and biting flies inflicted upon the gatherers seemed worth the discomfort.

The gift of wiigwaas will be greatly appreciated by Mille Lacs tribal elders. They will use the wiigwaas to make miniature jiimaanan (canoes), makakoon (containers), and other similar items. The elders work with wiigwaas for enjoyment and for keeping traditions alive, which they hope will encourage tribal youngsters to do the same.

New turkey zones in northern WI

By Sue Erickson, Staff Writer

Odanah, Wis.—Wisconsin added three new wild turkey management zones—zones 44, 45 and 46—all within the ceded territories effective in 2006. The new zones reflect the expanding numbers and range of wild turkeys, according to Peter David, GLIFWC wildlife biologist.

Expansion in zone 46, which largely includes Bayfield and Douglas Counties and small segments of Burnett, Washburn, Sawyer and Ashland Counties, was given a boost by a trap and transfer operation that brought about 165 wild turkeys to the northern region. The operation appears to have been successful with the turkeys weathering the northern winter well. Two local chapters of the National Wild Turkey Federation, the Snowbelt Longbeards and Gitchee Gumee chapters, provided funds and volunteer time to the Wisconsin Department of Natural Resources for the turkey release.

"Since these three zones will not be in effect until 2006, the area they represent can be hunted by tribal members in the fall of 2005 under a bag limit of one per day. They also probably will not be opened to state hunters for fall hunting for several more years," David says.

The Voigt Inter-tribal Task Force will be setting wild turkey declarations for zones within the ceded territory during their August meeting.

The total wild turkey harvest for the 2005 spring treaty season was 15 birds, the largest number taken to date in either a spring or fall hunt. All birds were taken from areas that were zoned at the time.

Mizise (turkey).

Early manoomin outlook encouraging

By Peter David, GLIFWC Wildlife Biologist

Odanah, Wis.—Each year, I try to provide a preview of how the wild rice crop appears to be shaping up, and each year I cringe a little at doing it. Not that I don't like to write about, talk about, or think about manoomin, I do—the time spent working on this particular resource is probably the most interesting and rewarding part of my job.

But the nature of publishing the ***Mazina'igan*** is such that there is often a significant lag between the time I draft a piece and the time it reaches your eyes, and a lot can happen in between. High winds, heavy rains or summer hail can take a promising rice bed and leave it in shambles. When I guess right, by the time my predictions make it into ink, it can look like I am stating the obvious; when I guess wrong, folks must wonder what I was thinking—or worse. But here goes anyway: I'm betting things are going to be pretty good!

Water levels have generally been favorable—on the low end of average. This tends to promote good seed germination and more tillering, leading to nice dense stands as the summer proceeds. Development seems to be slightly on the late side, but not as late as last year, which was really unusual in that aspect. Most of the beds I have had the opportunity to peak at so far look encouraging. Some Minnesota beds may have already had some loss to heavy rains in the floating leaf stage, but if things hold together for the rest of the growing season, I think pickers will have good days ahead.

I am also generally encouraged by the long term perspective. Data from some of our inland lakes suggest that the past decade was a period of relatively high water levels when looked at from a perspective spanning a century or so. But recently, it appears that lakes have started coming down. If this is a true trend, and not just a temporary blip, it may mean that water levels, on average, could be more conducive to rice growth in the years ahead than in the years just behind us.

John Heim, Bad River tribal member harvests wild rice on Totogatic Lake. (GLIFWC staff photo)

As you think about heading out to pick this year, you may want to try plying the ol' push pole in some new waters. The cooperative wild rice restoration work that GLIFWC has done with other agencies is providing some new places to pick—and helping to preserve some others that might have been lost. The St. Croix Chippewa, GLIFWC and other partners helped restore the failing dam on the Radigan Flowage in southwest Douglas County, keeping those rice beds protected. The Lac Courte Oreilles Band and GLIFWC similarly contributed to the restoration of the Lea Lake Flowage in northcentral Rusk County (see article below), which also supports substantial beds.

The seeding program is also giving pickers new options. Many of these seedings have taken place on shallow impoundments built for waterfowl. These impoundments tend to offer all the habitat needs for manoomin, but often do not get colonized by rice naturally because of the limited natural dispersal of the seed.

Some successful sites include the Phantom and North Fork Flowages near Grantsburg, which are becoming some pickers favorite spots. Price County's Spring Creek Wildlife Area Flowages and Lower Steve Creek Flowage have become good rice waters. The Scott Creek Impoundment and Hiles Millpond respectively offer new opportunities in Oneida and Forest Counties.

And finally, don't forget the restoration efforts at some of the lakes which historically supported this valuable resource. Lac Vieux Desert, the headwaters of the Wisconsin on the Wisconsin/Michigan state line, held nearly 50 acres of wild rice last year—more than in half a century. We are hoping there will be even more this fall. Here you have the chance to knock some rice where your ancestors may have done it decades ago.

None of these new or restored beds would be possible without pickers who are willing to provide us with the green seed we need for planting. You can contribute to these efforts not only by selling or donating seed, but by harvesting that seed with care, and making sure that it is properly handled and stored. These steps help ensure the viability of seed until its planted, and reflect the appreciation and reverence we should all feel for the great gift of manoomin.

We need your wild rice seed!

Each fall the Great Lakes Indian Fish & Wildlife Commission coordinates an intertribal, inter-agency effort to restore manoomin to its historic abundance. You can help by selling your freshly harvested wild rice seed to us for use in reseeding programs both on and off area reservations.

If you are interested in selling or donating seed to these seeding efforts, please contact Peter David or Dan North at 715-682-6619 before harvesting. Miigwech!

Lea Lake Dam reconstructed

By Peter David
GLIFWC Wildlife Biologist

Question: When is a beautiful, 230 acre flowage supporting abundant wildlife, wild rice and fisheries resources not an asset to a county? Answer: When the dam that created it can no longer be trusted—and the price tag for its repair stretches to 6 digits.

The Lea Lake Flowage, located in north-central Rusk County, Wisconsin, at the junction of the Stoney and Spring Creeks, is located entirely on county forest lands. It supports the largest wild rice bed in the county, a high quality northern fishery, and provides habitat for a wide variety of furbearers and wetland dependent species.

A beautiful flowage in a beautiful setting! But when the dam that created the flowage began to fail, the county faced a big headache; how to find the nearly quarter of a million dollars needed to save Lea Lake.

The county reached deep into several of its own funding sources and came up with nearly a $100,000. A great start, but still leaving a long ways to go. Then County Forester Paul Teska went to work looking for partners that also appreciated the values of the flowage and benefitted from its existence.

The project caught the eye of tribal biologists familiar with the lake because of the rice beds it supports. Both the Lac Courte Oreilles Band and the Great Lakes Indian Fish & Wildlife Commission contributed funds they had obtained though the Bureau of Indian Affairs' Circle of Flight program. Money also came from the U.S. Fish and Wildlife Service, Ducks Unlimited, the Wisconsin Department of Natural Resources, and the Wildlife Restoration Association.

The County Highway Department tackled the job, following an engineering plan developed by a private contractor. Construction was started in the late summer of 2004 and was largely completed by deer season. County Forestry Committee Chairman Gene DuSell noted that the weather had cooperated throughout the crucial stages of the work.

Snow melt and rain refilled the flowage this spring, and by the dedication ceremony in June, the flowage was again teeming with wildlife, the surface of its upper reaches speckled with the thin green leaves of wild rice in the floating-leaf stage. Should make for a great place to be this fall.

For more information contact the Rusk County Forestry Department at (715) 532-2113.

Agencies which donated funds to the reconstruction of the principal spillway and the emergency spillway project on the Lea Lake Dam, and representatives attending were: U.S. Fish and Wildlife Service, NAWCA Grant (Division of Bird Habitat Conservation)—$50,000; Habitat Development Project—$5,000, Bill Peterson, Fish and Wildlife Biologist, represented the agency. Great Lakes Indian Fish & Wildlife Commission, Circle of Flight Funds—$25,000, Peter David represented this agency. Ducks Unlimited—$20,000, Bob Hegeholz represented the organization. Lac Courte Oreilles (LCO), Kristinine Maki, LCO Plant Ecologist, Circle of Flight Program—$10,000. U.S. Fish and Wildlife Service, $5,000. Wisconsin Department of Natural Resources, Mark Schmidt, DNR Wildlife Biologist, State Waterfowl Stamp Funds—$20,000. Wildlife Restoration Association—$10,000. Rusk County Conservation Aids Funds, $13,860. County Forest Habitat Development Aids—$8,000, and County Owned Dams—$76,446.25 for a total of $98,306.72. (Photo submitted)

GLIFWC's garden flourishes

Features native plants to be enjoyed by all

By Karen Danielsen, GLIFWC Forest Ecologist

Odanah, Wis.—What a difference a year can make! The native plant garden re-established last summer outside of GLIFWC's offices (see ***Mazina'igan*** Summer 2004 edition) has grown tall and lush with leaves and flowers of every shape and size covering practically every inch of bare soil.

Tanya Aldred, GLIFWC plant technician (and gardener extraordinaire), observes with amazement the abrupt transformation of the delicate, pint-sized seedlings she planted last summer to this summer's stout and hearty plants. "I'm astounded by the garden's growth," she says, "I'm also very thankful that the plants seem to be extremely healthy and well-nourished."

With success, comes the time-consuming and ceaseless task of thinning and pruning, without which, large plants such as sasao-kwanins (wild bergamot) and misudidjeebik (columbine) would surely overtop the smaller plants such as ziiginizh (harebell) and ode´imin (wild strawberry). Taller plants have also required the placement of metal support rings to help brace their elongated stems against the capricious lashings of repeated summer storms.

The garden awards visitors with treats for all the senses. The hot pink flowers of sasao-kwanins burst from its stem tips in tight round clusters. Its leaves waft a pungent minty aroma. Wezawab-gonik explodes with vivid crimson and yellow flowers, contrasting with its less pretentious feathery lime-green leaves.

Tanya Aldred, GLIFWC plant technician, enjoys the healthy blooms from GLIFWC's native plant garden that she restored last summer. (Photo by Karen Danielsen)

Hugging the soil with horizontal stems, ode´imin forms an attractive ground cover with tri-parted emerald-green leaves. Its fruit, though tiny and easy to overlook, is loaded with sugary tastiness.

Standing less than two feet tall, ziiginizh has drooping pale purplish-blue flowers that look like dangling miniature bells. In spring, its first leaves, round and plump, grow at the plant's base. Later, creating a whole new look, it develops chartreuse, linear grass-like leaves along its slender upright stems.

Sasao-kwanins (wild bergamot). (Photo by Karen Danielsen)

Ojîibwe´ owe´ cûnûn (small bedstraw) has slinky, reclining stems covered with whorls of dazzling green leaves, prickly to the touch. Migiziwibag (large-leaved aster) flaunts blue-green, slightly fuzzy, heart-shaped leaves that, true to its English name, grow large and robust. Though neither plant develops showy flowers, their foliage creates an enchanting living carpet.

Butterflies regularly visit the garden consuming nectar from bu´gisowe (joe-pye weed) and ozhaashijiibik (fireweed); both plants advertising their locales with towering pinkish-purple flowers. With flowers swaying in the breeze and butterfly wings keeping tempo, the garden remains in constant motion.

Bagizowin (swamp milkweed) also attracts butterflies with its rosy red flowers. In particular, monarch butterflies visit, not only as adults for the nectar, but also as caterpillars to feed on the leaves. By ingesting the milky sap found in the leaves, these caterpillars develop a toxicity that makes them a dreadful snack choice for predators. Remarkably, this toxicity lasts throughout the life of the adult butterfly.

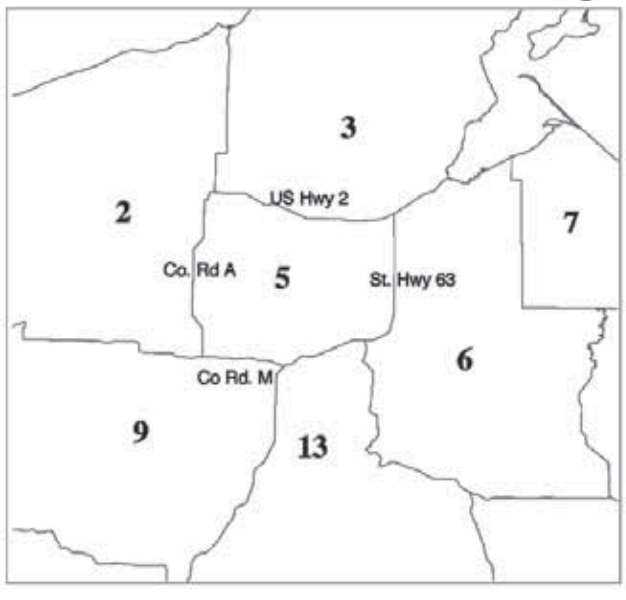
Wiingashk (sweet grass) occupies the garden's center, its lacy flowers blooming in late spring, before most other grass species. On warm summer days, it emanates a vanilla-sweet odor. Considered to be sacred by the Anishinaabeg, harvest of this grass occurs with respect, beginning with an offering of tobacco and ending with the meticulous braiding of its long leaves.

Bebeshigooganzhii-wiingashk (white sage), another sacred plant, also grows in the garden. Its velvety white-washed green leaves stand out against the brilliant green hues of surrounding plants, and its herbage projects a subtle earthy-mint scent.

As the days shorten, the flowers will produce seed. Eventually, leaves and stems will wilt and slump onto the soil. Until then, however, the native plant garden may be enjoyed by all.

Author's note: Ojibwe names taken from ***Plants Used by the Great Lakes Ojibwa****. This book is published by the Great Lakes Indian Fish & Wildlife Commission and is available for $20.00. To obtain a copy write: GLIFWC Plant Book, P.O. Box 9, Odanah, WI 54861; phone (715) 685-2150 or email pio@glifwc.org.*

Reminder—Tribes retain deer management unit 5



Wisconsin tribal hunters are reminded that they are to continue to register deer and recognize deer management unit 5 (upper left map). The Wisconsin Department of Natural Resources has eliminated unit 5, absorbing it into units 2 and 6 (upper right map).

If you have any questions, please call GLIFWC's wildlife section at (715) 682-6619.

Fisher, otter & bobcat declarations in the northern Wisconsin ceded territories for the 2005-2006 season

Fisher Zone	Tribal Declaration
A	225
B	210
C	160
D	160
E	15
F	15
Total	**785**

Otter—100
Bobcat—100

For more information contact the Great Lakes Indian Fish & Wildlife Commission's wildlife section at (715) 682-6619.

Students find summer work with Great Lakes section

Assessment work provides experience in their field

By Sue Erickson, Staff Writer

Odanah, Wis.—For GLIFWC's Great Lakes section, assessments begin early in the spring with sea lamprey trapping and juvenile sturgeon assessments in Lake Superior tributaries and continues through fall with lake trout assessment work in Lake Superior. "It would be a heavy schedule of field work for our three-man section," says Bill Mattes, Great Lakes section leader, "so additional staff is always welcome."

In order to help complete the heavy schedule of field work, the section generally brings temporary help aboard during spring and summer months, and 2005 was no different. The section welcomed additional manpower from Travis Neebling and William (Tony) Gilane, a Bad River tribal member, this year.

A native of suburban Detroit, Neebling came to GLIFWC as a Northland College (Ashland, Wis.) sponsored intern. Actually, he worked with GLIFWC in 2004 as a wild rice intern, but returned in 2005 as a fisheries intern, which is more in his line of interest.

He began work in mid-April and will be with GLIFWC through the second week in August. He has completed his senior year at Northland College, but has a fifth year remaining to finish up a five-year program with a double major in fish and wildlife ecology and biology.

Neebling assisted with the sea lamprey control work—trapping sea lamprey and recording data for population estimates, with juvenile sturgeon assessments and spent several weeks out on the big lake completing siscowet assessments in the Michigan waters of Lake Superior near Keweenaw Bay. Siscowet assessments involve setting and lifting assessment nets at predefined locations and recording data.

