

Mazina'igan

A Chronicle of the Lake Superior Ojibwe

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Plan released to protect Great Lakes water

By Charlie Otto Rasmussen
Staff Writer

Odanah, Wis.—Aquifers across the nation are drying up, and the population exodus to arid cities in southwestern United States steadily depletes local water resources. Thirsty eyes are drawn to the Great Lakes, the largest concentration of fresh water in the world. But many of the lakes already struggle with low water levels, making talk of potential large-volume water diversions unsettling to the states, provinces and tribes who manage the system.

In response, state governors and provincial premiers from Minnesota to Quebec released the Great Lakes Charter Annex (Annex) on July 19, a unified proposal for water conservation and management protocols. Under the draft agreement, massive water diversions out of the Great Lakes watershed would

be extraordinarily difficult and require the unanimous consent of the eight U.S. governors.

GLIFWC Policy Analyst Ann McCammon Soltis said that while the document generally outlines sound approaches to Great Lakes management, it's unclear what impact lower volume diversions might have on water levels and water dependent resources.

"One of the difficult things about this proposal is the uncertainty associated with the impacts of a diversion or withdrawal of a particular amount," said McCammon Soltis.

The Annex offers a series of guidelines for removing five million gallons or more daily over a 120-day period. For a "consumptive" use of that water, a super-majority of governors, or a 6-2 vote, would be required. Local jurisdictions are empowered to regulate smaller withdrawals, generally under one million gallons daily.

"Under the proposal, applicants seeking diversions are required to demonstrate that water removal will not cause significant adverse impacts to the basin's water resources. There are guidelines that will help jurisdictions decide whether an impact is significant. Unfortunately, a lot could depend on how strictly the guidelines are enforced," said McCammon Soltis.

Esie Leoso, Bad River and Midewin Lodge member, said she's encouraged by the recent proposal and called for women to step forward and advocate strict protections for the lakes. "It's good that people are preparing and looking ahead like this," Leoso said. "This is something that women need to stand up for. In Anishinaabe tradition, women are the water keepers. In essence it's all women who should protect the lakes."

Along with other Ojibwe women around Lake Superior, Leoso practices traditional water ceremonies and par-



Lake Superior. (Photo COR)

ticipates in events to promote water quality and protection. "Water is more important than oil. You can get by without oil, but you have to have water to live," Leoso said. (See Water diversion, page 23)

Gray wolf delisting proposed Midwest states & tribes prepare to take the reins

By Sue Erickson
Staff Writer

Forest Lake, Minn.—Lee Staples, cultural advisor, Mille Lacs Band of Ojibwe, offered a prayer and a special song to the wolves at the start of a press

conference at the Wildlife Science Center, Forest Lake, Minnesota, announcing the intentions of the U.S. Fish & Wildlife Service (USFWS) to propose delisting the gray wolf in the Eastern Distinct Population Segment (DPS) from the federal Threatened and Endangered Species list.

It was near the conclusion of the event when a lone wolf howl penetrated the air, interrupting the speaker and offering a wolf song in return. That howl soon became a chorus of wolf calls as other wolf tenants at the Science Center, around forty in all, joined in the refrain—the wolves insisting on having their say at this milestone occasion marking their return from near annihilation.

The penned wolves encircled a group of about fifty people assembled to hear the announcement of the proposed de-listing, which came 30 years after the gray wolf was first listed under the Endangered Species Act in 1974.

"The recovery of the gray wolf has been dramatic," stated Secretary of the Interior Gale Norton, noting that just three decades ago their status was precarious with only a handful in the lower United States and in Minnesota. Estimates currently show the gray wolf population to be about 2,445 in Minnesota, 373 in Wisconsin and 360 in Michigan.

Comparing the USFWS proposal to delist the wolves in the DPS to being released from an intensive care unit, Norton said that population goals have been reached, and all three states—Michigan, Minnesota and Wisconsin—

have management plans that will ensure gray wolf survival.

The states and tribes with wolf populations on their lands will assume control of managing these wolves.

Issues relating to control of depre-dating animals, possible hunting and trapping seasons, along with maintenance of a healthy wolf population will be governed by the appropriate state or tribe.

The USFWS will continue to monitor the gray wolf populations in the Eastern DPS for five years after delisting.

Norton noted that the gray wolf population in the Western DPS is doing well also, but state wolf management plans are not in place as yet.

Charlie Wooley, deputy regional director, USFWS Region 3, credited the cooperation and commitment of the Wolf Recovery Team, numerous agencies, biologists, congressional leaders, as well as private organizations and individuals for the success of the wolf recovery in the Eastern DPS.

Secretary Scott Hassett, Wisconsin Department of Natural Resources, said Wisconsin is ready to take over wolf management. "We will update the 1999 management plan and will continue to work with tribes in regard to (See Gray wolf, page 3)



Lee Staples, cultural advisor from the Mille Lacs Band, offers a song to the wolves at the Wildlife Science Center, Forest Lake, Minnesota at the beginning of a press conference announcing the USFWS's proposal to remove the gray wolf from the federal Threatened and Endangered Species list. (Photo by Sue Erickson)



Packers Super Bowl champs hooked into Partners event

Interagency gathering held at LCO

By Charlie Otto Rasmussen, Staff Writer

New Post, Wis.—Anytime a Green Bay Packer shows up for a couple of days to cast a line and chitchat with your fishing group, it's a memorable experience. Guys you root for at Lambeau Stadium or on the television screen are sitting next to you munching on fried shore lunch or trying to free up a snagged fishing line.

For the last five years tribal, state and federal fisheries managers have enjoyed that experience at the annual Partners in Fishing event held on Ojibwe reservations in northern Wisconsin. The gathering, organized by Bureau of Indian Affairs Biologist Bob Jackson, provides a break from number crunching, fish population modeling and the formal meetings that go along with co-managing the ceded territory fisheries.

But things changed this year—a new twist to the Packer fishing tradition. Jackson recruited two men of the green and gold cloth, and neither had delivered a hit at Lambeau in decades. Champion players of the first two Super Bowls, Jerry Kramer and Fuzzy Thurston, surprised interagency fish officials on June 3 at Herman's Landing Resort.

"We didn't reveal their identities ahead of time to add some additional excitement to the event," said Jackson, who coordinated planning with Lac Courte Oreilles (LCO) tribal leader Mic Isham and Mark Rose from Discover Wisconsin Television. "It was a treat to bring in some outstanding players that many of us enjoyed watching as kids."

The LCO Band hosted this year's get-together at the historic resort located in center of the 15,300-acre Chippewa Flowage. Groups of two or three fishermen



Jerry Kramer (center) holds up a 7.5 walleye he caught on the Chippewa Flowage. Lac Courte Oreilles' Mic Isham (left) and guide Ray Blank fished with the retired Green Bay Packer during the annual Partners in Fishing event. Blank, a local guide since 1942, filleted the fish and it was served that evening. (Photo by Charlie Otto Rasmussen)

from different agencies paired off in fishing boats, while others joined the Green Bay Football Hall of Famers in search of walleye, muskie, northern pike, and panfish.

Kramer horsed in the largest fish of the two-day event, a 7.5-pound walleye that nailed a Rattle-Trap provided by veteran guide Ray Blank. Kitchen staff fried and served the walleye back at the resort where Kramer and Thurston autographed 1960s-era color photographs.

Jackson said that a lot of factors—including the good-humored company of the special guests—made the 2004 Partners in Fishing one of the best in the last 14 seasons.

"The food was excellent: fishing action was steady for most groups," Jackson said. "Good working relationships between all the agencies and tribes has helped create an outstanding fishery in northern Wisconsin as well as some long-standing friendships."

The Wisconsin Department of Natural Resources (WDNR) reports that in 2003 state licensed fishermen caught nearly 1.2 million walleye in the ceded territory alone. According to creel survey estimates, anglers kept around 263,000 of those fish. By comparison treaty fishermen bagged approximately 27,000 walleye, or less than 11 percent of the total harvest.

Following shore lunch on an island in the eastern portion of the Flowage, Kramer encouraged the individual attendees to continue building strong working relations.

"One of the reasons my team, Fuzzy's team, was an exceptional football team wasn't really the people; we weren't great athletes, but we were able to subjugate our individual needs, wishes and wants for the benefit of the team, for the benefit of everyone," Kramer said. "And the DNR and the Indian Nations are coming together, and you can have an incredibly powerful impact if you can become a team and do what is best for the area."

Both players noted their mutual enjoyment and appreciation for northern Wisconsin's high quality water resources.

"You've got an incredibly beautiful area, a sensational resource that will be here for a long, long time, and I'd like to come back in a hundred years from now when I get as old as Fuzzy and see it again," Kramer quipped.