Neebling appreciates the experience in fisheries work and hopes to find a position working in inland fisheries management after completing his studies.

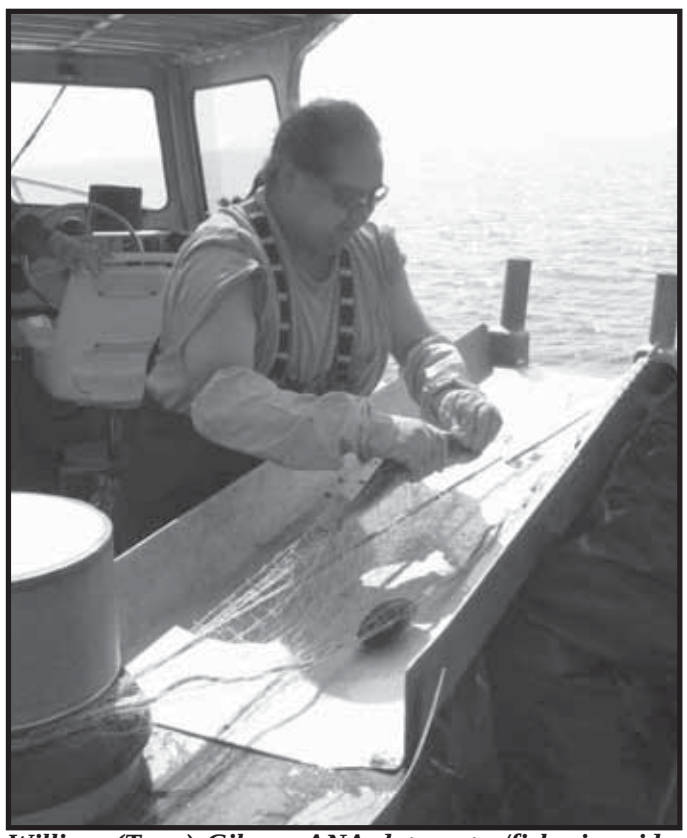
Tony Gilane's three-month position with the Great Lakes section was made possible through an Administration for Native Americans (ANA) grant. He started on April 25 and will work through August 29, helping with the same assessment activities as Neebling. When not in the field, the two work on data entry of information gathered during assessments.

The crew also assisted the Keweenaw Bay Indian Community Natural Resources Department and the US Fish and Wildlife Service with adult sturgeon assessment work this summer. Gilane found this particularly enjoyable, considering the cultural significance of the sturgeon, name', to the Ojibwe people. "Helping to preserve the "King of all Fish" was important and satisfying to me as an Ojibwe," he states.

Like Neebling, Gilane is a Northland College student studying natural resource management with a wildlife and ecology major. He started his college career at Lac Courte Oreilles Ojibwe Community College, where he also worked as an intern in wetlands research and with a mercury-in-fish study at the UW-Milwaukee Great Lakes Water Research Center.

Prior to taking the position with the Great Lakes section, Gilane worked for GLIFWC in several other capacities, helping out with a telephone survey relating to mercury-in-fish studies and helping prepare mercury sampling kits for wardens who collect walleye samples in the spring.

Gilane regards the summer work as a good opportunity to decide what field of natural resource management is most attractive to him. He is seeking his niche', whether it is in fisheries assessment or even in conservation law enforcement, and is thankful for the experience the position has provided for him.



William (Tony) Gilane, ANA data entry/fisheries aide, removes a siscowet lake trout from a gill net set in Lake Superior's Keweenaw Bay. The siscowet will later be dissected to remove its ear bones and stomach; the ear bones are used to determine age, and the stomach is further dissected to see what the fish eats. (Photo by Bill Mattes)

Northland College intern Travis Neebling assists the Great Lakes Section by boxing gill net set in 250 feet of water to sample the off-shore fish community of Keweenaw Bay, Michigan. (Photo by Bill Mattes)

Water quality forum set for October

Lac du Flambeau, Wis.—Midwest Environmental Advocates, Inc. is working with an alliance of native and non-native organizations to hold the first ever *"Joining the Waters: A Forum on Tribal Sovereignty and Water Quality"* in Wisconsin. The Forum will be held on the evening of October 21 and all day on October 22, 2005 at Lake of the Torches Convention Center on the Lac du Flambeau reservation in Lac du Flambeau, Wisconsin.

Recognizing the need for greater collaboration and cooperation between native and non-native conservationists, the Forum will explore issues and threats to our collective right to clean water and discuss Native American sovereignty and its implications for water quality in Wisconsin's lakes and rivers. A keynote address will be given by Josephine Mandamin, who walked around Lake Superior to raise awareness of water quality issues.

The Forum will provide a unique opportunity for collaboration between native and non-native people working to protect Wisconsin's water legacy. Participants will hear speeches about tribal sovereignty and the history of Indian tribes in Wisconsin, tribal cultural uses of water, and the role of community groups in supporting tribal sovereignty and combating racism. In addition, breakout sessions will be held on the topics of water use and privatization, mercury, shoreline development and mining, to name a few.

For more information and early registration, go to Midwest Environmental Advocates' website at *www.midwestadvocates.org/archive/northernrivers/forum*.

Comment period open for water diversion agreements

Draft agreements designed to update the way the Great Lakes and the waters of the Great Lakes basin are managed and protected, have been released for a 60 day public comment period. These agreements would govern water diversions from the Great Lakes basin as well as water uses within the basin.

Responding to comments on a 2004 draft of these same agreements, the revised agreements have been strengthened to minimize the potential for water to be diverted outside the Great Lakes basin.

Diversions would be prohibited with limited exceptions for communities that straddle the Great Lakes boundary, interbasin transfers (between two Great Lakes), and for communities not within the basin, but within a county that is partially in the basin. Even these exceptions have significant conditions before a diversion could be permitted.

The Council of Great Lakes Governors is accepting comments on the revised drafts. You can find copies of the agreements and submit comments at its website, *www.cglg.org*.

The deadline for comments is August 29, 2005.

An unwanted resurgence
Lamprey numbers climb

By Bill Mattes, GLIFWC Great Lakes Section Leader

Odanah, Wis.—Since 1986, GLIFWC has cooperated with the U.S. Fish and Wildlife Service (USFWS) and the Bad River Band of Lake Superior Chippewa to trap sea lampreys as they migrate upstream in the Bad River to spawn.

The information collected by GLIFWC is used by the USFWS and the Great Lakes Fishery Commission (GLFC), as part of a larger effort to reduce the numbers of sea lamprey preying on lake trout, whitefish, and other Lake Superior fishes.

Lampreys in Lake Superior, and in many of the Great Lakes, have made an unwanted resurgence in the past five years (see graph). In response, the GLFC, along with the USFWS, have stepped up treatment efforts on the lake, which includes treatment of the Bad River with the lampricide TFM (3-trifluoromethyl-4-nitrophenol) in the fall of this year.

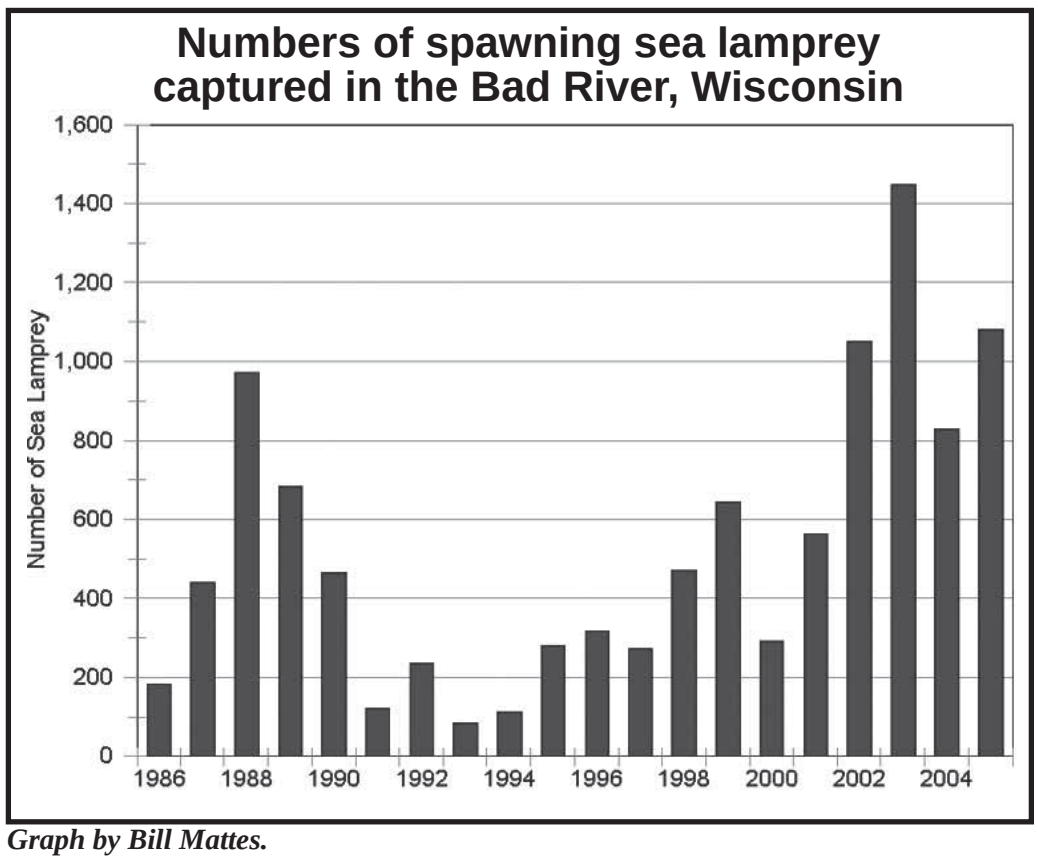
From late-April to mid-June, GLIFWC staff captured 1,118 adult spawning lamprey. Of these 508 were marked and released to determine a population estimate for the entire population in the river, while 572 were destroyed.

In Lake Huron and northern Lake Michigan, sea lampreys prey heavily on may fish species. More fish are destroyed by sea lampreys than all other sources of mortality combined, including natural causes and sport, tribal and commercial harvest.

In 2005, 12,497 adult lampreys were estimated to have ascended the Bad River to spawn and then die. This population estimate provides managers with valuable information on the success of the control program during previous years.

Lampreys spawning in 2005 are returning to the stream after migrating out eighteen months previous—in the fall of 2003. At the time of recapture, lampreys have already done their damage to the Lake Superior fish population and are in the process of spawning then dying in the river, leaving only their offspring to grow and damage the fish populations in the future.

Each female lamprey can lay over 100,000 eggs, which makes physical removal of adults an inadequate means for control on a free-flowing system such as the Bad River, where only about 5% of the adult population is trapped.



Graph by Bill Mattes.

However, future research may lead to more efficient trapping methods. One such method that shows promise is the use of pheromones.

Pheromones are chemicals given off by animals. Some of these chemicals, such as sex pheromones, can be used to attract animals. For lamprey, larval or young lampreys, give off a pheromone which attracts adult lampreys to streams where the larval lampreys are living. Larval lampreys can spend up to seven years in the stream prior to migrating out to prey on fish for 18 months.

Sterilized lampreys released into St. Mary's River

Marquette, Mich.—The St. Mary's River produces more parasitic lampreys than all Great Lakes tributaries combined. To combat this, the U.S. Fish and Wildlife Service (USFWS), Marquette, Michigan, and the Department of Fishes and Oceans, Sault Ste. Marie, Canada, as contracted agents of the Great Lakes Fishery Commission (GLFC), are releasing about 35,000 sterilized male sea lampreys into the St. Mary's River. The release began around mid-May and will continued through late July.

Prior to the mid-1970's, the St. Mary's River has been an inhospitable place for sea lampreys to live and produce. Water quality and habitat improvements during the past couple of decades have turned the river into a producer of thousands of sea lampreys annually. The river's tremendous size and flow volume prohibit effective sea lamprey control using conventional methods.

Sea lampreys attach to fish with a suction cup mouth and rasp through the fish's scales and skin with a sharp tongue. A sea lamprey will destroy up to 40 pounds of fish during the 18 months of its adult life in the lakes.

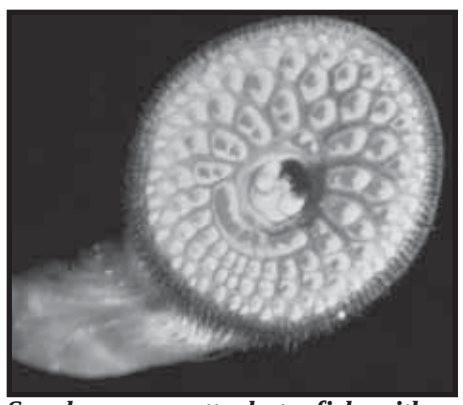
In Lake Huron and northern Lake Michigan, sea lampreys prey heavily on many fish species. More fish are destroyed by sea lampreys than all other sources of mortality combined, including natural causes and sport, tribal and commercial harvest.

The GLFC and its partners have developed an integrated, cost-effective strategy to control sea lampreys in the St. Mary's River. This strategy includes trapping lampreys, release of sterile male lampreys and application of granular Bayluscide, a lampricide, to specific "hot spots" where concentrations of larval lampreys are found.

Traps in the St. Mary's River and around the Great Lakes remove spawning sea lampreys and supply males for sterilization. Experimental field and laboratory studies have demonstrated that male lampreys can be sterilized without affecting their spawning behavior.

When released in streams, sterile male lampreys spawn with females but the eggs from these matings do not survive. Sterile male lampreys die after spawning.

Sterile male lamprey releases, combined with trapping in the St. Mary's River, have the potential to reduce the number of larval sea lampreys produced in the river by more than 90 percent.



Sea lampreys attach to fish with a suction cup mouth and rasp through the fish's scales and skin with a sharp tongue.

Lake trout numbers in the Great Lakes have been increasing since the advent of lamprey management and there is promise of self-sustaining populations through natural reproduction. Today, most of the lake trout in the Great Lakes are produced and planted by USFWS hatcheries. Sea lamprey management also benefits brook, brown and rainbow trout, and coho and chinook salmon planted in the lakes by the states and provinces bordering the Great Lakes.

The GLFC emphasizes that the fishery now enjoyed in the Great Lakes is dependent on sea lamprey management and would soon decline or disappear if the control program were discontinued.

More information can be obtained from the Great Lakes Fishery Commission website at *www.glfc.org*.

More fish are destroyed by sea lampreys than all other sources of mortality combined, including natural causes and sport, tribal and commercial harvest. A sea lamprey will destroy up to 40 pounds of fish during the 18 months of its adult life in the lakes. (Photo by Charlie Otto Rasmussen)

The return of namé: A slow process

Lake Superior—Namé, or lake sturgeon, once plentiful in Gichigami (Lake Superior) are making a slow but steady comeback. Fishing, both targeted and incidental, and dams, both for logging and hydropower, reduced the number of namé drastically during the mid-1800's and through the 1900's.

Today, however, the Chief of the Fish Clans—Ogimaa, is making a comeback. Many of the rivers damaged by logging have started to regain their former stability. Some dams have been removed. At other dams the water flow is regulated to leave adequate amounts of water in the stream for successful spawning and survival of young fish, and fishing has been greatly reduced.

Much work still needs be done if the "King of Fishes" is to return to its former glory. In 2003, a rehabilitation plan for lake sturgeon, edited by Dr. Nancy Auer, was published by the Great Lakes Fishery Commission (GLFC).

This plan, which was adopted by the Lake Superior Committee of the GLFC, acknowledges that there is yet a lack of information on the biological characteristics and population abundance of lake sturgeon, but that the goal remains to maintain, enhance and rehabilitate self-sustaining populations where the species historically occurred basinwide.

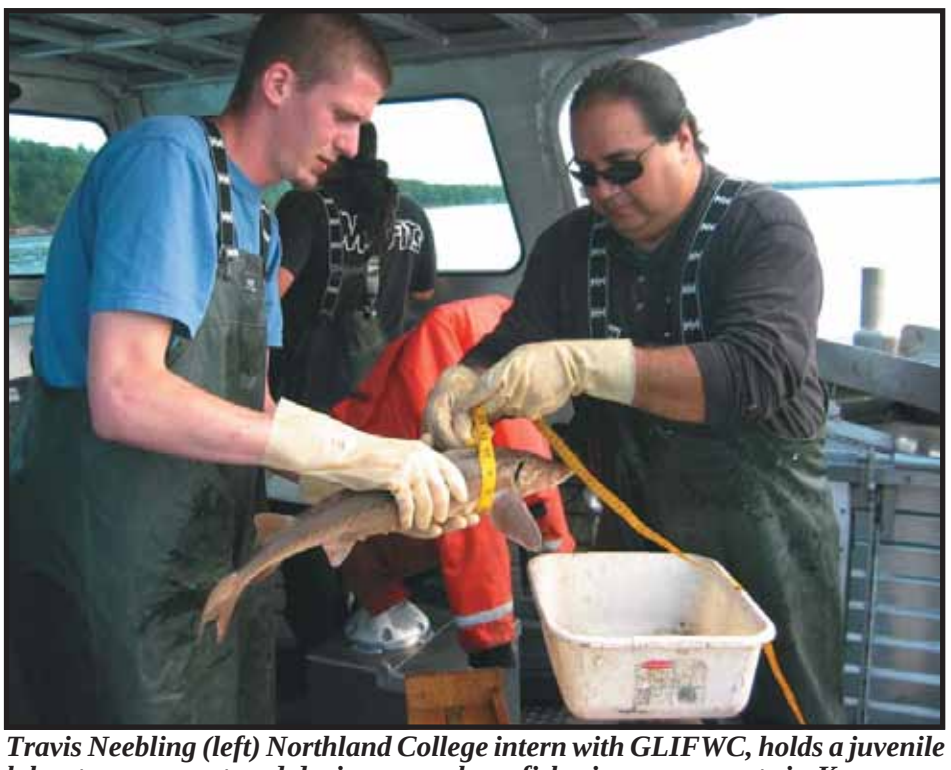
The plan states that, "Measuring progress toward the rehabilitation goal will be accomplished by monitoring the density of adults in spawning tributaries, the presence of drifting larvae in spawning streams, the presence of juveniles in nearshore habitats, and the capture of adults at historical spawning sites."

In Lake Superior, GLIFWC in cooperation with member tribes, federal, and state natural resource agencies, has been working to monitor the lake sturgeon population. In one project, GLIFWC in cooperation with the Bad River Natural Resources Department has obtained annual information on juvenile sturgeon in Lake Superior near the mouth of the Bad River. Data on distribution, movement, and biological characteristics have been collected at least one time per month during June to August since 1994.

During the first nine years of the assessments, 242 lake sturgeon were captured, of which 234 were measured for total length which averaged 26.5 inches; 176 for girth which averaged 10.2 inches, and 187 for weight which averaged 3.5 pounds. The average estimated age for lake sturgeon, based upon total length, was 5.9 years.

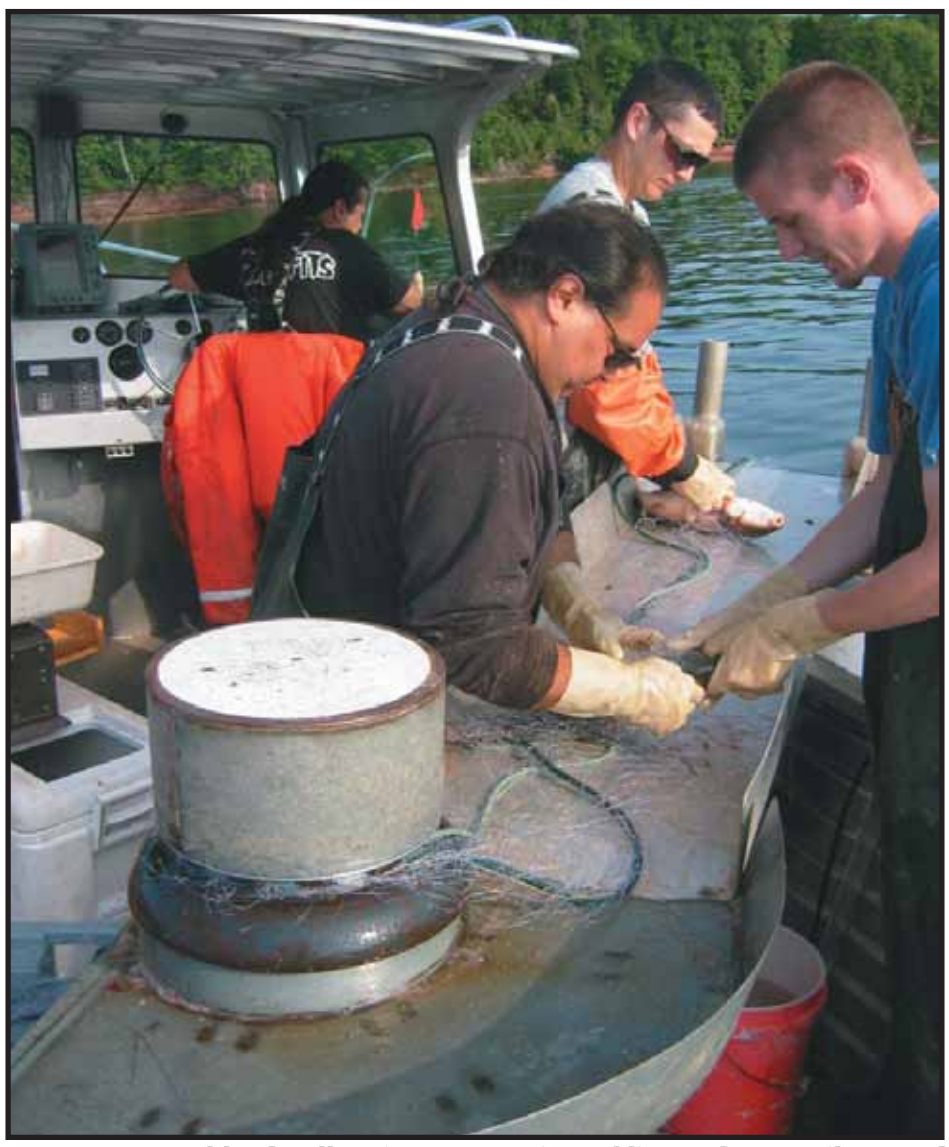
Average growth in total length for recaptured lake sturgeon was 1.8 inches for those at large one season, 4.0 inches for those at large two seasons, and 12.3 inches for those at large four seasons. This is a clear indicator of the slow growth exhibited by lake sturgeon.

Lake sturgeon do not reach sexual maturity until 20 years of age, at which time they will grow even more slowly. So, based upon the average age for namé captured in the GLIFWC assessments, fish released in 1994 should show up as spawning adults as early as 2008!



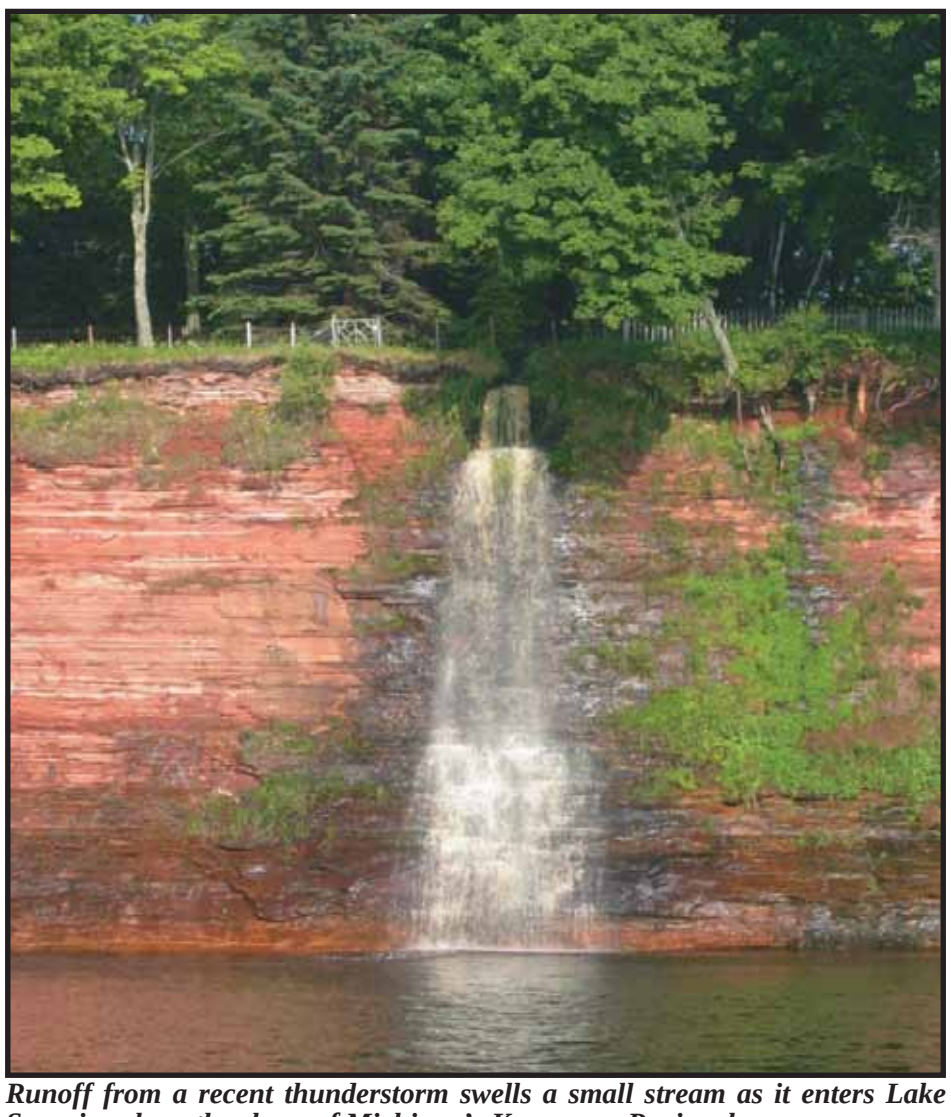
Travis Neebling (left) Northland College intern with GLIFWC, holds a juvenile lake sturgeon captured during near shore fisheries assessments in Keweenaw Bay, Michigan, as William (Tony) Gilane, ANA fisheries and data entry aide, measures the fish's girth.

Article & photos by Bill Mattes, GLIFWC Great Lakes section leader



GLIFWC's Northland College interns, Travis Neebling and Tony Gilane, and Nate Bigboy, ANA fisheries technician, work to free white suckers from an assessment net set in the near shore waters of Keweenaw Bay, Michigan, while in the background Mike Plucinski, GLIFWC Great Lakes fisheries technician, captains the boat.

GLIFWC's 2003 poster highlighted Namé (sturgeon). To receive a copy write to: GLIFWC, Public Information Office, P.O. Box 9, Odanah, WI 54861; phone (715) 685-2150 or email pio@glifwc.org. One copy of the poster is available free upon request, additonal copies are $2.00 each.



Runoff from a recent thunderstorm swells a small stream as it enters Lake Superior along the shore of Michigan's Keweenaw Peninsula.

Traditional Ojibwe dollmaker demonstrates skill at Smithsonian

By Sue Erickson, Staff Writer

Fond du Lac, Minn.—For Ojibwe dollmaker Joyce LaPorte a fascination with traditional Ojibwe dolls began early at the age of five when she received a small doll from her grandmother. Fashioned from buckskin scraps and stuffed with the dried fluff from cattails, the tiny, four-to-five inch, soft doll fit nicely in the five-year old's small hand—a treasured gift from grandmother to one of the oldest granddaughters.

Curious about the lack of features on the figures little face, LaPorte asked "why?". Her grandmother took her hand and led her to the creek. They both leaned over the bank and saw their faces reflected back. "Whose face would we use?" her grandmother asked. Her reply was "No one's." In other words, the doll would not assume someone's identity.

The "faceless" doll was common among the Ojibwe as well as dolls made by other tribes. According to Mary Jane Lenz in *Small Spirits*, dolls had a longstanding role in many Indian cultures, sometimes representing spiritual powers in medicinal rites and ceremonies. Perhaps because of this spiritual connection, care was taken not to give a toy doll features that might identify it with an actual person. Lenz also notes that some Indian people say the faceless doll encourages children to use their imagination, in contrast to the modern "Barbie" that leaves nothing to the imagination.

LaPorte, a Fond du Lac tribal member whose Indian name is giiwedin-anangkwe (North Star woman), has been creating dolls for the past twenty years.

Yasamin (left) and Sage Graff joined their grandmother Joyce LaPorte, Fond du Lac, at the Smithsonian's National Museum of the American Indian, Washington, D.C. this summer. LaPorte demonstrated making traditional, buckskin Ojibwe dolls at the museum. (Photo submitted)

Giiwedin-anangkwe has been creating dolls for the past twenty years. (Photo by Sue Erickson)

She uses her grandmother's gift as a prototype, although she does variations in size, sometimes taking orders for larger dolls. A few of the materials she uses have changed slightly.

Currently, LaPorte stuffs the dolls with cleaned buffalo hair versus the dried cattail fluff used by her grandmother. The cattails need to be harvested in the late fall, when the plant is done blooming, an activity which got difficult for LaPorte with age. Consequently, she switched to buffalo hair. The dolls are still soft, but a little less floppy than the cattail-stuffed dolls. She uses split buckskin for the body because it keeps its shape and uses a more supple, tanned hide for the clothing.

"In the old days, the dolls were made during the winter," LaPorte explains, "using only small scraps left from fashioning needed items, like moccasins and clothing." This may be why the dolls were often small. While her grandmother used her own hair on LaPorte's original toy doll, she uses clean horse hair on the dolls she makes and sews them by hand with artificial sinew. Originally, the dolls were sewn with a thread obtained from the outer bark of the stinging nettle.

Each doll is given long hair. The importance of long hair stems from an Ojibwe legend saying that if you don't hear your native name being called, you can grab onto someone's long hair and cross over after death, LaPorte says. This is also one reason why it is considered important to be given an Indian name, because that's how you will be addressed in the after-life.

Her dolls are dressed simply, adorned only with a few beads, following the example of the doll crafted by her grandmother. However, she does make dolls for special orders that may have particular fetishes inside. For example, she has made several pregnant dolls or dolls with turtles inside for people hoping to start a family.

Crafting the dolls is something she has shared with her grandchildren. Several of them made their own dolls at a young age, which is important to LaPorte, because she would like the dolls to "live on" in her family.

LaPorte's dolls represent one form of Ojibwe doll. According to Frances Densmore in *Chippewa Customs*, dolls were fashioned from a variety of natural materials, including from large tufts of long Norway pine needles, roots of bulrush, and basswood leaves. Some were also cut from the inner bark of slippery elm, and others made from grasses wound with thin strips of basswood fiber.

LaPorte recently returned from a four-day session at the Smithsonian's new National Museum of the American Indian in Washington, D.C. She along with a Seneca woman demonstrated their doll-making at the museum from June 16th to June 20th. She will also be at the Madeline Island Museum this summer.

LaPorte brings her dolls to a few art shows and pow-wows for sale and also takes orders. She enjoys making dreamcatchers as well, using red willow which is "kinnickinnick," Indian tobacco and sinew. But it is the dolls that remain so special to her. "They remind me of my grandmother," she says.

She can be contacted at 1282 Mission Road, Suite 15, Cloquet, Minnesota, 55720.

Ojibwe ancestors remembered on Madeline Island

By Chantal Norrgard HONOR intern

Madeline Island (LaPointe, Wis.)—A beautiful day greeted those attending the Madeline Island memorial ceremony on Saturday, May 28th in Ojibwe Memorial Park. On the Wednesday before, a Sacred Fire was lit that was kept burning for four days.

On the 4th day, prayers and a feast were offered to Ojibwe ancestors buried on the island. Participants also offered asemaa (tobacco) to the Sacred Fire. As is custom, the old Medicine Tree was removed and the new one was erected. The ceremony pays respect to Ojibwe ancestors buried on the island.