Thurston and Kramer played at Green Bay for much of the 1960s and were part of the Super Bowl championship teams of the 1966 and 1967 seasons.

(Continued on page 14)

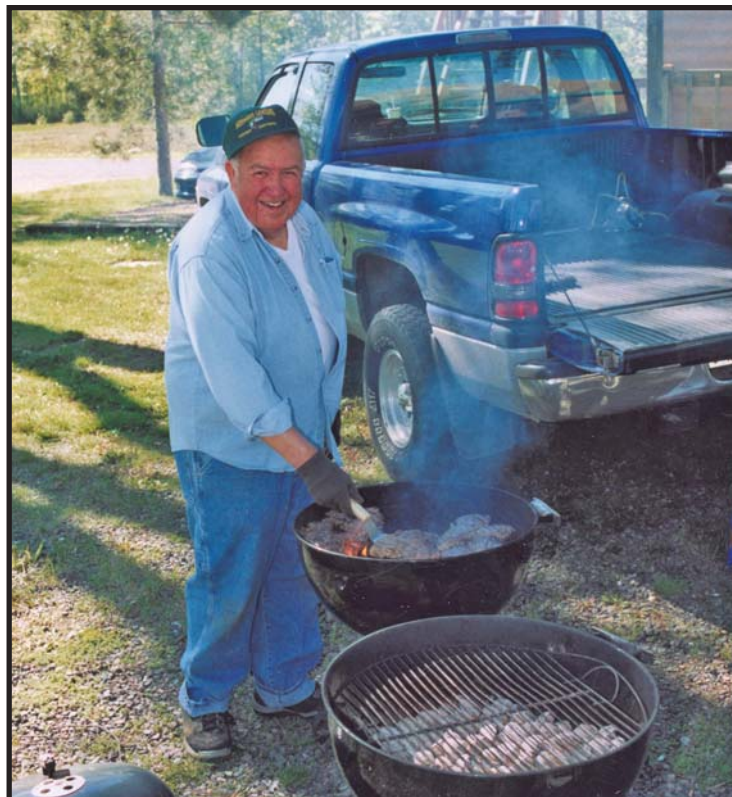


Packer Hall of Famers Fuzzy Thurston and Jerry Kramer signed 1960s-era photographs inside Herman's Landing Resort following an evening of fishing for walleye, northern pike, muskie, and panfish. Event organizer and Bureau of Indian Affairs Biologist Robert Jackson is seated at the right.

Photos by Charlie Otto Rasmussen



Jamison Wendell, Wisconsin Department of Natural Resources fisheries biologist, displays a Chippewa Flowage walleye. Wendell fished with GLIFWC Fisheries Biologist Nick Milroy (background) during the June 3-4 gathering.



Lac Courte Oreilles' Art Tainter manned the grill outside Herman's Landing.

On the cover

Victoria Gokee-Rindal, Red Cliff, proudly displays a pair of moccasins she completed herself under the guidance of Eileen Skinaway, St. Croix elder and instructor at the Red Cliff Language Immersion Camp this summer. (See story page 17) (Photo by Sue Erickson)

Hook and line violators pose greatest threat to fishery

By James Schlender
GLIFWC Executive Director

Ever since the spring fishing opener for state anglers in Wisconsin and Minnesota, newspapers have highlighted a steady flow of fish-poaching cases. It's not always front page news, but it seems to be happening with growing frequency—too much in fact.

One is left to ponder the impact of overbagging and double dipping—tricks of the poaching trade—on fish populations.

Violations are as old as fishing regulations but nowadays with more efficient fishing methods coupled with electronic fish finders, underwater cameras and a shortage of conservation enforcement officers, we face a growing challenge in maintaining healthy fisheries in the ceded territory.

While the Wisconsin Department of Natural Resources (DNR) reports that in 2003 anglers had one of the best walleye fishing seasons in recent history, populations struggle in many ar-

reas and fishermen retrieve bare hooks with nothing to show for their efforts.

The stock-and-trade response to poor fishing on northern lakes over the past twenty years has been “those Indians” and “spearing.” Idle talk at local taverns and a few outdoor news publications have kept the wet-noodle myth that Ojibwe spearing harms fish populations on life support over the years. Bad walleye fishing is generally translated as the Indians got ‘em all (actually Wisconsin treaty spearkers take around one-tenth of the state harvest annually). Or the DNR messed the lake up; they didn't stock enough; they did too much of this and not enough of that.

There's an old catch phrase used by boat landing protestors—made up of people genuinely concerned about spearing along with drunks and racists looking to get some good digs in—that Indians were out to “rape the resource.” Tribal spearkers, who are in fact tightly regulated, would be hard-pressed to pull off a rape of the resource.

First our wayward spearker has to get permits from the Great Lakes Indian

Fish & Wildlife Commission (GLIFWC) and tribe of enrollment, then get a harvest permit which is good for only one night and a finite number of fish. GLIFWC wardens and creel clerks, who are present at every boat landing on every open lake every night, pose another hurdle to the prospective Ojibwe violator.

GLIFWC staff checks every spearker coming off the lake; all the fish are measured; all the fish are counted. That is, if the fishermen was successful. Choppy water has made spearing impossible on many occasions.

DNR wardens are circulating around ceded territory lakes and boat landings as well, spending part of their time monitoring closed lakes where they nab, without fanfare, non-Indian spearkers pretending to be Ojibwe treaty fishermen just out doing their thing.

In truth it is the few greedy overbaggers that threatens walleye fisheries in the north country. Natural resource officials in both Minnesota and Wisconsin have intercepted an unsettling number of gross violators in high-profile cases this year.

During an opening weekend sting operation on Wisconsin's Turtle-Flambeau Flowage, a coordinated effort by more than a dozen wardens netted 13 anglers and the 98 illegal walleyes in their possession. Among them were double dippers, anglers who caught their daily limit—in this case three walleye—only to return and bag more fish.

These state enforcement efforts must be applauded, but it's not enough. Budgets are tight for the states along with all resource management agencies, so significantly expanding the warden pool is unlikely and might not even cure the problem were it feasible.

Minnesota took a step in the right direction last year, boosting penalties for gross overlimit fishing violations—Wisconsin might follow suit. Individuals also have a role. Pick up the telephone and call a poaching tipline when you see someone deposit a bag limit of walleyes back on land and head out for more. In Wisconsin call (800) 847-9367, Minnesota (800) 652-9093 and Michigan (800) 292-7800. Bust a poacher, save a walleye.

Got geese?

By Peter David
GLIFWC Wildlife Biologist

If you can answer yes to this question after this fall's hunting season, you may have beaten the odds.

Breeding population surveys of the Mississippi Valley Population of Canada Geese (commonly referred to as simply the MVP) present a dismal picture of the flock that provides most of the migratory goose harvest in the ceded territories.

First the good news: The estimated population size for the MVP flock increased 27% from 2003. So far so good, right?

Not really, as even the good news is tainted. Biologists have realized that the MVP population estimate can be inflated by the presence of molt migrants from other flocks. These are non-breeding birds (Canada geese typically do not breed until they are four-five years old) that really belong to other populations but which may come to the MVP breeding grounds to molt.

Due to large annual variations in the number of molt migrants that may be present each year, biologists have shifted away from basing management decisions on the total population estimate in favor of using estimates of the more accurately measured breeding cohort of the population. And though the total population increased, the estimated number of breeders fell 23% to 276,344 birds.

And these breeding birds faced nesting conditions that were about as bad as survey biologists have ever witnessed. Spring (as measured by snow melt) arrived very late on the nesting grounds, resulting in a delayed and reduced nesting effort with small clutches. And the late hatch means birds will not have as much time to grow and prepare for the fall migration. (Biologists have had to delay leg-banding efforts by nearly two weeks to give the birds more time to grow).

All of this means that recommended harvest quotas for this population have been reduced by a third from last year, and that further cuts could be in store next year if the breeding population falls any further.

One factor that may save the season for goose hunters, however, is the continued increase in locally breeding Giant Canada Geese. Two decades ago this population was essentially a non-factor in terms of local harvest, but today it accounts for a large and growing portion of the take.

Hunters who seek out places where the Giants have established themselves may have the best chance of answering “yes” to the “Got Geese?” question this fall.

Ducks less dismal

The North American May Waterfowl Breeding Population and Habitat Survey—the largest annual wildlife survey in the world—provides a less discouraging outlook for duck populations.

This remarkable survey of thousands of miles of US and Canadian breeding grounds will be celebrating its 50th anniversary next year. It has built a data base on trends in waterfowl and habitat that is unparalleled in the world.

The results of this year's survey suggests that overall continental duck populations are down about 11% from last year, but only 3% below the long-term (1955–2003) average. Overall wetland conditions were generally average to poor, especially early in the season, and likely negatively impacted early-nesting species. Conditions improved later in the year, but the benefits of the additional water may not be realized until 2005.

As in most years, some of the individual species included in the survey fared better than others. Mallards and blue-winged teal, important species in the tribal bag, were similar to their long-term average. Gadwall, green-winged teal and shovelers were well above their long-term averages, while widgeon, pintails and scaup (blue-bills) were well below.

The low level of the latter two species especially concerns biologists, as these species appear to be exhibiting long-term declines for reasons that are not understood. (Wood ducks, another important species in the tribal bag, are not adequately monitored in these surveys due to their unique nesting habitat, but other evidence suggests their population is doing well.)

Tribal waterfowl hunters are reminded that fall hunting regulations are available at tribal registration stations, and online under the regulations link at www.glifwc.org.



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Gray wolf delisting

(Continued from page 1)

wolf populations that colonize on their lands and cooperate in management of wolf populations in the ceded territories,” he said.

Hassett also noted that the state will pursue science-based management, but will also continue to work with stakeholders, balancing wolf survival with social needs and concerns.

The federal proposal to de-list will be open for public comment for 120 days following the publication of the rule. A series of public hearings will be held in the Eastern DPS, the details to be announced in the near future.

Following the public comment period, the USFWS will evaluate the information and make a final decision on the proposal. Norton estimates a decision to be out early in 2005.

In anticipation of the delisting, states and tribes will prepare to be handed responsibility for long-term gray wolf survival. As Lee Stapes noted in his opening ceremony:

“The wolves are our brothers; Anishinaabeg survival depends on the gray wolf. That is a teaching from our elders. Tobacco was offered to the wolf, and thanks given to those who have helped with the survival of our brother, who has walked with us. I hope everybody helps insure the gray wolf continues to walk and run on this land.”

For more information on the USFWS's proposal go to the USFWS website at <http://midwest.fws.gov> or call the Gray Wolf Information Line at 612-713-7337.

Have a safe and successful fall hunt!

Wild rice restoration program underway on Lac Vieux Desert

Forest Service, GLIFWC biologists update local property owners

*By Charlie Otto Rasmussen
Staff Writer*

Land O' Lakes, Wis.—Water levels on the Wisconsin-Michigan border lake Lac Vieux Desert have rebounded following the parched summer of 2003, one of driest in the last century. Last year's drought unfortunately coincided with a new interagency management initiative to foster wild rice restoration by lowering the maximum lake level.

The 50-percent reduction in rainfall and adjustments at the Lac Vieux Desert dam, created uncommonly low water and a lot of concern from local property owners.

"Because of the timing, it appeared that the rice restoration project was responsible for driving down water levels on the lake," said Great Lakes Indian Fish & Wildlife Commission (GLIFWC) Biologist Peter David. "But natural hydrology actually accounted for much of the drop."

David and U.S. Forest Service (USFS) project managers Robert Evans and Cheri Ford discussed the management plan with more than two dozen Lac Vieux Desert property owners on June 12 at the Land O' Lakes town hall. The meeting provided an opportunity to update riparian landowners on the effort to restore 80-100 acres of wild rice, or manoomin, on the 4,200-acre lake and clarify the scope of the project

developed by federal, state and tribal resource officials.

"The cooperating agencies and Lac Vieux Desert Tribe have a strong interest in reestablishing some of the historic wild rice on the lake, particularly Rice Bay," David said. "It's an important food for wildlife and people. And there's certainly a cultural component."

Once an outstanding wild rice lake, key ecological functions of Lac Vieux Desert were altered after Wisconsin Valley Improvement Company (WVIC) installed a concrete dam at the outlet in 1937. The wild rice, including an extensive bed just offshore from the ancient Indian village Katikegoning, vanished by the early 1950s.

When the time came to draft a new federal operating license for the dam in the mid-1990s, an interagency workgroup including GLIFWC, USFS, Michigan Department of Natural Resources, and U.S. Fish & Wildlife Service requested that the maximum water elevation be set at 1,680.7, about nine and half inches below the old high water mark.

"Wild rice grows best in around two feet of water, ranging upward to three feet," David said. "When exposed to consecutive years of high water as has occurred in Lac Vieux Desert, the stand can become depleted and ultimately die out."

In recent years Lac Vieux Desert tribal members, USFS and GLIFWC



Hand seeding efforts helped maintain this 20-acre manoomin bed on the east end of Lac Vieux Desert's Rice Bay. (GLIFWC photo)

staff have worked to restore manoomin in Rice Bay near Katikegoning. Shifting water levels, however, has plagued annual seeding efforts, David said.

Although Lac Vieux Desert is a natural lake, the dam enables the company to build up extra water for power generation on the Wisconsin River; when the river flow wanes during dry periods, water is released through the dam to feed downstream power generators. Under the new federal operating license WVIC is required to reduce the maximum operating level of the lake for a period of 10 years in order to

assess whether wild rice establishment is sustainable.

David and Evans explained that the effort to restore wild rice is a work in progress, a fluid program of "adaptive management" that entails regular monitoring of the lake habitat, wild rice beds and other ecological functions over the ten-year period that began in 2003. The agencies are working to maintain a balance between the needs of recreational users and the ecological requirements of not only wild rice but also fisheries and aquatic vegetation, Evans said.

Ricing moon approaching

Preliminary outlook encouraging

*By Peter David, GLIFWC
GLIFWC Wildlife*

Odanah, Wis.—Believe it or not, its not too early to start thinking about where you put those cedar sticks last fall.

Although the cool summer we have had may make it seem like summer has barely arrived, the calendar still indicates that the maturing of the manoomin will soon be upon us.

Two Great Lakes Indian Fish & Wildlife Commission (GLIFWC) summer interns, Travis Neebling and Seth Lanning, have been busy checking on the rice beds on selected waters since early July (see story on page 19). Additional aerial surveys should also be completed by mid-August.

Overall, the information available at the time this story went to press is encouraging. The wet weather, which has hounded parts of Wisconsin and Minnesota, has largely stayed south of the heart of the rice range, creating relatively favorable water levels. As a result, most of the beds examined to date appear to be at least average or better.

As is always the case, year-to-year production of this annual plant varies from water to water, and some beds will not be as good last year, which produced one of the best crops of the past two decades. Phantom Flowage, for example, a site which was planted a decade ago in a cooperative effort between the Wisconsin Department of Natural Resources and GLIFWC—and which was the most heavily harvested wild rice bed in the state last year—is down from a year ago. Nevertheless, unless the crop is damaged by late storms or affected by pollination problems, it appears that pickers should have a good opportunity to gather some of this sacred grain this fall.

We need your wild rice seed!

Each fall GLIFWC coordinates an intertribal, interagency effort to restore manoomin to its historic abundance.

You can help by selling your freshly harvested wild rice seed to us for use in reseeded programs both on and off area reservations.

Contact Dan North or Peter David at GLIFWC's main office (715) 682-6619 before harvesting to make arrangements.

Miigwech!



Some of these opportunities will be at other waters which have been seeded in the interagency wild rice restoration program that GLIFWC coordinates. This program has been working to restore some of the lost abundance of manoomin throughout the ceded territory, and it is showing some marked success.

In recent years, roughly a quarter of Wisconsin's off-reservation wild rice harvest has come from sites seeded through the restoration efforts of the past 15 years. At the same time, harvest pressure on some lakes, like Clam in Burnett and Totogatic in Bayfield, has lessened as new, alternative sites have become available. And of course, these new beds are available not only to humans, but

to ducks, swans, muskrats, and all of the other species that utilize this generous resource.

Despite the optimistic crop outlook, GLIFWC encourages ricers to do a little scouting of their own. GLIFWC surveys can help head ricers in the right direction. Summaries of our abundance surveys will be available at tribal registration stations and posted on our web site (www.glifwc.org) shortly before the season begins. Much of the survey work is done relatively early in order to have the results available before the season begins, and a lot can happen in the meantime. It's always a good idea to scope out favorite spots before heading out to pick. This might be even more valuable this year than usual, since the cool summer weather we've had may make the season unfold a little later than usual.

Opening information for those lakes which have their harvesting dates regulated should also be available at tribal conservation offices and GLIFWC's Law Enforcement Dispatch office. Regulations pertaining to sticks, boats, hours, etc. apply to all ricing waters, whether their harvest dates are regulated or not.

Have a great season!

Rejuvenating the GLIFWC garden

By Karen Danielsen
GLIFWC Forest Ecologist

Odanah, Wis.—Six years ago, staff members of the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) Wildlife Section constructed a distinctive garden comprised of wild plant species known to be gathered and used by the Anishinaabe.

Bricks were laid down to delineate two concentric circles, dividing the outer circle into the four Medicine Wheel directions. Wiingashk (sweet grass) was planted within the inner circle and dozens of other plants were planted within the directional divisions.