Of great significance to the gathering is the early and more recent history surrounding the island, known as moningwanekaaning, home of the yellow-breasted flicker, to the Ojibwe. The park is adjacent to a burial ground, and graves of important leaders such as Peshike (Chief Buffalo) and Oshaga remind us of centrality of Madeline Island as a historical, spiritual, and ancestral place to Ojibwe. Peshike and Oshaga are particularly remembered for their heroic trip to Washington D.C. to stave off the potential of removal.

While the park itself is free from the threat of development at the present, the Madeline Island Marina, where a canal was dug to allow the entrance of sailboats, and the nearby golf course development are painful reminders of the disregard for Ojibwe remains excavated with the canal.

Sylvia Cloud, one of this year's coordinators of the gathering, recalled visiting the grounds as a child and the sadness she felt returning to the place as an adult, observing that the area where she had walked was now part of the marina. Cloud called for the further repatriation of Ojibwe remains and items, which still lie in museums, such as the Smithsonian.

The gathering was also a reminder of the strength of early Ojibwe organizers of the ceremony and the cooperation between the tribes and local community members to prevent further development in the early 80's when a proposed condominium development threatened what is now the Ojibwe Memorial Park.

Red Cliff elder Leo La Fernier, who was instrumental in organizing the first gathering, recalled that "when we dedicated the park, we started the gathering on the basis of giving thanks to our ancestors and the people in the town of La Pointe who helped stop the development."

Robert Finman, Madeline Island landowner, was instrumental in organizing a fundraiser in order to purchase a section of the property. The property was then deeded to the town and made into a permanent park. Local community member Tom Nelson (of Tom's Burned Down Café fame) purchased the golf course and gave the deed to 1,000 square feet of land, including Oshaga's grave, also contributing to the creation of the park.

He stressed his connections with members of the Anishinaabe **(See Ojibwe ancestors, page 16)**

The Medicine Tree erected at Ojibwe Memorial Park pays respect to Ojibwe ancestors buried on the island. (Photo by Chantal Norrgard)

Healing Circle Run unites eight Ojibwe reservations

Began in '89 in response to racist landing protests

By Sue Erickson, Staff Writer

Red Cliff , Wis.—"Healing Circle Run" participants stopped at the Red Cliff reservation on July 11th. Sixteen years ago, walkers and runners also enjoyed the hospitality of the Red Cliff band during the now traditional, mid-July run/walk that connects eight northern Ojibwe reservations in Wisconsin, Minnesota and Michigan.

The Healing Circle Run grew out of the 1989 Solidarity Run, whose course connected six Wisconsin Ojibwe reservations in the aftermath of violent, anti-Indian protests at Wisconsin boat landings during the treaty spring spearing seasons.

While the massive, ugly protests have diminished to a few, isolated incidents each season, runners/walkers found both the physical and spiritual components of the run were powerful healers—not only for social illnesses, but for personal problems and illnesses as well. And so, the tradition has continued annually, with each segment of the run/walk beginning and ending with a healing circle—a time for thought, for prayer, for saying miigwech, for sharing joys or sorrows.

The run is open to runners and walkers, young and old, Native or non-Native people—anyone who wants to go a mile or more as part of the seven-day course that begins and ends at the Lac Courte Oreilles reservation.

July 12th was to be another sultry summer day just as those that had proceeded it in the week of the run. But the morning air was still somewhat cool and refreshing as a small group gathered by Red Cliff's Buffalo Art Center overlooking a calm, hazy Lake Superior for ceremonies before heading down the road toward Fond du Lac's Black Bear Hotel and Casino south of Cloquet, Minnesota—the day's destination.

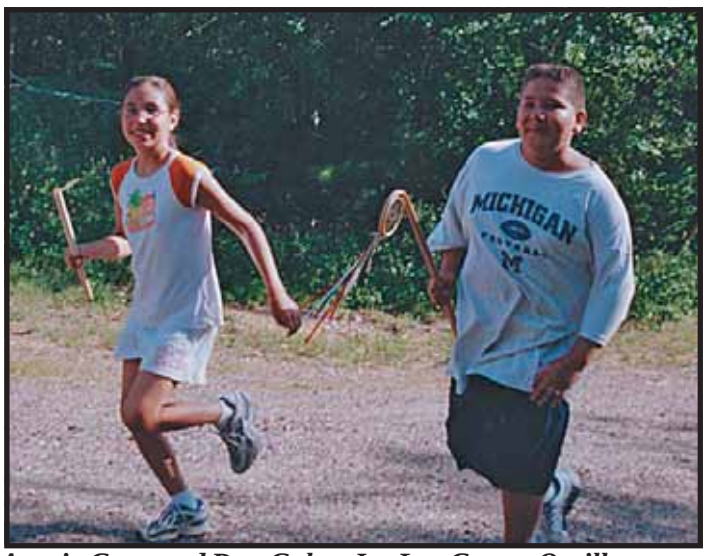
Three pipes were lit that morning—a runner's pipe carried by Neil Kmiecik, GLIFWC Biological Services director and core runner, a pipe carried by Jim Schlender, GLIFWC Executive Administrator and core walker, and a woman's pipe carried by Agnes Fleming, Lac Courte Oreilles tribal member and core walker. As Schlender stated, all the prayers from the circle went up to the Creator with the smoke of the pipes.

Sue Nichols, Bad River tribal member and Three Fires Society member, spoke words and offered a song on behalf of nibi (water). As everyone looked out at the expanse of Lake Superior, they were reminded of the importance of clean, pure water to our survival and to the survival of all on Earth. While women especially speak for the water, the need is there for all of us to care for the water. Water was passed to all participants as part of the ceremony.

After the ceremonies, Grandma Genny (Genivieve Goslin), 85 years old, led the way out of Red Cliff at the start of the day's journey. Grandma Genny has always walked a mile or so in support of the Healing Circle Run as it passes through Red Cliff reservation—that is now a tradition.

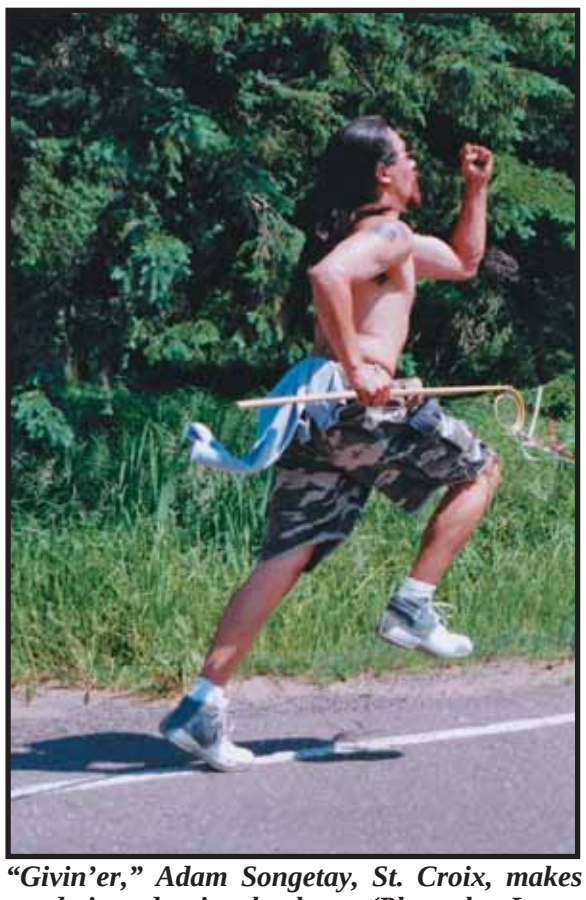
Besides Schlender, Fleming and Kmiecik, the core team included Margaret Schlender, Jason Schlender and giiwegiizhigookway Martin. Information on the Healing Circle Run can be found at the GLIFWC website: *www.glifwc.org* under "events."

Runners from St. Croix helped chalk up miles during the 2005 Healing Circle Run. (Photo by James Schlender)



Acacia Crow and Dan Gokee Jr., Lac Courte Oreilles, were among many youth who made tracks during this year's run. (Photo by James Schlender)

During the morning ceremony, GLIFWC Executive Administrator James Schlender holds the staff, Mitigonaabe, given to GLIFWC by Nee-gaw-nee-gah-bow (Eugene Begay), asking participants to pray for Nee-gaw-nee-gah-bow as they ran or walked. (Photo by Sue Erickson)



"Givin'er," Adam Songetay, St. Croix, makes good time despite the heat. (Photo by James Schlender)

Two veterans of the annual Healing Circle Run share a hug. Genevieve Goslin, Red Cliff, and giiwegiizhigookway Martin, Lac Vieux Desert Band. Grandma Genny traditionally joins the runners and walkers as they approach and leave the Red Cliff reservation each year. Giiwegiizhigookway participated in the first Solidarity Runs in 1989 and 1990 and has been part of many subsequent run/walks over the past sixteen years. (Photo by Sue Erickson)

Sue Nichols (center), member of the Bad River Band and Three Fires Midewiwin Society, sings a song in honor of nibi (water) at a Healing Circle Run morning ceremony on the Red Cliff reservation. Assisting with the water ceremony were her granddaughter, Selena Zarate, Milwaukee, and Margaret Schlender, Lac Courte Oreilles Band, also a Three Fires member. (Photo by Sue Erickson)

GLIFWC wardens offer exceptional assistance with tribal fee-exempt national forest camping

By Karen Danielsen
GLIFWC Forest Ecologist

Odanah, Wis.—Since the recent implementation of fee-exempt camping on national forest lands for tribal members exercising treaty rights within the ceded territories, GLIFWC wardens have kept busy explaining the provision to both tribal and non-tribal publics. Essentially the "ambassadors" for GLIFWC, the wardens have effectively responded to the general lack of awareness and widespread misconceptions regarding this provision.

Wardens Vern Stone, Mike Wiggins, and Mark Bressette met in July to discuss some of their experiences. They all stated that they have been called to various incidents concerning fee-exempt camping in which inaccurate assumptions by one or more individuals have threatened to escalate seemingly innocuous encounters to more serious confrontations.

Often these incidents entailed non-tribal campers assuming that tribal fee-exempt camping constituted a special privilege. They perceived an "inequity" that seemed to be "unfair." The three wardens agreed that, in these cases, they spent a good deal of time explaining that camping has always been a tribal activity associated with the exercise of treaty rights. Thus as a component of treaty rights, camping must be necessarily accessible and free for tribal members.

Sometimes, the wardens had to advance a step further and provide basic lessons in treaty rights, handing out literature prepared by GLIFWC's Public Information Division. Eventually, most non-tribal campers understood and respected the concept of treaty rights and the necessity for tribal fee-exempt camping.

GLIFWC Warden Mike Wiggins talks with managers of the Two Lakes Campground in the Chequamegon-Nicolet National Forest. (Photo by Karen Danielsen)

For other incidents, neither the affected tribal nor non-tribal campers fully understood the tribal-approved regulations associated with fee-exempt camping, which led to intense arguments. All three wardens described using an inoffensive approach, and clearly communicating the regulations, to defuse the situations.

Essential to implementing the tribal fee-exempt camping has been the communication link between GLIFWC and the national forests, particularly the Chequamegon-Nicolet National Forest in Wisconsin. Initially, non-compliance of regulations by tribal campers seemed to receive extra attention by the national forests—likely, and understandably, due to the novelty of fee-exempt camping and an uncertainty of suitable responses.

As the communication link between GLIFWC and the national forests matured, reaction to campground incidents involving tribal campers fell to more appropriate levels. Indeed, national forests reported a rising comfort level among their employees; and Stone, Wiggins and Bressette all attested to their increased ability, as GLIFWC wardens, to facilitate and contain minor incidents.

During their July discussion, the wardens expressed optimism that as tribal fee-exempt camping becomes more common, controversies will subside. However, they also recognized that educating the uninformed of the significance of treaty rights and detailing the scope of treaty rights, including the need for fee-exempt camping, will always be a necessity and one of their responsibilities, given their frequent visibility in the public eye.

GLIFWC wardens complete summer safety classes

Hunter Safety to be offered late summer/fall

Summertime safety classes were well attended on several GLIFWC member reservations this summer. GLIFWC conservation officers who are certified instructors offer a series of safety classes through the year. This summer ATV Safety classes were held at the Bad River, Red Cliff and Mole Lake reservations, and one Boating Safety class was completed at the Lac du Flambeau reservation.

Hunter Safety classes have not yet been scheduled but will be offered this fall. Contact the GLIFWC satellite enforcement office on member reservations for more information.

In addition to offering classes, one GLIFWC warden from each of the GLIFWC's three enforcement districts attended a US Forest Service training on the use of new technology. Michigan wardens and GLIFWC dispatch also attended a July 20th training on the use of a new 800 megahertz radio system now in place in Michigan.

On-rez Boating/ATV Safety Classes completed

Participants successfully completed a Boating Safety Class at the Lac du Flambeau reservation that was provided by certified GLIFWC conservation officers. Pictured above, front row are: Raymond Zortman, Kiah Pfeffer, Jenna Unban, Tanner Davids, and Zachary Mann. Second row: Dylan Smith, Jeremiah LaBarge, Kyle Ayvazzadeh, and Raymond Zortman; Back Row: Roger McGeshick, GLIFWC warden; Jonas Moermond, GLIFWC warden, and Fred Maulson, GLIFWC chief of enforcement. Not pictured is Mike Wiggins, Bad River warden, who is pursuing certification as a Boating Safety instructor. (Photo by Mike Wiggins)

Successfully completing the ATV Safety Class offered by GLIFWC wardens on the Mole Lake/Sokaogon reservation this summer are: (front row) Jacob Randall, Cameron McGeshick, Jacob McGeshick, William Sekel, and Gabriel Gilpin. Back Row: GLIFWC Warden Roger McGeshick, Thaddeus Byrne, Kody Smith, Tyler Sekel, Feather Randall, and GLIFWC Wardens Jonas Moermond and John Mulroy. (Photo by Fred Maulson)

Pardun, former GLIFWC warden, walks on

By Charlie Otto Rasmussen
Staff Writer

Danbury, Wis.—Family, friends and dozens of law enforcement officers attended services for former GLIFWC Conservation Warden Ken Pardun on May 26. Pardun died unexpectedly at home in rural Danbury just one day shy of his forty-fifth birthday.

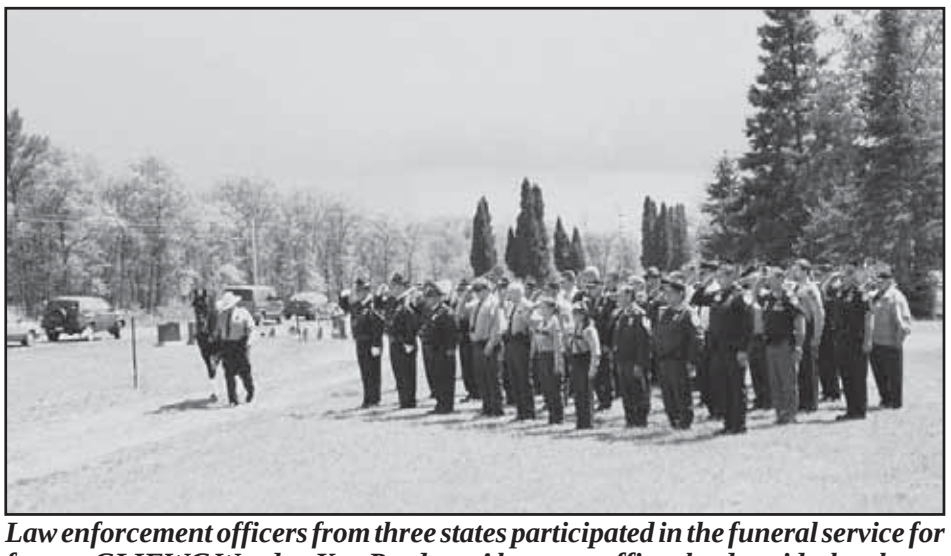
Visitation and traditional Ojibwe funeral services were held at the Lake Lena Community Center located across the St. Croix River in Ogema Township, Minnesota.