Through the years, the plants flourished—some growing larger, some reproducing by setting seed or generating new sprouts off interlacing root systems. Though GLIFWC staff continued to maintain the garden, plant interactions often mimicked that seen in the wild.

GLIFWC staff even incorporated and labeled appropriate plant species that had colonized the garden from the adjacent landscape. Certainly, not your typical rose garden, but still very beautiful and unpretentious in its natural essence.

However, as occurs with all gardens, the original sparkle began to flicker. Kentucky bluegrass, a European species commonly used for lawns, slowly crept into the wiingashk. Plants growing in the outer circle lost their form and vibrancy, becoming gangly and prostrate.

The cacophony of plants, so attractive at first, soon became less manageable. Rejuvenating the garden became a goal for summer 2004.

The task fell to Tanya Aldred, GLIFWC plant technician. She first placed down her tobacco and then began unearthing most of the plants to allow for a “fresh start.”

She used some of the unearthed plants as compost material, but many

she placed in temporary pots for eventual replanting. She tediously separated the Kentucky bluegrass from wiingashk. She saved all the wiingashk either through replanting or making braids.

She placed black plastic over the cleared soil for several weeks to “cook and kill” the seeds of unwanted plants. Then she added topsoil and mulch. She

replanted wiingashk within the inner circle and the other saved plants into the outer circle. The Northern Native Plants Project of the Sigurd Olson Environmental Institute (see sidebar) donated many more native plants.

Her hard work has come into fruition, with the new garden already a sunrise of purple, yellow, and a myriad of greens.

Northern Native Plant Project

The Northern Native Plant Project (NNPP) is working to help recapture our true Northwoods by restoring the native plant diversity through landscaping and gardening.

It seeks to create public awareness about the importance of northern native plants, to encourage their use in landscaping and gardening without discouraging the use of non-invasive perennials and annuals and to increase the availability of the northern native plant species supply on a retail level.

NNPP is a program of the Sigurd Olson Environmental Institute of Northland College. Partners include GLIFWC, USDA Forest Service, Natural Resource Conservation Service, Bad River Tribal Natural Resource Department, Wisconsin Department of Natural Resources, and University of Wisconsin Extension.

For more information contact Pam Troxell at (715) 682-1490 or ptroxell@northland.edu.

Plants of the GLIFWC Garden

bagizowin, swamp milkweed—used as a strengthening bath
bu'gisowe, joe-pye weed—used to treat colds
busidji'bikuguk, meadow rue—used to treat pains of rheumatism
imbji'goa, white sage—used to purge “bad medicine”
migiziwibag, large-leaved aster—used to treat headaches
misudidjeebik, columbine—used to treat stomachaches
ode'imin, wild strawberry—used for food and medicine
ozhaashijibik, fireweed—used to treat bruises
sasabwaksing, boneset—used to treat pains of rheumatism
sasa'bikwan, dogbane—used to treat sore throats
sasao-kwanins, wild bergamot—used to treat respiratory problems
wezawab-gonik, black-eyed susan—used to improve health of babies
zhawaseshkoohnse, blue vervain—used to treat nosebleeds
ziiginizh, harebell—used to treat earaches



Tanya Aldred, GLIFWC plant technician, starting work on the GLIFWC garden. (Photo by Karen Danielsen)



The rejuvenated GLIFWC garden. (Photo by Charlie Otto Rasmussen)

Bark can be taken off birch trees safely

Strip bark at the right time, the right way

By Sue Erickson
Staff Writer

Lac Vieux Desert, Mich.—Charlie Fox, Mole Lake tribal member, recently found a sign tacked to a birch tree on the Lac Vieux Desert reservation by someone obviously upset because bark had been taken off the tree. The person more than likely assumed the tree would die or, at least, be damaged. However, that is not true if bark has been properly stripped.

Ojibwe people have been harvesting bark from birch trees (wiigwaasimitig) for centuries without harming the trees, which are highly valued. Birch bark containers, or makakoon, were used to store and transport food; birch bark covered their lodges and was used to shape canoes. These are just a few of many traditional uses.

Birch bark has always been a highly valued resource in Ojibwe Country and still is. Many contemporary harvesters still fashion baskets, lodges, and even canoes from this traditionally-used material. The same is true in Sweden, where people become masters of birch bark, continuing an age-old tradition of fashioning many objects, even shoes, from the versatile bark. They, too, harvest the bark with care to avoid losing the trees.

Because of its value, Ojibwe people harvest birch bark carefully, avoiding serious damage to the tree. There's a period of time in the spring, usually in June, when the outer bark of the tree actually loosens from the tree's trunk. This is when birch bark should be stripped. Some people who know birch well can tell when the bark is loose just by looking at the tree's leaves.

When stripping bark, a person must also be careful not to cut into the trunk beneath, only through the outer layer of bark. If done correctly, the outer layer will lift away readily without damaging the tree's trunk.

Most Ojibwe harvesters are very respectful of the birch tree, often putting down asemaa, or tobacco, in respect and thanksgiving, before taking the bark. They also know that they may need more bark at some point and that coming generations will also need this resource, so they strip the bark carefully in order to insure the continued life and growth of the tree.

Under a Memorandum of Understanding with the U.S. Forest Service, GLIFWC member tribes harvest birch bark in several national forests.



This sign was tacked on a birch tree at the Lac Vieux Desert reservation.

Sowing seeds for a healthy lifestyle

Gitigaan projects blossom in Ojibwe communities

By Sue Erickson, Staff Writer

Editor's note: Numerous gitigaan (gardening) projects have sprung up on a number of reservations over the past six or seven years as part of an effort to encourage healthier diets by cultivating gardens and gardening skills. The gardening projects are linked to off-reservation harvest opportunities, which provide access to traditional, native foods—wild rice, berries, venison, fish—all important to a healthy diet as well as culturally significant to the Ojibwe people. The article below features just three of many successful gardening projects on GLIFWC's member reservations.

FDL's medicine wheel garden links gardening and gathering to good health

Fond du Lac, Minn.—In the heart of the Fond du Lac Tribal and Community College (FDLTCC) campus lays a Medicine Wheel garden. It shows the four directions, the four sacred colors through the use of white, yellow, red, and black rocks collected from Lake Superior shores as well as associated plants sacred to the Ojibwe people—wiingashk (sweet grass), miskwaabiimizh (red osier), giizshik (cedar), and nookwezigan (sage). Behind the garden, the image of the Medicine Wheel appears again on a sign explaining the significance of each to the Ojibwe culture. Funded through a USDA grant and created by a local artist under the advisement of area elders, the FDLTCC Medicine Wheel signifies the ideals of the Fond du Lac Gitigaan Project, linking gardening and traditional gathering to the health of the people, including emotional, physical, mental, and spiritual well-being.

Understanding the full meaning of producing and gathering healthy, natural foods has stirred a great deal of enthusiasm for participants in FDL's Gitigaan Project since its inception ten years ago, when it was started as part of Project Grow, sponsored through the Natural Resources Conservation Service (NRCS), says Dave Wise, tribal liaison officer for the NRCS at FDLTCC. Five years ago the Fond du Lac Reservation Business Committee took over the program as a sponsor along with FDLTCC and several Gitigaan mentors.

Ever since 1994, the Gitigaan Project at Fond du Lac has offered a series of ten evening courses relating to gardening, gathering and nutrition, essentially providing the how-to expertise on gardening and gathering techniques, some Ojibwe cultural history and nutritional information, according to Norma Debe, master gardener. Debe and her husband, Leland, who is a FDL tribal member and master gardener, have been with the Gitigaan Project since its inception and have led the way, along with other enthusiasts, towards its expansion.

As well as the 48-hour course, the project provides hands-on help in setting up a garden, including tilling if required, and also gives out seeds and bedding plants each year. But the project doesn't stop with standard gardening; it also includes and encourages gathering of wild rice, maple sap, berries, and other traditionally gathered foods. So several of the educational sessions relate directly to gathering techniques for these wild foods.

While in the past the annual gardening sessions have attracted about 35 participants, this year saw growth with 50 participants. Leland says he has also noticed that many people are expanding their gardens each year and obtaining their own equipment.

The Debes estimate the Fond du Lac community can now boast 135 flourishing home gardens, including three sizeable enough to be commercial. One of those belongs to Richard Breitkreutz, who recently moved his garden off-reservation to a site with preferable gardening soil. Breitkreutz, who has his own greenhouse, brings his produce to the Duluth Farmers' Market, but would like to establish a farmers' market closer to home.

He, as well as the Debes, raises everything—beans, peas, beets, squash, pumpkins, lettuce, tomatoes, broccoli, cucumbers, cauliflower—the works.