A Mille Lacs Band member who lived much of his life in the Danbury area, Pardun served as a treaty conservation officer at St. Croix from 1992 to 2003. He garnered a reputation as an even-handed enforcer of conservation laws and routinely aided tribal members in the field hampered by everything from severe weather to motor engine trouble.

While many remember Pardun from his enforcement work on behalf of the tribes, he was a soft-spoken, but active promoter of Ojibwe treaty rights well before his GLIFWC career. Throughout much of the 1970s—years before the courts reaffirmed inland treaty rights—he entered the ranks of so-called violators, hunting deer and fishing walleye outside tribal lands in northwest Wisconsin.

One September day he and brother Rick walked onto the Burnett County Forest adjacent to the St. Croix Reservation armed with a rifles and hand-typed off-reservation hunting permits issued by tribal officials. Hunting in the spirit of enduring treaty privileges and tribal self-determination, they harvested two bucks before the season was shut down.

During the 1986 treaty fishing season around a decade later, Pardun, an off-duty Department of Natural Resources (DNR) warden, speared a 53-inch muskie on Shell Lake for consumption at a traditional feast featuring special guest former Governor Tony Earl. The hook-and-line community bellowed in anger and disbelief over a trophy wallhanger falling prey to an Indian out for a meal. DNR officials demanded Pardun personally relinquish his treaty rights or find a new job. He enjoyed a large helping of baked muskie and resigned his DNR post. A half-dozen years later Pardun signed on with GLIFWC.



Law enforcement officers from three states participated in the funeral service for former GLIFWC Warden Ken Pardun. Above, an officer leads a riderless horse through the Danbury cemetary where Pardun was laid to rest. (Photo by Charlie Otto Rasmussen)

Pardun's strong Ojibwe roots were reflected at the funeral service conducted by Mille Lacs spiritual leader Lee Staples. Speaking in Ojibwe for virtually the entire service, Staples also sang songs and played a shaker. The few English words he spoke emerged as instructions to the hundreds of people that participated in the ceremony. Tobacco, feasting and a sacred fire just outside the community center served as central components of the service.

Pardun was born in Siren, Wis. on May 24, 1960. He is survived by his parents, four children and three siblings. Ken will be missed.

It is illegal to remove driftwood from state property. A joint patrol landed this catch at the Willow Flowage in Wisconsin. Working together conservation officers Jonas Moermond, GLIFWC, and Ron Nerva, WDNR, Park Falls, recently nabbed a man with a truck and boatload of driftwood. The individual, a non-tribal member, will be prosecuted in state court. (Photo by Kelly Moermond)

New warden comes aboard at Keweenaw Bay

By Sue Erickson
Staff Writer

David Tembreull

Odanah, Wis.—David Tembreull recently joined GLIFWC's Enforcement Division as a conservation officer stationed at the Keweenaw Bay satellite office. He hails from L'Anse, so is already familiar with the area. He will be monitoring treaty commercial fishing on Lake Superior as well as inland treaty harvesting and will be assisting in Wisconsin and Minnesota during the spring spearing and netting season.

Trembreull holds an associate of arts degree from the University of Alaska-Anchorage, another associate of arts degree from the Community College of the Air Force with a major in applied sciences and also a bachelor of arts degree in criminal justice from Wayland Baptist University, Plainview, Texas.

He comes to GLIFWC following a six and one-half year stint in the U.S. Air Force. He worked as a munitions systems craftsman during his military career, inspecting, handling, shipping, testing, and managing munitions and their systems. While in the service he also received firearms training with a variety of weapons and was recognized for his small arms marksmanship.

He was attracted to the position with GLIFWC because the work takes him outdoors where he loves to be. For recreation, he enjoys fishing, four-wheeling, snowmobiling—outdoor activities in general.

Fee-exempt camping at national forest campgrounds

Through an agreement between participating GLIFWC member bands and the U.S. Forest Service, tribal members exercising treaty rights may camp for free and without length of stay restrictions for most campgrounds in the **Chequamegon-Nicolet, Ottawa, Hiawatha, and Huron-Manistee National Forests.**

Member bands that have ratified the agreement include Bad River, Bay Mills, Keweenaw Bay, Lac du Flambeau, Lac Vieux Desert, Red Cliff, and Sokaogan (Mole Lake). Member bands that have not yet ratified the agreement include Lac Courte Oreilles, Mille Lacs, and St. Croix.

Some fee-exempt campgrounds still maintain length of stay restrictions between June 15 and August 15. The Forest Service states that these campgrounds experience high visitation rates during these summer months. This provision will be periodically reviewed to ensure that these restrictions are not interfering with the exercise of treaty rights.

In addition, some campgrounds operated by concessionaires will not have fee or length of stay exemptions until the solicitation and awarding of new concessionaire contracts. Expiration dates for the existing contracts will continue until 2009.

For fee-exempt camping in national forest campgrounds you must:

1. Be a member of a band that has ratified the Tribal/USFS Campground Agreement.
2. From your tribal conservation department or other person designated by your band, **obtain a tribal camping permit, the list of fee-exempt campgrounds, and the booklet entitled *Regulations Summary: National Forest Treaty Gathering and Camping.***
3. Follow the camping registration procedures at the campground. Generally, this involves providing information requested on a registration form or envelope.
   a. Indicate the number of days that you plan on camping on both the tribal camping permit and on the campground registration form.
   b. Instead of paying a fee, give the camping permit to the campground registration personnel or place the permit in the envelope.
4. Camp only at the campsite for which you have registered.

Editor's note: *In the summer edition of* ***Mazina'igan****, we failed to list Lac du Flambeau as a member tribe that has ratified the agreement.* ***Mazina'igan*** *apologizes for the oversight.*

Grassroots protection for tribal resources

"Nationhood Gathering" evaluates mining, other threats

By Charlie Otto Rasmussen
Staff Writer

Mole Lake, Wis.—Below the forested swell of the sacred landmark known as Spirit Hill, approximately 100 regional tribal members and environmental advocates gathered to plan grassroots efforts to protect native cultures and homelands.

Sponsored by the Midwest Treaty Network (MTN), the 2005 Nationhood Gathering explored how tribal sovereignty and treaty rights can help thwart harmful development of sensitive ecosystems.

"Who controls the water, the earth, energy and foods we eat?" said Zoltan Grossman, an event planner and MTN member. "These are pressing issues for everyone in the western Great Lakes region, but particularly affect the tribes."

The June 10-12 weekend gathering featured presentations and talking circles focusing on specific threats to native lifeways along with grassroots strategies to deal with issues like water quality, nuclear waste storage, sustainable agriculture, and metallic sulfide mining.

A one-two punch of severe weather Friday and Saturday added a poignant sense of drama to the proceedings. Tornados ripped through points south of reservation; blasting winds at Mole Lake leveled everything from a pair of large banquet pavilions to small camping tents. Elders, students and others evacuated the grounds and took shelter in the tribal administration building.

"The high winds were a good reminder of where power really comes from, and putting the tents back up was a good example of working together against great odds," Grossman said.

Also present to remind gathering participants of the power of nature, several Sokaogan members spoke about traditional Ojibwe insights into the natural world. Following a series of songs by the Mole Lake Drum accompanied by singer Fran Van Zile, Tribal Judge Fred Ackley gave thanks to storms for their historic role in flooding river valleys where Ojibwe people would gather firewood from downed trees. He encouraged everyone to be respectful of the natural world while "riding that ball," living on the earth.

Spiritual leader Robert Van Zile addressed one of the most significant victories for environmental advocates, highlighting the proposed Crandon mine saga, which ended in 2003 after Mole Lake and the Forest County Potawatomi Community purchased the property and mineral rights from a developer. The metallic sulfide mine, situated on the borders of the Sokaogan reservation, would have threatened the water quality of local aquifers and the nearby Wolf River.

One talking circle drew clear parallels between Kennecott Minerals Corporation's proposed mine on the Yellow Dog Plains in Upper Michigan and the defunct Crandon project. Like Crandon, Cynthia Prior said the Yellow Dog site holds similar ores that can create sulfuric acid when exposed to air or water.

Pryor, director of the Yellow Dog Watershed Preserve, said that like Wisconsin's Wolf River, the pristine Yellow Dog and Salmon Trout Rivers are in a perilous position where extensive damage from acid mine drainage is possible.

"Kennecott has found an extremely rich ore body they wish to extract from underneath one of the most important rivers in the region," Pryor said. "I think Kennecott saw this as an area where they would encounter little resistance."

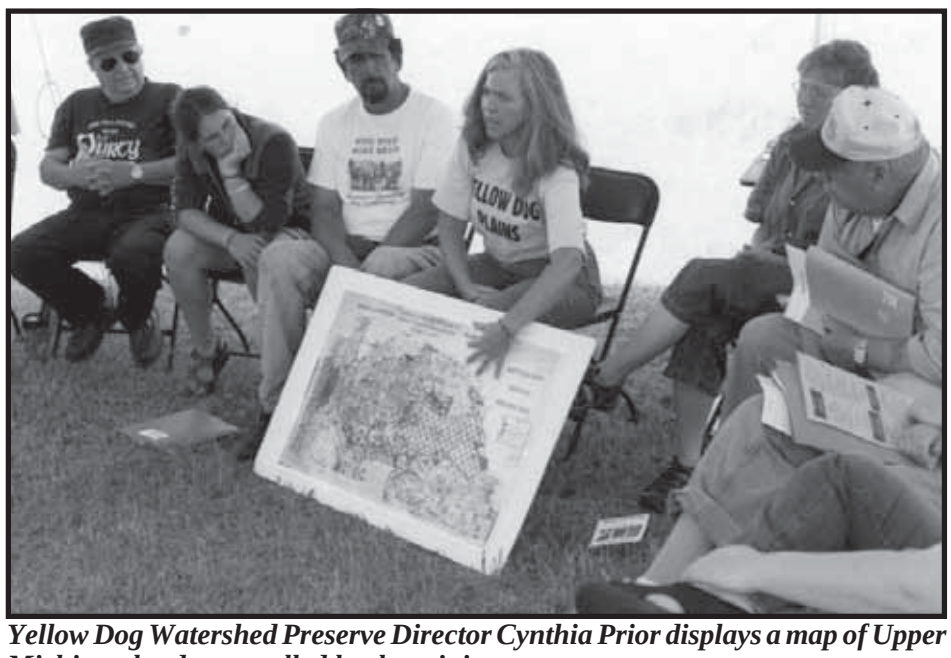
Area residents and governments—including the Keweenaw Bay Indian Community—have nevertheless closely monitored development plans for the metallic sulfide mine which contains nickel and copper. Kennecott is expected to apply for a mining permit from the Michigan Department of Environmental Quality later this year.

"Mining is always there, and we have to be the watchdogs," said Tom Goldtooth, Indigenous Environmental Network. "They always come back. When they do, you have to have facts and have to be able to back up what you say."

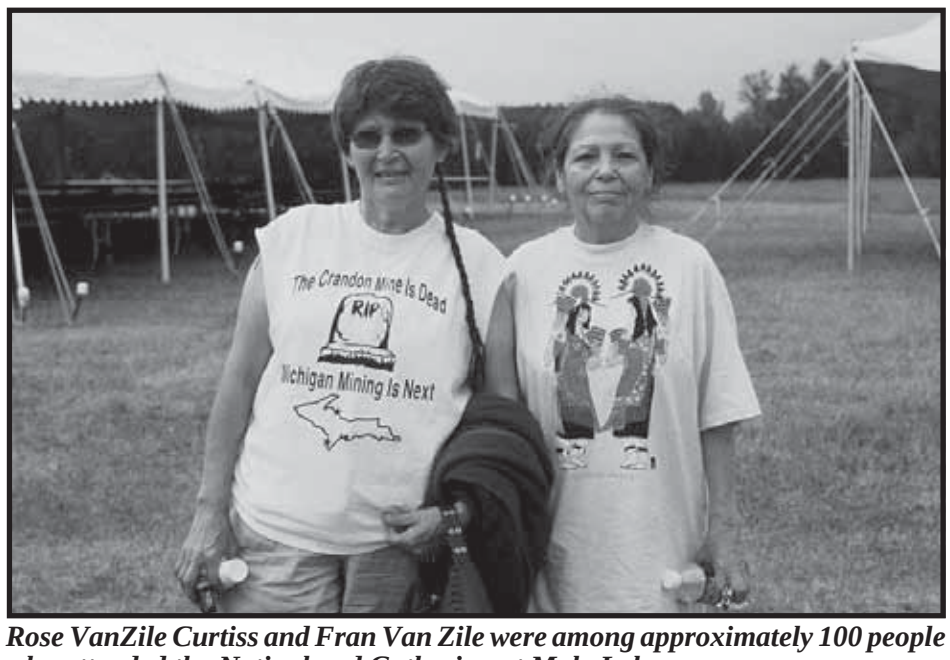
Organizations like the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) are vital because they help generate a lot of the hard data, Goldtooth said. Armed with sound information, MTN and its supporters can better advocate grass-roots protections for native people and the environment, he said. Following extensive analysis of the Crandon site, GLIFWC specialists are currently focused on the proposed Yellow Dog mine, working closely with Keweenaw Bay resource staff.

The MTN is a native and non-native alliance supporting treaty rights, tribal sovereignty, cultural respect and environmental justice in the western Great Lakes region. It was founded in 1989 to coordinate the Witness for Nonviolence, which supported Ojibwe spearers and their families during the height of the protest era.

For more information contact the Midwest Treaty Network, P.O. Box 43, Oneida, Wisconsin 54115 or call (920) 713-6861. Find MTN on web at *www.treatyland.com*



Yellow Dog Watershed Preserve Director Cynthia Prior displays a map of Upper Michigan lands controlled by the mining company.



Rose VanZile Curtiss and Fran Van Zile were among approximately 100 people who attended the Nationhood Gathering at Mole Lake.

Photos by Charlie Otto Rasmussen

Kentuck Lake walleye fishery

(Continued from page 3)

the data from annual walleye population assessments conducted by GLIFWC, fish community surveys performed by both WDNR and GLIFWC, plus precise information recorded on the tribal catch, there is a substantial data base on the lake already, he says.

A creel survey documenting angler harvest would help form a more complete picture of Kentuck Lake's fishery and allow managers to better understand the impact of increased fishing pressure on walleye and other species.

Meanwhile, state and GLIFWC conservation officers plan for an increased presence at the lake and to keep a watchful eye on the activity there.

Bad River hatchery

(Continued from page 5)

during the winter months when the hatchery is not in operation is sold back to the power company, generating an income. Consequently, electrical power, normally a major hatchery cost, is nearly zero dollars for Bad River's facility.

Along with dollars necessary for renovation to the hatchery and ponds, Doolittle attributes this year's success to the dedication and experience of the six-man hatchery crew. Ed Leoso, hatchery foreman, along with Sam Powless, Tom Houle, Ken Couture, Ed Wiggins, and Hillary Butler bring a combined 83 years of hatchery experience to the job, experience that is paying off with bumper production.

Ojibwe ancestors remembered

(Continued from page 12)

community as his reason for attending the memorial ceremonies. "This Memorial gathering gives me the opportunity to remember and thank friends and loved ones who have gone on ahead," he said, "friends who I LOVE dearly and who had done so much for me. When I give tobacco at this gathering, I get a wonderful feeling of certainty that these people are still with me. I always give tobacco for friends like Dorothy Charette, Toddy Gokee, and Walter Bressette. And my grandmother is there with me too."

The gathering concluded with hugs, laughter, and handshakes and participants boarded the ferry home with the sense that Ojibwe ancestors at Madeline and those who have more recently passed on would continue to be remembered.

Ojibwe language program is all talk at Bay Mills

By Charlie Otto Rasmussen
Staff Writer

Brimley, Mich.—Throw out your textbooks, pencils and notepads if you want to attend Nishnaabemwin Pane classes at Bay Mills Community College (BMCC). And forget messing around with a computer or late night studying because homework, pop quizzes and term papers are nonexistent—even frowned upon. Huh?

What at first sounds like a school kid's daydream is an innovative teaching method used by Ojibwe language instructors in eastern Upper Michigan. Adult students are required to attend classes and pay attention to the instructors, who speak only in Ojibwe. Period.

"There's no books and no note taking," said Ted Holappa, director of the Nishnaabemwin Pane Immersion Program. "The only thing we encourage students to do outside of class is see if they can find a speaker to talk to them."

Holappa, a Keweenaw Bay member, founded the immersion program at BMCC with Barbara Nolan and John Paul Montano two years ago. All three educators had studied Ojibwe grammar in the past and were bound by a sense that there must be a better way to pass on the language. They found what they were looking for in the highly successful French language immersion programs first developed in 1965 in Canada, and the Hawaiian and Maori indigenous language programs that followed in the 1980s.

"The goal is to avoid a dependent relationship between instructors and students," Montano said. "In this program we're creating autonomous acquirers or independent language students. Language acquisition is subconscious and students come to understand the meaning of what's being said like a child does."

Manitoulin Island native Barbara Nolan is the primary instructor and engages students through animated gestures and expressions. She tells stories and joins with other instructors to stage skits using everyday props like hats, phones, toys and binoculars. Instructors are responsible for continually assessing the comprehension level of students and adjusting the level of speech when appropriate.

"There's no real subject matter. The focus is always on the meaning of the story, not the language," Montano said.

Immersed in summer

Students from across Michigan attended monthly three-day immersion classes over the summer at the Bay Mills Culture & Learning Center, a former hotel and restaurant complex located on the north end of the reservation. One-time hotel rooms now serve as dormitories. A cook prepares meals in the kitchen, and classes are held in the old lobby where students sit on padded couches and chairs.

Following storytelling or a short performance, instructors—never breaking from Nishnaabemwin—ask students to interpret what they have heard and observed. The language staff, however, are careful to keep their inquires open-ended so that anyone can answer, or remain silent.

Note: the Ojibwe language is known by several names including Ojibwemowin and Anishinaabemowin. The Bay Mills Community College language immersion program identifies it as Nishnaabemwin. The program's title, Nishnaabemwin Pane, can be understood as "The Native language all the time."

Nishnaabemwin speakers perform short skits as part of the Bay Mills Community College language immersion program. Pictured above, from the left, Barbara Nolan, head instructor/associate director; Phyllis Williams, visiting speaker; Patricia Ozawamick, instructor; and Rosella Kinoshameg, visiting speaker. (Photo by Charlie Otto Rasmussen)

"Students are allowed to speak English. We encourage them to speak Nishnaabemwin, but one is never forced to speak it. Everything's always optional," Montano said. "One of the keys is to maintain an emotionally safe learning environment to help students absorb the language."

Most of students attending the summer immersion camps had logged somewhere less than 800 hours with language speakers, Montano said. The class encompasses a broad demographic from college-age students to elders; men and women; whites and Indians.

Some, like Elaine Schuster, commute from as far away as Detroit to participate in the innovative program.

"The language is in here," Schuster said, placing her hand over her heart. "It's just waiting to come out." Both Bay Mills members, Schuster attends class with her father, local resident Bill LeBlanc. During the winter when classes meet more often, she makes weekly trips from Detroit through sometimes rough weather to attend.

Michelle Dolly from Bitley, Michigan, said the BMCC immersion program has helped her reconnect to her childhood when Nishnaabemin was often spoken around the house. Dolly said other Ojibwe language courses she's taken emphasized memorizing words and common phrases.

"This program is unique in that we get so much exposure to the language," she said.

While the instructors encourage students to listen to the language outside of class whenever possible, speakers are hard to come by. Montano said that out of the 200,000 American Indians in Michigan, Wisconsin and Minnesota, only around 200 or so have high proficiency speaking Nishnaabemwin. The youngest speakers are generally in their 50s, he added.

Language aptitude is measured, in part, by the amount of time students invest in listening to speakers. At 2,000-2,400 hours students can almost fully comprehend spoken Nishnaabemwin; at 6,000 hours students are considered functionally bilingual; by 12,000 hours, people are able to communicate on par with fluent speakers.

For information on the Bay Mills Community College, for enrollment in the upcoming Fall semester, or for general information concerning the program contact: Theodore Holappa, Program Director, Nishnaabemwin Pane Immersion Program (906) 632-7378.

Back to the basics of Ojibwe life

Campers learn language and traditional skills

By Lorraine Norrgard
For Mazina'igan

Red Cliff, Wis.—Under tall pines near the shores of beautiful Lake Superior at the Raspberry Point Campground on the Red Cliff reservation, the Ojibwemowin Language Immersion Camp once again took place during the week of June 6th.

Organized by Andrew Gokee, UW-Steven's Point, the camp offered both language practice and cultural activities that kept families busy as they enjoyed meals, crafts, and learning the language together in an outdoor environment.

As in past years, many resource people were present during the week-long camp serving as teachers and advisors. Among them were Frank Dickerson and Wanda Baxter who provided cultural and spiritual guidance to participants while they practiced using Ojibwemowin.

Cultural resource persons offered learning opportunities for all ages, including birch bark basket making, moccasin making, and others. Sis Wiggins and Sharon Nelis, both from Bad River, demonstrated brain tanning deer hides. Participants had the opportunity to try their hand at scraping hides, which involves carefully removing the hair from the hide without tearing the hide. Deer brains were boiled, mashed, and spread on hides to soften them.

The finished product—on the left Sis Wiggins shows a "brained" hide before smoking. Sharon Nelis, shows the finished smoked hide with a rich, golden color. The two, both from Bad River, demonstrated the complete brain-tanning process during Red Cliff's Language Immersion Camp. (Photo by Lorraine Norrgard)

Campers enthusiastically participated in the process, asking many questions as Sis and Sharon took them patiently through the long process. Sis has been tanning hides using the traditional brain tanning method for about nine years. The results of the tedious, and sometimes smelly process, is a lush, velvety soft piece of buckskin, ready to be sewn into a dance outfit or made into moccasins. Young and old appreciated the women's willingness to share their knowledge.

Marvin DeFoe, Red Cliff, shared the campsite with Sharon and Sis. He offered insights about the history of copper in the region and how indigenous people here worked with copper to form spearheads, bowls, knives and other implements centuries ago.

He explained that raw copper is naturally found in the Lake Superior **(See Back to the basics, page 20)**

Up north plants

Survey pinpoints invasive plant populations

By Sue Erickson, Staff Writer

Odanah, Wis.—Getting a picture of invasive non-native plant populations in the northwoods is the goal of terrestrial weed surveys being performed by the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) this summer. Unfortunately, invasive, non-native plants are becoming more common in and around the north woods, introduced either intentionally by gardeners and horticulturalists, or unintentionally carried from one area to another.

This is the third season that GLIFWC staff have searched the woods, wetlands and right-of-ways for terrestrial invasive plants.

"We find out what's out there, where it is, and how widespread it is, " says Mile Falck, GLIFWC wildlife biologist, "Once we have a more complete picture, we can prioritize for further action."

The groundwork for action requires careful searching for invasive plants, some which are more troublesome than others. This year the surveys targeted the region around the Northern Highlands State Forest, largely in Vilas County, Wisconsin. In 2003, GLIFWC surveyed in the western portion of Michigan's Upper Peninsula, mostly in the Ottawa National Forest, and in 2001 surveys concentrated on public lands within Wisconsin's Ashland and Bayfield Counties.

Armed with a handheld geographical positioning system (GPS) unit attached to a PDA, Steve Garske, GLIFWC's invasive plant aid scours the landscape for the intruding plants as he slowly cruises down back roads. Using the GPS, the exact location of sighted weeds is documented, and this and other information is electronically filed directly into a GIS database on the PDA. This small piece of electronics saves hours of tedious data entry.

Some invasives, such as spotted knapweed and reed canary grass are so widespread that their locations are usually not all documented. "They are just about everywhere the roads go," says Steve Garske, "so it is pointless to document locations of these very common invasive plants." Other common weeds, including dandelions, daisies and hawkweeds, are also not marked.

Garske photographs some of his finds. Sometimes he also takes samples, which he either puts into a plant press carried in his pick-up truck or keeps cool until he can arrive home. One sample he's collected is of Eurasian marsh thistle. This plant was first introduced to the upper Midwest in Marquette County, Michigan in 1934 and has been spreading ever since. So far, he's recorded well over 2,000 locations comprising over 80 invasive species.

One of the most unusual finds this season has been a small shrub called mezereum (D*aphne mezereum*), which was growing in recovering aspen woods. It's unusual appearance (see photo) immediately captured Garske's eye. He also has found a mystery plant. The plant is a member of the mint family, but precise identification will take more research.

GLIFWC's invasive plant surveys are performed over a minimum of twelve weeks during the summer, with some work being done in the fall when it is easier to spot pesty plants like buckthorns that stay green much later than most native plants. The surveys are also comprehensive—documenting all but the most common invasive plants, rather than focusing on one or two species.

Information from GLIFWC's database is shared with other management agencies. More on invasive plants can be found on GLIFWC's website at *www.glifwc.org*.

Spreading west, Eurasian march thistle, a nasty invasive plant, has already become established as far west as Michigan. (Photo by Steve Garske)

Commonly known as mezereum, Daphne mezereum, was found during GLIFWC's summer plant surveys in and around the Northern Highlands State Forest. This attractive small shrub is not native and has become seriously invasive in the Northeast. (Photo by Steve Garske)

Biologists to address elk feeding problems & land use

(Continued from page 1)

gallon maximum of corn, hay or grains; and moreover, it is unlawful to feed elk.

"People in Clam Lake have been very supportive of elk over the years," Stowell said. "We'll tell them that the best thing they can do is to stop feeding the herd."

Balancing habitat

Wildlife biologists recognize three critical habitats that elk need to thrive in northern Wisconsin: winter food, winter cover and spring food. Backyard feeders didn't make the list.

Seeking to provide improved spring food sources, the conservation group, Rocky Mountain Elk Foundation (RMEF), is leading an effort to convert small fallow fields into nutrient-rich grazing areas by sowing cool spring grasses.

Gilbert, a member of the elk committee and Wildlife Section Leader at Great Lakes Indian Fish & Wildlife Commission, is concerned that concentrating elk in small three to six acre fields on a handful private lands will cause more harm than good.

"Areas of this size that draw in a lot of elk are perfect places to spread parasites," he said. "Elk are eating, defecating and milling around. It will make it a lot easier for brain worm and liver flukes to be transmitted."

Unlike bovine tuberculosis and other diseases that require nose-to-nose contact, Gilbert said parasites move through the environment to different hosts. Both liver flukes and brain worm pass through the feces and can be reingested by elk feeding on nearby forage. The two parasites accounted for five elk deaths over the past year.

One solution discussed by the elk committee and RMEF is to create not just a few, but dozens of cool grass food plots across the heavily forested Clam Lake region to encourage greater dispersal of foraging elk and reduce the risks of transmitting disease. While more areas under cultivation would likely benefit elk, the idea lends harmful possibilities to other species like the endangered American marten.

"Martens are highly sensitive to poor habitat conditions, which includes these types of open spaces," said Gilbert who has studied martens for 15 years. "Even though quality mature forests might be nearby, extensive non-forested areas will reduce marten numbers even more."

Gilbert said that a precise ratio of acceptable habitat types for marten survival is unknown, and he plans on seeking input from other biologists on the elk committee to make the best management decisions for the Clam Lake ecosystem.

In the end

While Cow 14 spent a decade avoiding the pitfalls of highway crossings from Clam Lake to Upper Michigan and got out of a bind on the frigid Chippewa River, she couldn't escape the ancient rhythms of nature. Canoeists encountered the elk's remains around Independence Day last summer, Stowell said. At a ripe 15 years old, maybe even a bit more, she was taken by wolves,

Ultimately, biologists agree more time is needed to understand the dynamics of elk mortality in northern Wisconsin. The very young and old animals like Cow 14 will always be susceptible to predation. How elements like feeding, illness, vehicle collisions and land management play out still requires years of monitoring and research.

Sizzling in the hot July sun, survey crews search land & water for invasive species

By Sue Erickson, Staff Writer

Odanah, Wis.—As temperatures soared into the nineties and the hot sun baked the northland, Sam Quagon and Dara Olson, GLIFWC aquatic invasive species (AIS) survey crew, benefited from their on-water work site. They had few complaints about spending the hot days on inland lakes checking for invasive species, although the surface of the boat sometimes seemed hot enough to fry an egg on.

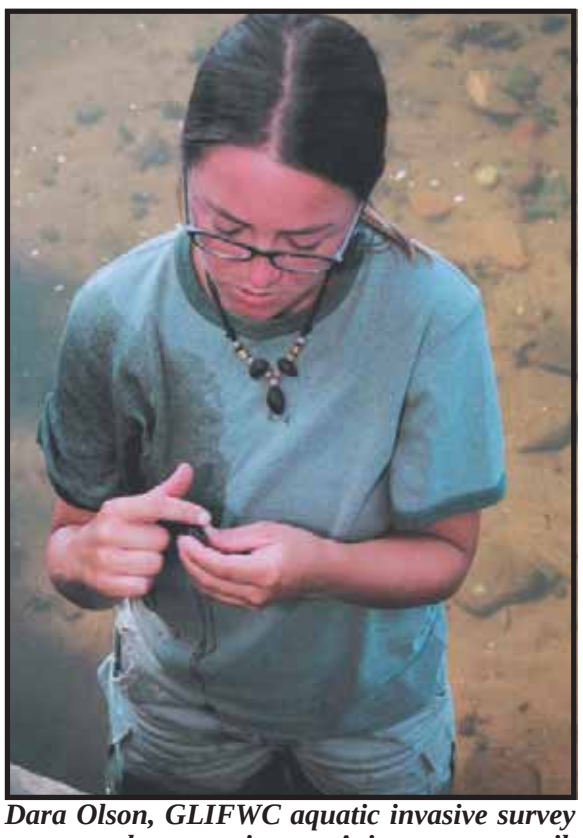
This is the second season of AIS surveys for Quagon, who has worked for GLIFWC in a variety of capacities since 1985, and the first for Olson, who was more recently hired under a Bureau of Indian Affairs add-on relating specifically to AIS. Together they tackled a total of 29 ceded territory lakes, twenty-seven in Wisconsin and two in Michigan, looking for AIS. By the end of their twelve-week work schedule, they will have visited all 29 lakes twice this summer.

Unlike a number of other AIS surveys, GLIFWC's crew is performing a comprehensive search. They have several target species, including zebra mussels, rusty crayfish, Eurasian water milfoil, curyleaf pondweed, purple loosestrife, yellow iris, and spiny waterflea. They also record any other AIS they might observe during their surveys, such as Asian mystery snails.

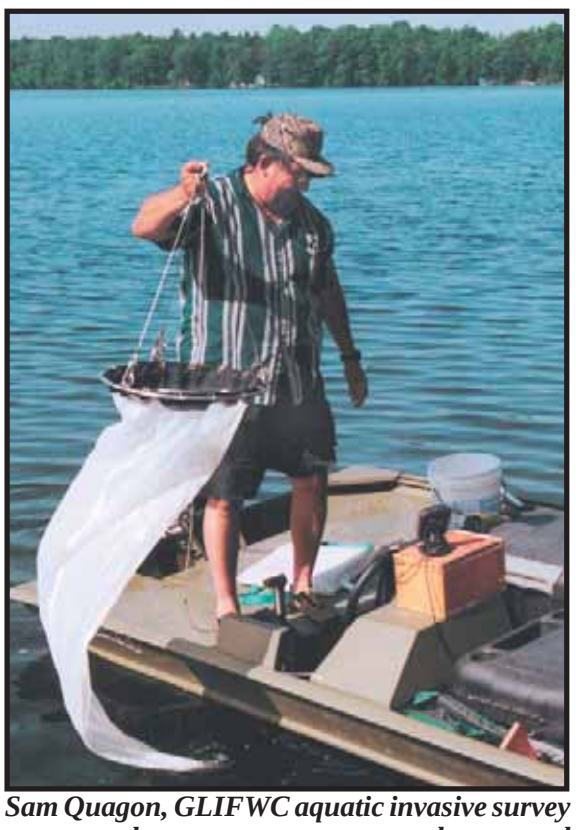
The crew surveys as much shoreline of each lake as possible, averaging roughly one lake per day. Areas of high use, such as boatlandings, are given priority, however.