The Medicine Wheel garden at the FDLTCC campus links gardening and gathering to physical, mental, emotional, and spiritual well-being. Promoters and organizers of the Gitigaaning Project gathered by the Medicine Wheel are: Richard Breitkreutz, master gardener; Leland and Norma Debe, master gardeners; David Wise, tribal liaison for the Natural Resources Conservation Service, and Temperance Debe, psychologist. (Photo by Sue Erickson)

The Debes are also considering developing a five-acre plot to produce high bush cranberries and Juneberry plants, which could later be planted into a wild environment. Both plants are important to the traditional Ojibwe diet.

The hype about gathering and gardening generated by this activist Gitigaan group stems from concerns about survival, health issues and self-sustainability. According to Peggy Hiestand-Harri, dietician with FDLTCC and director of the Woodland Wisdom Program, and Temperance Debe, a FDL member and a psychologist currently working on her doctorate, it has to do with healing—spiritual, mental, emotional, and physical healing of the people after generations of consuming highly processed foods and foods high in carbohydrate often in combination with alcoholism. The resulting health issues, particularly type 2 diabetes, are now coming to the fore, especially in Native populations.

The ways of gathering and eating off the land and the large family gardens have nearly disappeared, and in their stead are the fast foods, the boxed dinners, quick-prep stuff—all often packed with high salt content, high carbs and chemical preservatives, says Norma. Fresh produce on the grocer's shelves may have chemical residues and are frequently not allowed to properly ripen. They lose nutritional value in transport to the many destinations, she adds.

The result has been a rising rate of type 2 diabetes among tribal members, especially among tribal people who have depended more on commodities than gardens or gathering over the past generations, according to Hiestand-Harri. While the rate of type 2 diabetes is on the rise in the general American public, it occurs at a much greater rate in the tribal public, she says.

Norma adds that studies also indicate a rising rate of rickets in American children due to processed, over-cooked foods that lack vitamin D.

The leaders of the Gitigaan Project are not only anxious to get nutritional produce into the hands of the people, especially the elders and the youth, but also to teach the skills for people to provide those foods for themselves in the coming years. This is why they have encouraged incorporating gardening and gathering information in the school curriculum and work with the kids in class. For instance, they are looking at a possible farmer's market run by the kids from a garden they have grown. At FDLTCC they would like to see a grow lab at the college's greenhouse and through the college's Woodlands Wisdom course encourage more Indian students to become dieticians and work in the fields of nutrition.

"As Indian people we are supposed to look after the next seven generations," says Leland Debe, "so we want to give them something good to pass on to their kids." That's what the Gitigaan Project is all about—giving the participants the knowledge to produce a self-sustaining diet of natural foods. And that's why the Medicine Wheel garden, linking the many aspects of good health, appropriately lies at the heart of the project.

(See Tribal youth, page 7)



Teaching them young. The Bad River Gitigaaning Project encourages youthful involvement in gardening, teaching both nutrition and gardening skills. Above, a VISTA volunteer working with the Gitigaaning Project helps plant the Headstart pumpkin patch. (Photo submitted)



Cucumber plants, ready for the taking and planting, were among numerous species of plants set outside the home of Judy Pratt-Shelley, Red Cliff, as part of a plant giveaway to Red Cliff gardeners. (Photo by Sue Erickson)

Tribal youth learn gardening skills, good nutrition

(Continued from page 6)

Gitigaaning: Bad River, the place of the gardens

Bad River, Wis.—"Bad River was once known as Gitigaaning or the garden place," says Luis Salas, Gitigaaning Project director, "and gardening is in the hearts of the people here." More specifically, he explains, an area where the White and Bad Rivers join was once called Gitigaaning, and Ojibwe people would travel to this area to plant their summer gardens. So it was no surprise that Bad River members showed a lot of interest when a Gitigaaning Project took root on the reservation about six years ago.

The program has since featured six, annual master gardening classes. This year about 35 people attended the educational sessions and received fruit trees at the end of the class. About fifty pear and fifty plum trees were given away as well as over three thousand plants that were started and raised in a greenhouse.

Tom Syverud, UW-Extension, provided the five-week class, which also featured Sally Auger, Director of the Dream of Wild Health Network, who promotes native plants and heirloom seeds. Joy Schelble, UW-Extension nutrition educator, also works with kids in the garden on a weekly basis, part of the overall effort to stimulate an early interest in gardening and healthy food choices.

Salas says one of the primary reasons for starting the project was to make healthy foods more available in the community, adding to more healthy, natural diets. To date, about 500 fruit trees have been planted in various locations throughout the community. While not all survived deer, rabbit and rodent damage, a springtime ride around the community showed numerous blooms on many young fruit trees.

Also noticeable are hoop houses on raised beds near tribal homes, a result of an initiative three years ago when Tom Cogger of the Natural Resources Conservation Service (NRCS) presented a program on gardening with raised beds.

In recent years the program has been given an extra boost through VISTA volunteers. VISTA has a three-year commitment to the program. This year five volunteers assist with the Gitigaaning Project. Their work includes grant writing, planning, educational programs, and actual garden development.

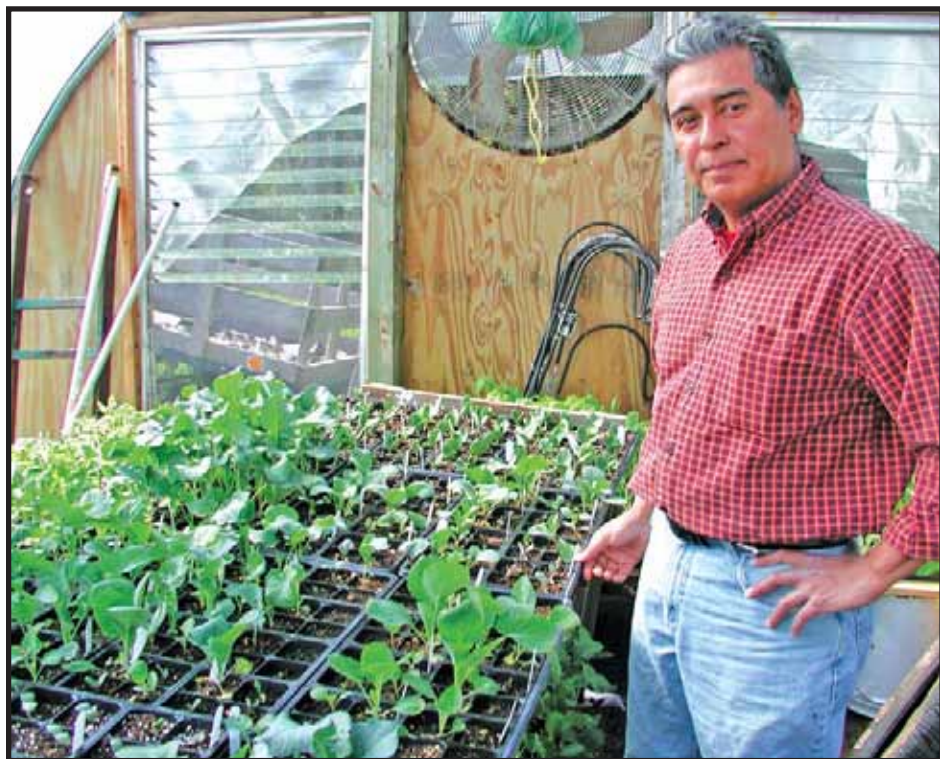
Seven gardens were planted this year, two of which were funded by a grant from the First Nations Development Institute. One is located by the Bad River Day Care and another by the Elderly Center. The project's goals are to increase youth leadership, to build relationships between youth and elders, to increase knowledge among community members about traditional, healthy foods, and to interest the youth in gardening.

Under the grant two youth leaders have been hired, Sophie Lemieux and Shana Powless, and Sylvia Cloud volunteers as an elder advisor. A garden tended by youth from the Bad River Boys and Girls Club was also planted at the Great Lakes Visitors Center just east of Ashland, Wisconsin.

In addition five other gardens in the community have been planted, including one by the pow-wow grounds, a Headstart pumpkin garden; Marvin's garden with heirloom squash, a three-sisters garden at the Northern Great Lakes Visitors' Center; and a community garden across from the pow-wow grounds. They are preparing the community garden site through funds from the NRCS designated to clear, drain and create raised-bed gardens.

A demonstration garden has been planted at the site this year, and the rest of the site will be planted over with a buckwheat cover crop. In 2005 eighty 20-foot by 25-foot family garden plots will be available to tribal members.

In addition to the gardens, the VISTA crew has also tilled up a total of 32 family garden plots, a service free to those you attend the gardening classes and available to others for a small fee.



Luis Salas, Bad River's Gitigaaning Project director, had a greenhouse full of young vegetable plants ready to be dispersed to community gardens once the threat of frost was past. To date, Bad River has hosted six master gardening classes, encouraging community members to develop gardening skills.

Plans for three more gardens in 2005 are also part of the program. Those will be planted as three-sisters gardens, using corn, beans and squash. The beans are planted around the corn, using the corn as a climbing pole. The two plants are complimentary because corn uses up nitrogen in the soil while beans replenish it. Squash are planted between the corn and bean mounds.

VISTA volunteers this year include Timothy Ott, Kaya Tith, Marchelle Jordan, Tai Johnson, and Janelle Cole. Tribal members interested in a garden plot or the Gitigaan Project are welcome to call the VISTA office at 715-685-2784.

If all goes as planned and summer weather cooperates, Bad River members will have plenty to harvest as fall approaches, and Bad River will once again be Gitigaaning, the place of the gardens.



Judy Pratt-Shelley, pictured above, and her husband Adam raised thousands of plants in their greenhouse on the Red Cliff reservation this spring. The Shelleys are committed to encouraging self-sustainability through gardening and producing chemical-free vegetables by applying organic gardening skills.

Plants available for Red Cliff gardeners Tribal gardener goes organic

Red Cliff, Wis.—Many gardens also grow in Red Cliff, thanks in part to the efforts of Judy Pratt-Shelley, a Red Cliff tribal member whose yard hosts an abundance of varied and vigorous veggies, native tobacco and sweet grass. Her large greenhouse is filled with plants she and her husband, Adam, started from seed and reared. To the Shelleys, home gardening is one of the only ways we can know what we are eating and feeding to our children, and gardening is a survival skill that needs to be further encouraged in the modern day.

"When you read that the residue of 32 pesticides were found on one carrot and that peppers are supposed to retain even more pesticides, you have to worry about the produce offered in our grocery stores," Judy states. No pesticides find their way into Shelley garden. If bugs get to be a problem, her husband, Adam concocts a spray with pepper, tobacco and garlic, which does the trick. They are organic gardeners, using calcium from eggshells and manure from the chicken coop for fertilizer—a side benefit of keeping a coop full of laying chickens.

While working for the Red Cliff Tribe, Judy was able to procure funding to encourage tribal gardeners and a community garden. It was in 1996 a greenhouse was procured for the tribe and the tradition of a plant giveaway each spring began. At first about 40 tribal members participated. By 2003 160 tribal members received plants of all sorts—squash, beans, pumpkins, tomatoes, peppers, dill—the works. Leftover plants were then taken to the community garden and planted.

Also working through NCRS, Red Cliff distributed 400 fruit trees to community members and put up 100 hoop houses for home gardening projects.

This year the tribe did not sponsor a gardening project, but the Shelleys started the plants on their own, purchasing the seed and tending them in the greenhouse until planting time arrived. On Saturday, June 12, they set the plants outside on their lawn, all neatly labeled, for a plant giveaway. She offered a variety of peppers, tomatoes, cucumbers, seven varieties of squash, two kinds of pumpkins, beans, beets, dill, and carrots. Judy estimates they grew about 10,000 plants in both 2003 and 2004 for the community giveaway.

Judy does a lot of canning in the fall, so the products of her garden are available all winter long. In addition, the family gathers blueberries, currants, blackberries and apples for jams and jellies.

Judy would like to see the idea of a tribal community garden revived. "We want the community to be able to garden and have that healthy food source available as well as the skills," she says. Besides avoiding all the extra preservatives and residue chemicals found in store-purchased foods, she feels it just makes individuals and the community more self-reliant, especially in this day and age when major catastrophes could disrupt modern day systems or pollute significant food sources.

Photos by Sue Erickson

Japanese barberry: A prickly problem

By GLIFWC Staff

Odanah, Wis.—Japanese barberry is well on its way to becoming a major forest pest, explains Miles Falck, Great Lakes Indian Fish & Wildlife (GLIFWC) biologist. This aggressive shrub is well-established and increasing in parts of the upper Great Lakes region.

Where did Japanese barberry come from?

Japanese barberry is (not surprisingly) native to Japan. It was brought to the US around 1864, and by the late 1800s was being widely planted in eastern North America, mostly for erosion control. Today it is planted mainly for ornamental purposes.

What does Japanese barberry look like?

Japanese barberry is a distinctive and easily-recognized plant. It is sprawling, very spiny shrub that usually grows to a few feet tall, but can reach over 6 ft tall. The inner bark and roots are golden-yellow. The arching branches produce clusters of two-four paddle-shaped leaves at each node. Each node also has a short, sharp spine. In May clusters of one-four small, yellow flowers also appear in the axils of the leaves. These are replaced by small, bright red, somewhat elongated berries by late summer. The berries are relatively low in nutrients and not that attractive to birds, and so often remain on the plant through the winter.

Two other barberry species are found in eastern North America—common barberry and American barberry. Common barberry (*Berberis vulgaris*) is native to central Asia. It is the primary alternate host of black stem rust, a serious pest of wheat. It has toothed leaves and produces elongate clusters of 10-20 flowers at each node. A now-famous campaign to eradicate common barberry from the northern Great Plains was carried out by Civilian Conservation Corps (CCC) crews and others during the 1930s, and eradication projects continue to be conducted (though on a much smaller scale) in Canada today. American barberry (*Berberis canadensis*) is native to the southeastern US and is similar in appearance to common barberry.

Where does Japanese barberry live?

Japanese barberry is quite shade-tolerant and readily establishes along woods edges and in closed woods. It also grows in open, disturbed sites, though it competes poorly with grasses and is somewhat sensitive to drought. Its sharp spines make the leaves and branches unpalatable to deer and other large herbivores. With the high white-tailed deer populations currently found across the Great Lakes region, barberry has a significant advantage over most native forest herbs and shrubs.

Japanese barberry has become a frequent invader of closed-canopy forests throughout much of the upper Great Lakes region. It is considered “ecologically invasive” in Wisconsin and “highly invasive” in Upper Michigan.



Cultivar of Japanese barberry.



Barberry flowers.



Branch with spoon-shaped leaves and ripe berries.



Barberry patch in the wild.

How does Japanese barberry spread?

Barberry spreads by a variety of methods. Its stout, creeping roots and stolons send up new shoots, often within several inches of the main plant. The tips of the branches root freely when they touch the ground, establishing new plants at up to six feet away. This vegetative expansion enables individual plants to grow into large, nearly impenetrable thickets.

Japanese barberry reproduces mainly by seed. The berries are eaten by some birds, including wild turkeys and ruffed grouse. Deer may also eat the berries, presumably dispersing the seeds as well. Many of the berries simply fall to the ground, where they may be found by chipmunks, rabbits, and other small animals. Although the longevity of Japanese barberry seed in the soil is apparently unknown, seeds of common barberry are reported to survive as long as ten years in the soil.

Widespread ornamental planting of Japanese barberry has greatly aided its spread to new areas. A number of Japanese barberry cultivars are sold by the horticultural trade, including some with yellowish, lime-green, or dark red leaves. Birds and mammals spread the seeds from plantings to surrounding wild areas.

What effects does Japanese barberry have on the environment?

Japanese barberry is rapidly invading the forests of the northern US and southern Canada, part of a wave of introduced plants, insects, and other organisms threatening these forests. Researchers studying these forests have found that Japanese barberry can indirectly increase soil nitrogen cycling rates and pH by changing the composition of soil microorganisms. Barberry's effects on the soil may partly explain the rapid spread of this plant into our northern hardwood forests as well.

Like common barberry, some strains of Japanese barberry are susceptible to black stem rust of wheat. Under pressure from the horticultural industry, the U.S. Department of Agriculture tests Japanese barberry strains for susceptibility to stem rust and allows the sale of resistant varieties in the US. Canada had until recently banned the import and sale of all varieties of common and Japanese barberry, but now allows the sale of resistant varieties. Japanese barberry can hybridize with common barberry, and while the hybrids often closely resemble Japanese barberry, they are fully susceptible to stem rust.

How can Japanese barberry be controlled?

Little information exists on the control of Japanese barberry in natural habitats. Barberry is one of the earliest plants to leaf out, making plants easily identifiable and conspicuous. As for other invasive species, persistence is the key—the site must be revisited every year for several years thereafter, and any new sprouts and seedlings destroyed. (The good news is that after the first year or two the workload usually drops considerably!)

Manual control methods can be effective for small stands and for isolated plants. Manual methods have an advantage over chemical methods, because they have less impact on the surrounding native vegetation and are probably safer to use as well.

Digging can be quite effective for smaller populations. Even large barberry plants have relatively shallow root systems and can often be dug up with a shovel or pulled with a weed wrench. A long-handled shovel gives good leverage and allows a bit more room to work around the spiny branches. Care should be taken to keep damage to the roots of neighboring species to a minimum.