Some of the survey work is primarily visual, checking along shorelines, around and under docks for rusty crayfish, snails, Eurasian water milfoil and noting any species found.

The crew uses GPS readings to pinpoint the location of AIS when they are found.



Dara Olson, GLIFWC aquatic invasive survey crew member, examines an Asian mystery snail, found near a landing dock at Lac Courte Oreilles Lake. The crew search landing sites for evidence of aquatic invasive species before setting out for their on-water work. (Photos by Sue Erickson)



Sam Quagon, GLIFWC aquatic invasive survey crew member, prepares to put a zebra mussel sampling net into Lac Courte Oreilles Lake to test for the presence of zebra mussel veligers. Samplings taken this summer will be sent to a central laboratory to determine results.

They also employ plankton nets for the collection of spiny water fleas and zebra mussel veligers that might be adrift in the water and are not noticeable to the human eye. The zebra mussel net, comprised of a very fine mesh, is a vertical tow, which is lowered straight down into the water and pulled up.

The spiny waterflea net is pulled horizontally through the water for the length of 100 meters. Floats mark either end of the 100-meter area and a GPS reading is taken on both ends. The mesh is pulled slowly through the water to collect any spiny waterfleas that might be present.

Collected specimens are then bottled in a solution that is four parts water to one part ethanol for preservation. The Wisconsin Department of Natural Resources has established drop off sites at their various headquarters, such as in Park Falls or Spooner, for preserved specimen. All samples will be taken to state laboratories to be examined for the target species, so it will be some time before the results of the surveys are actually known.

As of mid-July Quagon and Olson had found some AIS present in some lakes where they had not yet been recorded. They are also recording yellow iris, which previously has not been recorded at all. Yellow iris is more notable in western, ceded territory lakes so far, they say.

The first five weeks of the surveys have gone fairly well for the on-water crew with only one week serving up substantially cool, wet weather. In that instance, they don ponchos and keep on working, unless lightning makes them go ashore. Each day is concluded by pressure washing their boat and equipment using hot water or vinegar. They make sure all their gear is clean and ready for their next port of call.

GLIFWC's invasive species control team takes to the water near Fish Creek Slough, Ashland, Wisconsin to control purple loosestrife. GLIFWC has been successfully controlling purple loosestrife in Fish Creek Sloughs for many years and just a small fraction of the loosestrife which was once present remains in the sloughs. The experience that GLIFWC invasive species control team has garnered in Fish Creek Sloughs is being applied to other invasive species populations. This control effort is one reason why GLIFWC was awarded the "Invader Crusader" award by the Governor's Council on Invasive Species. Working on GLIFWC's purple loosestrife eradication crew are: Ron Parisien, Dennis Soulier, Jake Parisien, and Ronnie Parisien. (Photo by Sue Erickson)

Aquatic Invasive Species in the Upper Great Lakes

Promoting Regional Cooperation & Collaboration

When: October 19-20, 2005

Where: Lake of the Torches Resort Casino
Lac du Flambeau, Wisconsin

Conference Theme:

Promote regional coordination and cooperation among entities that are actively engaged in AIS management throughout Minnesota, Wisconsin, and Michigan.

Target Audience:

All levels of organizations/agencies that are actively managing AIS (e.g. federal agencies, tribes, state agencies, counties, towns, lake associations, non-profits).

Additional Information:

For more information, please contact Dara Olson, GLIFWC Invasive Plant technician, at (715) 682-6619 ext.129 or **dolson@glifwc.org**.

Interest in the Ojibwe language attracts four Ojibwe youth to summer jobs with GLIFWC

By Sue Erickson
Staff Writer

Odanah, Wis.—The formidable task of identifying Ojibwe names for numerous plants, animals, birds, insects and places in the ceded territories was given a boost when four young men temporarily joined GLIFWC staff for the months of July and August. The three-year project is funded by a grant from the Administration for Native Americans (ANA) and supervised by Jim St. Arnold, GLIFWC's ANA program coordinator.

Drawn to the summer job by their interest in the Ojibwe language, all four young men are now immersed in the language project and are enjoying an opportunity to learn from their work. The four include: Sam Maday, Jack Corbine and Jason Sanders, all Bad River tribal members, and Willis Ford, Lac Courte Oreilles tribal member.

Some of their work involves formulating a database on the various species from information gathered at earlier meetings with tribal elders. Terms used by the elders are looked up in several Ojibwe/English dictionaries for comparative definitions and spellings. The findings are then entered on a spreadsheet in order to compare for discrepancies. Another part of the project entails editing the previously videotaped elder sessions into a final version as well as videotaping several new sessions with elders, such as with Nancy, Dennis and Dan Jones, Canadian Ojibwe from the Fort Francis area.

While a large part of the work involves relatively tedious data entry and slogging through pages of raw data, they also had the opportunity to attend the Red Cliff Language Immersion Camp in early July at the Raspberry Bay Campground. This provided a change of pace and another opportunity to learn more language as well as cultural activities, such as brain-tanning hides and traditional copper work. The time spent at the camp proved to be one highlight in their summer.

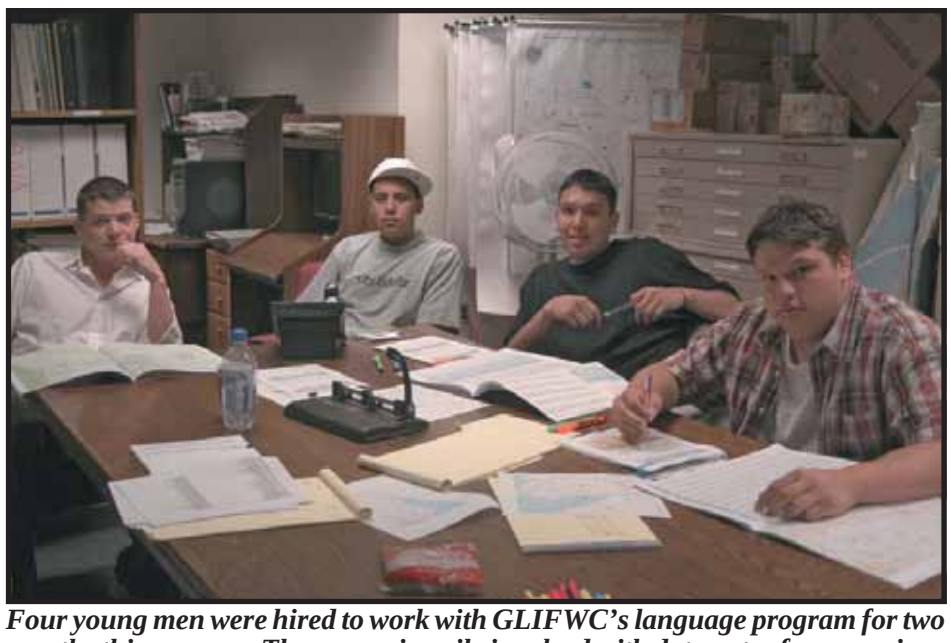
Sam Maday, who will be a sophomore at UW-Superior this fall, is not a new face around GLIFWC offices. He has previously worked with the Public Information Office, helping out in a variety of capacities on an as-needed basis.

Sam is pursuing a major in English with a minor in First Nations Studies. He feels his summer job is complimentary to his course work, where he has also been studying the language. So far, he has been primarily developing a spreadsheet by recording Ojibwe names for species and locations and then looking for deviations. For instance, he explains there might be different words for high bush and low bush cranberries and also the language can vary by region. He records the dialectical differences when found.

Sam regards his summer job as a great opportunity on his path to learning the language and hopes to be able to pass some of his enthusiasm for the Anishinaabe culture and language to other Ojibwe youth.

Willis Ford, will also be sophomore this year, having done his freshman work at UW-Superior, although he may transfer to Fond du Lac Community College for his second year. To date he hasn't decided his major, so is pursuing general course work in college.

Willis has been studying the Ojibwe language for a couple years, so already has some familiarity with it. His primary focus this summer has been on place names—locating places on the map, recording translations, checking spellings and finally entering the information into a computer database. Places include the various reservations, communities, rivers and lakes.



Four young men were hired to work with GLIFWC's language program for two months this summer. They are primarily involved with data entry from previous sessions with elders. From the left are: Jason Sanders, Jack Corbine, Willis Ford, and Sam Maday. (Photo by Sue Erickson)

Jason Sanders graduated from St. Norbert College in DePere, Wisconsin with a Bachelor of Arts in English and humanities. He hopes to pursue a law degree in the not-too-distant future, but is taking some time off from studies to gain some "real world" experience and also to pursue more traditional Ojibwe knowledge, including language and culture. So, the summer position at GLIFWC turned out to be a perfect fit with Jason's goals. He has primarily been working on building the computer database for the project.

Jack Corbine will be starting his second year at Wisconsin Indianhead Technical College in Ashland, Wisconsin. He is pursuing an associate of applied arts degree with an emphasis in photography and hopes to pursue a four-year degree in communications, possibly at Brown College in Minneapolis. Because of his experience with and interest in photography, he has been working on editing previously recorded video and will also be videotaping upcoming interviews with elders. The finished product will either be published as a multiple CD or a DVD, relating the Ojibwe terms for the various species and including some of the stories that have been told during the interviews.

Although each of the four young men focus on a particular aspect of the job, they also switch off, so each has exposure to all aspects of the project. It's a matter of teamwork, and they have done well.

GLIFWC's language program was honored with the presence of several fluent speakers of Ojibwemowin (Ojibwe language) in mid-July. Assisting with a project designed to find Ojibwe names for hundreds of wildlife species as well as locations in the ceded territory were: Dennis Jones, Dan Jones, Nancy Jones, all Canadian Ojibwe from the Ft. Francis region; Leonard Moose, Fond du Lac; Mary Moose, Canadian Ojibwe; and Tobasonakwut Kinew, Ojibways of Onigaming, Canada. In the back is Willis Ford, temporary staff with the language program, which is funded by a grant from the Administration for Native Americans. (Photo by Sue Erickson)

Back to the basics

(Continued from page 17)

region and often on shorelines as rough float copper. Many people have forgotten how to work with copper, and Marvin demonstrated pounding copper into bowls.

He gave each camper a circular thin disk of copper that they pounded with round hammers on a wood log with a curved indenture to form the bowl. The copper disks were put into the fire for softening and doused in water as pounding the bowl shape progressed.

Slowly, the copper was pounded on the log in a circle to form the shape of the bowl. The process fascinated participants, who all had a chance to hammer out copper bowls.

The language camp has become an annual event, one which encourages families to spend what we call "quality time" together, and it truly is quality time! Well away from the "maddening world," the camp presents a hands-on opportunity to gain traditional knowledge in a relaxing, natural environment. Of course there was no lack of a key Ojibwe ingredient—laughter!

Dagwaagin—It is Fall

**Dagwaaging, boozi ziibing Nimaamaa. Agaasadetigweyaa omaa.
Mangitigweyaag imaa keyaa iwidi zhaawanong, dakobidoo.
Odakobijigaan i'iw ozhaawashko-manoomin. Niibinong, manoominaganzhiin dakwegadon.
Noongom akwaamagadon. Onaadin manoominike-mazina'igaans.
Maajii-manoominike, aaba'oodoo. Zhiizhiibag gaawiin omiijinziinaawaan.
Gizaagitoomin manoomin.**

**(When it is fall, she embarks on the river, my Mother. The river is narrow.
When it widens in that direction over there to the south, she ties the wild rice.
She ties up that green wild rice. In the summer, they are short.
Now they are tall. She goes to get a ricing-little paper (license).
When she begins to rice she unties the wild rice. The ducks didn't eat it.
We love wild rice.)**

Bezhig—1

OJIBWEMOWIN
(Ojibwe Language)

Double vowel system of writing Ojibwemowin.
—Long vowels: AA, E, II, OO
Onz<u>aa</u>m—as in f<u>a</u>ther
Miigw<u>e</u>ch—as in j<u>ay</u>
Way<u>ii</u>ba—as in s<u>ee</u>n
Man<u>oo</u>min—as in m<u>oo</u>n

—Short Vowels: A, I, O
D<u>a</u>sh—as in <u>a</u>bout
<u>I</u>widi—as in t<u>i</u>n
Zoogip<u>o</u>n—as in <u>o</u>nly

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

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

Verbs
Inanimate Intransitive

These are the "IT IS"verbs.They are to use. They are about non-living things and the action doesn't transfer to an object. Weather words, colors, etc.

Gisinaa.—It is cold weather.
<u>Gii</u>-kisinaa.—It <u>was</u> cold. (past tense)
<u>Wii</u>-kisinaa.—It <u>will</u> be cold. (future)
Gisinaag.—<u>If/When</u> it is cold
Zoogipon.—It is snowing.
<u>Gii</u>-soogipon.—It <u>did</u> snow.
<u>Wii</u>-soogipon.—It <u>will</u> snow.
Zoogipong.—<u>If/When</u> it is snowing.

Niizh—2

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

A. <u>Izhaadaa</u>! Babaamoomigodaa <u>noongom</u>.

B. Zaaga'iganing, <u>miikana</u> azhashkiiwan. Azhashkiikaa.

C. Eya. <u>Onzaam</u> gii-kimiwan. <u>Wayiiba</u> wii-soogipon.

D. Nindaa-inoomigomin oshedinaang <u>gemaa wabashkiking</u> giiwedinong.

E. <u>Iwidi</u> niwii-agidaakiiwemin idash niwii-niisaakiiwemin.

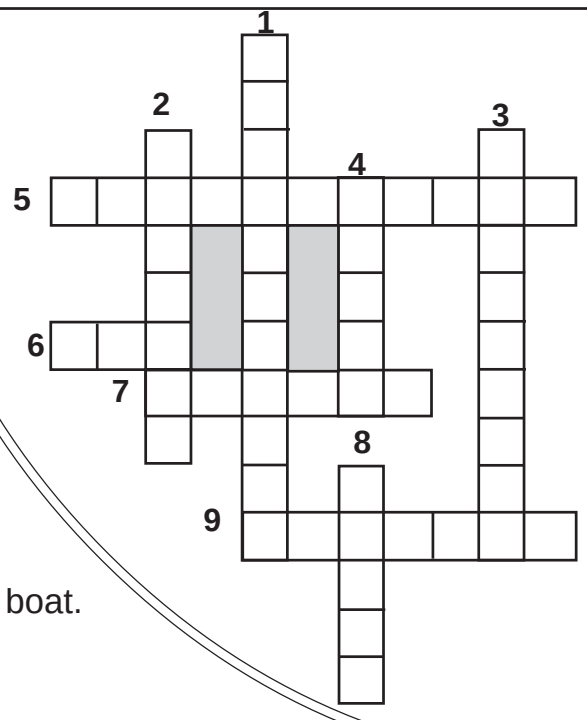
F. Nindaa-izhaamin <u>Makwa</u>-ziibiinsing.

G. <u>Wawiinge</u> niwii-izhaamin. Giishkadinaa.

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

Niswi—3

**IKIDOWIN
ODAMINOWIN
(word play)**



Down:
1. It did snow.
2. Trail, road
3. S/he ties wild rice.
4. Over there.
8. S/he embarks in a boat.

Across:
5. Ducks
6. Yes
7. It is summer.
9. Now, today.

Niiwin—4

MiVII's—Past, Future, Conjuncts

Baagwaamagad.—It is shallow.
<u>Gii</u>-paagwaamagad.—It <u>was</u> shallow. (past)
<u>Wii</u>-paagwaamagad.—It <u>will</u> be shallow. (future)
Baagwaamaga<u>k</u>.—<u>If/When</u> it is shallow.
Zazagaa.—There is a dense underbrush.
<u>Gii</u>-sazagaa.—There <u>was</u> underbrush.
<u>Wii</u>-sazagaa.—It <u>will</u> be underbrush.
Zazagaag.—<u>If/When</u> there is a dense underbrush.