Chemical control should only be used on large stands, where other methods of control are not possible. Whenever using herbicides to control invasive plants, care should be taken to avoid (See [Japanese barberry](#), page 22)

Thoughts from Nee-gaw-nee-gah-bow

Contemporary Ojibwe spirituality, practice & belief

By *Nee-gaw-nee-gah-bow*
Lac Courte Oreilles Ojibwe Band elder

Before the invasion by Europeans to this continent, the Ojibwe lived a life of total submission to the Creator and lived by the Midewin teachings.

After the creation of the universe and all life here on the earth, the Creator gave the Anishinaabeg a sacred legend (aadizookaan) of life which contained the order of the Midewin teachings of life and practices. This is where all Anishinaabe spirituality began and where it comes from today.

All Ojibwe spiritual values and living practices have their origin in the Midewin spiritual pronouncements. All Ojibwe ceremonies and rituals, such as sweating, fasting, healing, spirit naming, interpreting dreams, the vision quest, feasting, and sacrificing all come from the Midewin.

But what is happening in Ojibwe Indian Country today is that most contemporary Ojibwe Indian people are no longer aware of the fact that the ceremonies and rituals which they practice today originated in the Midewin spiritual practice. The Midewin spiritual practice itself was almost lost, except in a very few Ojibwe Indian communities.

What's happening today to most Ojibwe Indian people in their earnest search for their true spiritual identity is that they are making a religion of certain ancient ceremonies and rituals as if these ancient ceremonies and rituals were individual expressions of different ways of living amongst my people today.

For example, the sweat lodge ceremony that was used only for spiritual cleansing before entry into the Midewin Lodge is now used as a place of intense worship, healing and a modern day renewal of life. I am not opposed to this practice of spirituality but my people still have to know and learn about the teachings of the Grand Medicine Lodge, the Midewin. They need to re-establish and practice the ways of the Midewin Spiritual Society. Our Ojibwe people, for generations back, were all strong practitioners of the ancient Ojibwe Midewin way of life. Most of our contemporary Ojibwe Indian people now truly know who they are and are beginning to struggle to verify their cultural and spiritual identity and rightful place in today's society.

There are many Ojibwe reservation people who are indeed professional educators, health providers, successful business women and men, who live in modern day homes with air conditioning, possess beautiful automobiles and contribute to the best welfare of our reservation communities. Many of our people are now teachers in our reservation schools and our own accredited colleges. They are business people who operate our commercial enterprises, such as the casinos, construction companies, logging companies, etc. Our people are also astute elected public officials who are rapidly learning the skills of political and diplomatic relations with other nations of the world.

We are especially proud of all of our veterans and warriors living or since deceased who served gallantly fighting for the survival of this nation, the United States of America. We have many veterans, some highly decorated, who are still living today. We honor and respect all veterans at our annual traditional celebra-



Nee-gaw-nee-gah-bow

tions called pow-wows throughout Indian Country and especially on this country's holiday known as Veteran's Day.

I am not eager to say that the Church is still present on several reservations trying to civilize and educate our people. They deliberately tried to suppress the traditional and spiritual ways of the people by suppressing the use of our ancient language (Gaagiidoowin). The reason why I state this is because I would estimate that there are many reservation Ojibwe who are still practicing the old ancient Ojibwe way of life, but there is less than a handful of Ojibwe Indian people today who still speak fluently their ancient language known as the Anishinaabe/Gaagiidoowin (language).

There are very few full-blooded Ojibwe Indian people in existence today because there has been much intermarriage with the European people who came to

this world starting in 1492. But there have been more in mass by immigration during the last one hundred and fifty years. For example, some Ojibwe people no longer know their traditional identity by knowledge of their spiritual name or clan membership. So now they use the last name of their white forefathers who intermarried with Ojibwe Indian women. They now have European names.

Furthermore, it is interesting to know that most of the modern-day named Ojibwe people come from Ojibwe families who gave up a long time ago the Ojibwe traditional spiritual way of life and were converted to Christianity by the missionaries in the mid-eighteen hundreds when they built churches and schools on the reservations in an attempt to civilize and educate the Ojibwe Indian people.

The Christian Church under the persuasion of the United States Government, whose aim it was also to civilize and educate the Indian people of this country, enlisted the mission program of the Church to accomplish this goal. The federal government granted and permitted the use of land and natural resources within the reservation to build their mission churches and schools.

Today, our contemporary Ojibwe people are beginning the long, arduous journey to find their spiritual place in the world once created by our God of peace, serenity and confidence in eternal life. We are now teaching the Ojibwe language in our schools, reviving the ancient ceremonies and rituals of our people, which have made us so strong that we have survived and are still here since long before 1492. We are then beginning today a healing process amongst our Ojibwe people to once again seek our true humanness and spiritual identity.

I pray everyday for the welfare of all people throughout the world. I pray for peace, the understanding of the differences in belief amongst all people of the world, and the eradication of painful sickness and death by virtue of conflict and aggression against each other. Therefore, I do not struggle to believe in the existence of the Creator as I do know without any shadow of a doubt that the Creator as we know him does exist and will exist through whatever may confront human beings when the earth may someday come to its end.

A-ho by Nee-gaw-nee-gah-bow today, just an Ojibwe elder.

(Editor's note: Nee-gaw-nee-gah-bow was born and raised on the Lac Courte Oreilles Ojibwe Reservation in northern Wisconsin, is a Fourth Degree Grand Medicine Lodge (Midewin) member, Spirit Drum Chief (Ogichidaa), Sacred Pipe carrier, and fluent Ojibwe language speaker.)

A tribal elder's thoughts on wetlands

By *Karen Danielsen*
GLIFWC Forest Ecologist

Odanah, Wis.—"Wetlands are an ecosystem all their own. It is not hard to upset their balance," states Joe Rose, a Bad River tribal elder. His concerns include water and air pollution, mining, and clearcutting.

He recalls, as a child, gathering mashkiigiminag (wild cranberries) in burlap bags at Honest John Lake. Nowadays, at this site, he finds fewer mashkiigiminag. He thinks past pollution from untreated septic water may be to blame. Fortunately, a new wastewater project has alleviated that impact.

While ricing at Bad River Slough two years ago, he observed a bad infestation of worms in manoomin (wild rice). He thinks that one cause could be the declining populations of birds that feed on these worms.

He remembers when, decades ago, huge flocks of red-winged blackbirds inhabited the slough. He wonders what has happened to all these birds—maybe too many farmers shooting these birds or the loss of habitat in their migration corridor.



Joe Rose, Bad River tribal elder. (Photo by Karen Danielsen)

He also notes that the Bad River Natural Resource Department has implemented a study of a particular bird known locally as the ricebird and by biologists as the Virginia rail. This study monitors its population trends and relationship with manoomin.

As changes in bird populations can affect wetland plants, changes in wetland plant populations can affect birds. Unlike during his childhood, Joe now rarely hears the unique hollow croak of the American bittern. He attributes their decline to the draining of bog habitats for human developments.

He also sees fewer ducks such as pintails, American widgeons, and scaups. He knows that all in nature is interrelated. An impact to one species affects another.

Mining and other human activities have increased the amount of mercury in our wetlands. High mercury levels in the sea lamprey (an invasive non-native) easily transfer to its predators, such as nigin (the river otter). Joe has also read that waagaag (fiddlehead fern) has shown a high mercury content. Maybe the same is true for other plants.

He has particular concerns about clearcutting. It destroys biodiversity and increases erosion. Impacts to upland habitats always affect the connecting wetlands.

The Anishinaabe use so many wetland species for a variety of purposes. Some wetland plants such as maskigobag (Labrador tea) are used to make tea. Other wetland plants, such as manoomin, waabigoniin (marsh marigold), and waabiziipin (arrowhead), provide food.

Many wetland plants also provide medicines. Joe recalls a story told to him by Joe Megwinabe in which, many years ago, a boy was taken to the hospi-

tal for a gunshot wound in the stomach. Doctors could not help him, and it seemed the boy was going to die.

Mr. Megwinabe made a medicine from a wetland plant and healed the boy. The doctors asked him how to make the medicine, but he would not tell them.

The loss of wetland plants for the Anishinaabe is a loss of culture. Joe Rose wishes that more politicians understood the connections in nature and made more informed decisions.

He states with passion, "It is important for young people to tear themselves from the television and Nintendo and to get outside to experience nature, to listen to the wind and trees, waves and birds.

"Once you get to know something, you will start to understand it. Once you understand it, you will start to respect it. Once you respect it, you will start to love it. And once you love it, you will start to protect it."

This, he wants for our wetlands.