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

Wii-...g

Gii-....g

-g

d ----› k

Gii-

1. Zazagaa_____, waanzh naawinaagwad.
2. _____sazagaa gii-kanawaabandamaan i'iw waanzh.
3. Baagwaamaga_____, nimbagiz.
4. _____soogipon_____, niwii-minwendam miinawaa.
5. _____kisinaa_____ agwajiing, nigii-poodawe.

Translations:
<u>Niizh—2</u> **A.** Let's all go! Let's all go riding on horseback today! **B.** At the lake, the trail it is muddy. There is a lot of mud. **C.** Yes. Too much it rained. Soon it will snow. **D.** We should ride horse to the ridge or to the swamp to the north. **E.** Over there we will go uphill and we will go downhill. F. We should go to Bear-creek (little river). G. Carefully we will go. There is a steep bank.
<u>Niswi—3</u> **Down: 1.** Gii-soogipon **2.** Miikana **3.** Dakobidoo **4.** Iwidi **8.** Boozi **Across: 5.** Zhiishiibag **6.** Eya **7.** Niibin **9.** Noongom
<u>Niiwin—4</u> **1.** <u>When</u> there is a dense underbrush, the den it is barely visable. **2.** There <u>was</u> a dense underbrush when I was looking for that den. **3.** <u>When it is</u> shallow, I go swmming. **4.** <u>When it will</u> snow, I will be happy again. **5.** <u>When it was</u> cold outside, I built a fire.

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 world language translation.

Educational resources

New programs available from producer Lorraine Norrgard

Four Seasons of the Ojibwe

This is a four part DVD series designed primarily for children but adults enjoy the programs as well. Each part shows the hunting/fishing/gathering activities of a season as they were done long ago and how they are done now. This beautiful series of four programs is narrated by a young child and describes the importance of the traditional seasonal activities that have continued in our communities today.

Lorraine Norrgard.

Historical footage and dramatic reenactments of the seasonal activities, as they were done before Europeans came to this region, give an interesting view of how life has changed through the years. Each seasonal program is eight minutes long and the complete indexed DVD with all four seasonal programs is a half hour long.

This DVD is being used by Head Start pre-schools, tribal schools, and public schools throughout the country. It is also being distributed nationally by the Agency for Instructional Television. $35.00 plus shipping/handling.

Anishinaabe Adisokan

This DVD includes the seven traditional stories in Ojibwemowin with English subtitles, that were shown in the television series, *Waasa Inaabidaa—We Look In All Directions*. The stories are narrated by Dan Jones and Margaret Big George in the Ojibwe language.

All of the stories were approved by an elders advisory group and are common ones that have been published and have been public in many other media. It is still advised that these stories be viewed only in the winter.The visuals were created by Ojibwe painter, Carl Gawboy.

This DVD is a half-hour long and includes all seven stories indexed. It is very useful for language programs, community education, and school use. $35.00 plus shipping/handling.

Minnesota Indigenous Language Symposium

This is a complete recording of the speakers at the first Minnesota Indigenous Language Symposium in 2003 organized by the Grotto Foundation and the University of Minnesota. Speakers include Regis Pecos, Gerald Hill, Janine Pease Pretty on Top, Robert Peacock, Dr. Anton Treuer, and others on the importance of language re-vitalization. The symposium also included best practices presentations including immersion programs, master-apprentice programs, etc.

The six DVD set of the symposium runs approximately six hours and is $85.00 plus shipping/handling.

Highlights of the Minnesota Indigenous Language Symposium

This is a half-hour of the most powerful and insightful information provided by the speakers at the first symposium in 2003. It is powerfully edited with visuals, music, and sequenced to present to communities, tribal councils, language program advisors, etc. on the importance of language re-vitalization efforts. Cost-$35.00 plus shipping/handling.

New programs/order forms

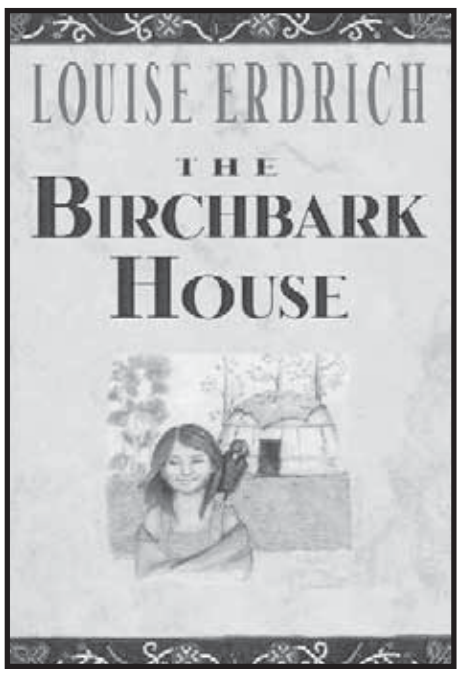
New programs in production are: Ojibwemowin—interviews with Anishinaabe Elders; Carl Gawboy portrait; the Sandy Lake Tragedy, and others.

Payment for the above productions can be made in cash, check, money order, or purchase order, but not credit card. Order forms are available from: Norrgard Productions @ (218) 879-2288 or e-mail Lnorrgard@aol.com

Louise Erdrich's *The Birch Bark House*

Good reading for young (or old) readers

By Sue Erickson, Staff Writer



Louise Erdrich's rich, poetic language and imagery gently take the reader through a full cycle of seasons with a young Ojbwe girl in the mid-1800s living on Moningwanaykaning, Island of the Golden-Breasted Woodpecker, known as Madeline Island today.

Told through the eyes of Omakayas (Little Frog), the story celebrates the life of a small Ojibwe family and shares with the reader the beauty and joys, challenges and heartbreaks that life at the time presented. It's a vivid portrayal of a vigorous Ojibwe society on the brink of a major encounter with European settlement.

Erdrich's attention to the details of early Ojibwe lifeways presents a marvelous, vivid history lesson, which is learned and absorbed as the fascinating account unravels. Methods of gardening, preparing and storing foods, sewing materials, gathering methods, tool-making—the myriad aspects of Ojibwe life come alive as the book's characters carry on the many seasonal tasks required for survival. Also woven into the narrative is the unique spiritual relationship of the people with the natural world around them.

Erdrich uses Ojibwe words throughout the book in a manner that enhances the text and acquaints the reader with the language. A short glossary appears at the end of the book. The text is further enhanced by the author's charming illustrations of happenings within the story.

Erdrich appeals to the many emotions experienced by growing children, but reinforces a strong system of values. The love of family, respect for all life, the finding and acceptance of one's identity, and self-sacrifice are all values that emerge as Omakayas lives and learns within her community.

A good read for young or old, replete with a surprise ending, we recommend *The Birchbark House* published by Hyperion books for children. ISBN: 078680302, Ages 9-up, 192 pages. Contact your local book store or phone 1-800-759-0190.

HONOR intern develops kid's activity book

By Sue Erickson, Staff Writer

Chantal Norrgard.

Odanah, Wis.—GLIFWC was once again selected as a site to place an HONOR intern this summer. The Public Information Office is benefiting from the placement of Chantal Norrgard, who is working on a kid's activity booklet to be published this fall.

Norrgard is the daughter of Lorraine and Phil Norrgard, Cloquet, Minnesota and is currently pursuing her PhD in history with a major in American Indian history and a minor in 19th century U.S. history at the University of Minnesota, Minneapolis campus.

Norrgard is not new to Indian Country. Her father is the Health and Human Services director for the Fond du Lac Band, and her mother has produced a number of documentary videos for and about the Ojibwe, the most recent being the *Waasaa Inabidaa* series. Consequently, between her studies and life experiences, Chantal came to the PIO program with significant background and understanding of Ojibwe treaty rights and Ojibwe communities.

Her interest in the summer internship through HONOR stemmed from a desire to apply her skills to work that contributes to the well-being of tribal communities and raises a greater awareness regarding Ojibwe culture, she says.

While also helping out with *Mazina'igan* coverage, Norrgard's chief objective for the internship is to develop text and graphics for a kid's activity booklet, which will combine cultural information, treaty history, cultural stories, and activities for elementary level students. Currently, GLIFWC has few materials geared to this level, although educators from both the tribal and non-tribal sectors are always seeking resources.

In addition to her studies, Norrgard has also worked as a teaching assistant at the University of Minnesota and has been employed by the Northeast Minnesota Historical Center in Duluth as well as the Douglas County Historical Society in Superior, Wisconsin. Currently, in addition to the internship, she is teaching one summer course at the University of Minnesota as well as working with the Madeline Island Historical Museum.

For more information on the kid's activity book, contact GLIFWC's PIO office at (715) 682-6619 or email pio@glifwc.org.

The Ojibwa Dance Drum out-of-print

DVD/VHS about Bill Baker, The Drummaker available

La Pointe, Wis.—Responding to a number of inquiries about his book, *The Ojibwa Dance Drum*, Tom Vennum, author and enthnomusicologist, says the book is out-of-print with no copies available. He does not anticipate having the book reprinted.

However, on VHS or DVD is the film, *The Drummaker*, featuring a 1974 video of the former Bill Baker, Lac Courte Oreilles (LCO) drummaker. Baker was filmed at LCO's Six-Mile Corner.

The VHS or DVD versions are available through the Penn State Audio Visual Sales at 1-800-770-2111.

Beautiful beadwork

Summer's flowers live all year in Ojibwe beaded designs

The Ojibwe people make many beautiful designs using small beads to decorate their clothing, especially outfits used for dance. They also put beadwork on moccasins, bags, headbands, hair ties, belts—many different items,

The Ojibwe have used beads to decorate things for hundreds of years. A long time ago, before there were glass or plastic beads, they would use dried berries, seeds or small, carved pieces of wood or bone. Bone beads used to be placed on the breast of jackets. Their arrangement was beautiful, but they also protected the chest area. Sometimes beadwork also told stories or recorded important events, such as on wampum belts. In the Ojibwe language beads are known as *manidoominens*—spirit berries.

The Ojibwe people's love of nature comes out in their beadwork designs, which show many different kinds of flowers, berries, leaves, nuts, butterflies, and animals. Their designs are called "woodland" designs because they depict so many plants and animals that live in the northwoods.

Beadwork designs and colors are very special to the people who bead. Often their work tells about a special spiritual message that has come to that person, sometimes in a dream or a vision. That's why beadwork is done with great care and respect because the design and the colors have an important meaning to them. The beads themselves are also kept carefully, respected and not wasted. It is important for people to respect the beadwork of others as well.

Some of the plants that appear in Ojibwe beadwork are the wild rose called *oginii-waabigwan* in the Ojibwe language; strawberries called *ode'imin*; acorns called *mitigomin*; and grape called *zhawimin*.

The fine beadwork of Sharon Nelis, Bad River tribal member, adorns a variety of items, many used in her dance outfit. The elaborate floral beadwork on her black velvet dance skirt follows a traditional woodland design and color scheme. Sharon uses very small beads, size 13, in most of her work. (Photo by Sue Erickson)

The beadwork decorating the buckskin knife scabbard are those given to Sharon Nelis by Tobasonakwut Kinew when she received her Indian name, nenaiigiziigok, which means healing sky woman. Oftentimes, there is a distinct meaning, purpose or special thought behind the colors and designs of beadwork. (Photo by Sue Erickson)

Colors that have always been popular in Ojibwe beadwork are:
ozhawaa—blue
miskwaa—red
ozaawaa—yellow
waabishkaa—white

Color the woodland beadwork

Images reprinted with permission from **Beads to Buckskins**, by Peggy Sue Henry.

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POSTAGE PAID
PERMIT # 203
EAU CLAIRE, WI

Printed by: EAU CLAIRE PRESS COMPANY, EAU CLAIRE, WI 54701

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(Pronounced Muh zin ah' ĭgun)

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MAZINA'IGAN (Talking Paper) is a quarterly publication of the Great Lakes Indian Fish & Wildlife Commission, which represents eleven Ojibwe tribes in Michigan, Minnesota and Wisconsin.

Subscriptions to the paper are free. Write: **MAZINA-'IGAN**, P.O. Box 9, Odanah, WI 54861, phone (715) 682-6619, e-mail: pio@glifwc.org. Please be sure and keep us 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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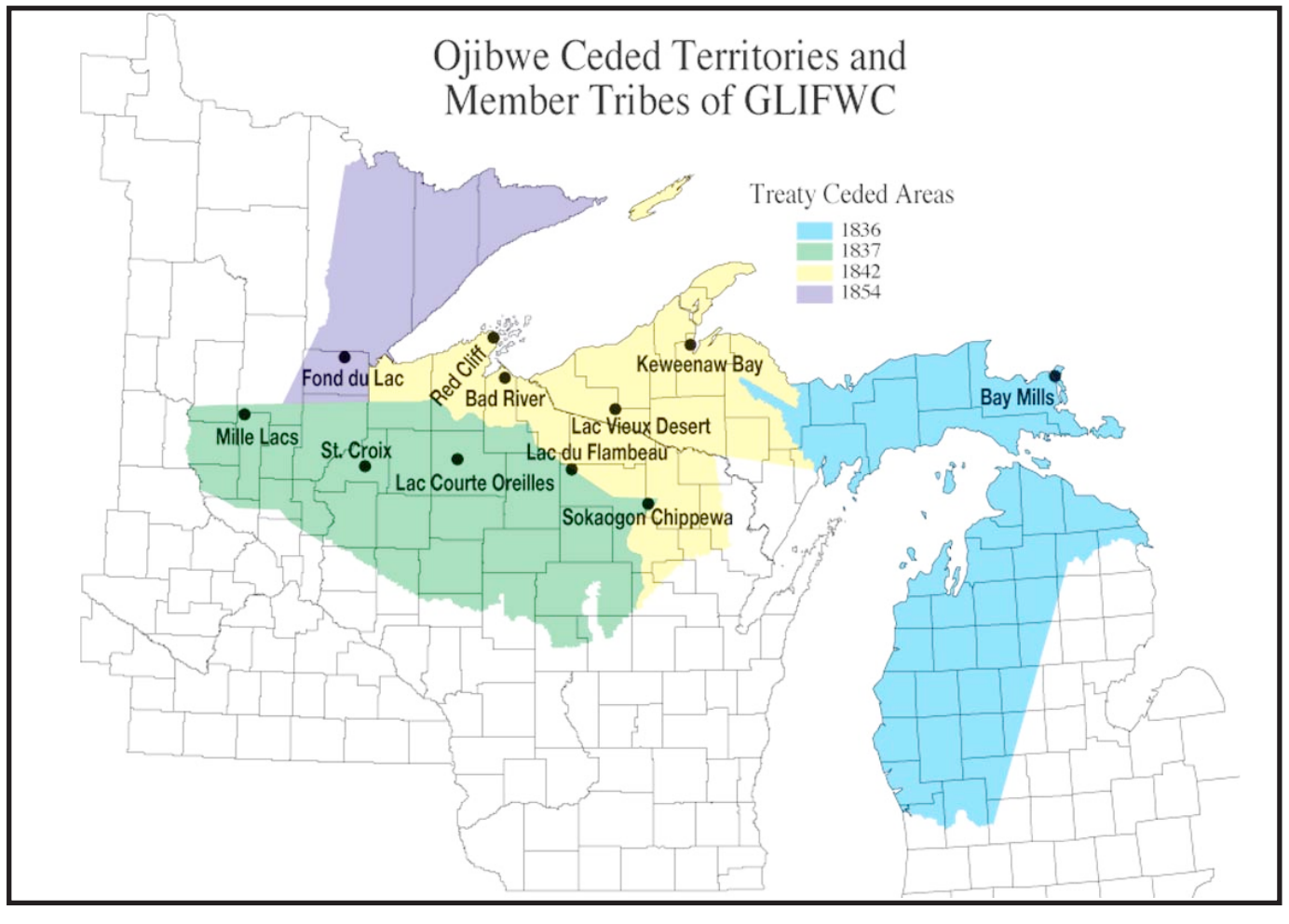

Mazina'igan

A Chronicle of the Lake Superior Ojibwe