Ceded territory news briefs

Sampling underway in Yellow Dog watershed

Marquette, Mich.—The Michigan Department of Environmental Quality (MDEQ) and Kennecott Exploration Company are conducting water quality monitoring in four Yellow Dog watershed streams. GLIFWC mining specialists recently submitted suggestions to the MDEQ highlighting effective methods to gauge water conditions. Water sampling from the streams—including the Salmon Trout and Yellow Dog Rivers—is designed to establish baseline conditions ahead of a possible sulfide mine operated by Kennecott on the Yellow Dog Plains in north-central Upper Michigan.

Through exploratory drilling, Kennecott has located an estimated 5-million ton rock deposit containing nickel and copper at the Plains. Keweenaw Bay Indian Community officials and the mining watchdog group Eagle Alliance are participating in a workgroup with MDEQ and Kennecott representatives throughout the summer, providing input in how mining operations might be permitted and regulated by state officials.

Bad River Tribe granted TAS status by EPA

Odanah, Wis.—The Bad River Tribe was recently granted “treatment as an affected state” (TAS) status by the Environmental Protection Agency, giving the tribe a voice under the Clean Air Act in permitting decisions within a fifty-mile radius of the tribe’s boundaries. Essentially, the tribe will be given an opportunity to review and make recommendations on any permit applications received by the EPA within that area. The tribe has been working on achieving TAS status for three years and has been monitoring for total suspended particulates, like dirt and dust levels, since 2001.



GLIFWC and Bad River Conservation Officers conducted an outdoor safety education class at the mouth of the Bad River. GLIFWC Warden Mike Wiggins is pictured above with nine Bad River students. Other safety classes are available through GLIFWC satellite enforcement offices.

Enforcement Division adds Bad River area warden

By Charlie Otto Rasmussen
Staff Writer

Odanah, Wis.—With his new position as a GLIFWC warden in the Bad River region, Mike Wiggins enters the second phase of a career plan devised back in college. A four-year graduate of University of Wisconsin Superior’s Criminal Studies program, Wiggins plotted a course to serve Bad River and other Indian communities through education and conservation law enforcement.



Mike Wiggins

On June 14, he began official duties at the Bad River satellite office, joining GLIFWC Central District Supervisor and veteran warden Vern Stone.

Following graduation from college, Wiggins worked to steer kids away from destructive behavior through the AODA Prevention Program in Odanah. Seven years later he took on duties as a Home School Coordinator for the Ashland Public School district, maintaining an important link between the classroom and the parents of tribal students.

Wiggins sees his new position with GLIFWC an extension of the earlier work serving the tribal community. This time the focus is on outdoor safety education, keeping treaty hunters informed about conservation laws, as well as enforcing Bad River tribal codes for off-reservation harvest activity. Wiggins is scheduled to complete his basic enforcement training at Chippewa Valley Technical College this fall.

Along with his wife and two daughters, Wiggins resides on the Bad River Reservation.

Wisconsin requests pilot program to take over national forest

Madison, Wis.—The Wisconsin Assembly sent a letter last June to the White House Office on Inter Governmental Affairs requesting that a twenty-five year pilot program be established whereby Wisconsin will take over the management of the Chequamegon-Nicolet Forest from the US Forest Service (FS).

The proposal received support from twenty-five state legislators, according to a release from the Wisconsin State Assembly Speaker’s Task Force on Forestry, chaired by Rep. Donald Friske (R-Merrill). The letter indicates that the legislators are not satisfied with the FS management plan for “passive forest management in the name of enhanced recreation.”

The proposed pilot program would hand over management positions, funding and responsibility to Wisconsin for a twenty-five year, trial period.

Ruffed grouse numbers down

Madison, Wis.—According to a Wisconsin Department of Natural Resources (WDNR) report, results from spring ruffed grouse drumming surveys show a decline in numbers from last year—down about 14 percent. The greatest decline was seen in the northern part of the state where the decrease from last year was at 17 percent. WDNR officials believe the decrease in numbers is in line with the ten-year ruffed grouse cycle that peaked in 1999. The population is currently on the downward trend.

Red Lake’s walleye rebound

Red Lake, Minn.—Spring electrofishing assessments found the Tamarac River, a Red Lake tributary, teeming with walleye, many of them large females up to 28-inches long. The walleye abundance indicates that the lake’s walleye population is rebounding after nearly collapsing in 1997. Since then, a ban on walleye fishing and an aggressive stocking program seem to have succeeded in restoring a healthy walleye fishery to Red Lake. The stocking program and ban were part of a 1999 agreement between the state, the Bureau of Indian Affairs and the Red Lake Band of Chippewa, which controls most of the lake.

American Medical Association adopts mercury recommendations

At the annual meeting of the American Medical Association (AMA), the AMA adopted four statements of policy recommended by the Council on Scientific Affairs regarding fish consumption and mercury.

The first recommendation is that women who might become pregnant, are pregnant, or who are nursing should follow federal, state and local advisories on fish consumption. Because these advisories may differ, the most protective advisory should be followed.

The second recommendation says that physicians should a) assist in education patients; b) make patients aware of the advice contained in both national and regional consumer fish consumption advisories; and c) have sample materials available, or direct patients to where they can access information on national and regional fish consumption advisories.

Thirdly, they recommend that testing of mercury content of fish should be continued by appropriate agencies and results should be publicly accessible and reported in a consumer-friendly format.

Lastly they recommend that, given the limitations of national consumer fish consumption advisories, the Food and Drug Administration should consider the advisability of requiring that fish consumption advisories and results related to mercury testing be posted where fish, including canned tuna, are sold.

Garness joins GLIFWC staff as Benefit Specialist

By Sue Erickson, Staff Writer

Odanah, Wis.—The posting for a Benefits Specialist at Great Lakes Indian Fish & Wildlife Commission (GLIFWC) came out just as Mary (Pero) Garness and her husband, Duane, were preparing to move back to the Ashland area from Aberdeen, South Dakota. A Bad River tribal member, Garness wanted to return to the northland and felt lucky to see a job opening within her field just as she was coming home. She applied and was hired, starting as GLIFWC’s new Benefits Specialist on July 12.

The Benefits Specialist, a position in GLIFWC’s administration, oversees all the organization’s benefits including insurances and retirement accounts.

Prior to GLIFWC, Garness worked for one year as an accountant with Indian Health Services in Aberdeen after completing her Bachelor of Science degree in accounting at UW-Superior. She also worked in accounting research while completing her degree.

Garness has a daughter, Julia, age eight. She and her family enjoy a variety of outdoor activities, such as biking, fishing, boating and walking. On the quiet side, she also likes to curl up with a good book and on occasion take out her cello.



Mary Garness.

Keweenaw Bay Indian Community Lake Superior fisheries management

*By Mike Donofrio, Director,
KBIC Natural Resources
Department*

L'Anse, Mich.—The Keweenaw Bay Indian Community (KBIC) signed a treaty with the United States in 1854 establishing the L'Anse and Ontonagon Indian Reservations. Tribal members traditionally fished for both subsistence and commercial use within the area presently known as the 1842 Treaty ceded area within Michigan waters of Lake Superior. Since 1972, tribal members have conducted commercial fishing efforts in this area of Lake Superior.

KBIC currently has 14 licensed commercial fishermen exercising their treaty right to fish in Lake Superior. Their tribal commercial harvest in 2003 was 198,000 pounds with lake whitefish and lake herring composing 60% of that harvest.

KBIC imposes self-regulation of their fishery through a five-year fisheries management plan. The KBIC Tribal

Council adopted the first plan in 1991. The intent of the plan is to ensure the continued health of the fish stocks and the commercial fishery by protecting the resource from overexploitation.

The plan is written with lake whitefish as the principle target species of the tribal large mesh gill net fishery and lake trout as an incidental species. Lake herring is the principle target species of the tribal small mesh gill net fishery in this plan. The plan attempts to delimit the tribal harvest while protecting the long-range interests of the tribe (and all other user groups) by ensuring that whitefish stocks are not overfished and that lake trout and lake herring are rehabilitated in the treaty ceded area.

KBIC is currently working with the Great Lakes Indian Fish & Wildlife Commission and Michigan Department of Natural Resources on updated quotas for the period of 2005-2010.

The goal of the plan is compatible with the Great Lakes Fishery Commission's (GLFC) "Strategic Great Lakes Fishery Management Plan." This

goal is to encourage the rehabilitation and protection of healthy aquatic ecosystems in the Great Lakes that are based on foundations of naturally reproducing fish populations and self-regulating fish communities, that provide sustainable benefits to society, and that support fisheries having increased contributions of wild fish.

All KBIC commercial fishermen are required to submit monthly catch reports, and the KBIC Natural Resources Department periodically monitors their commercial catch. The Natural Resources Department also monitors the lake trout fishery by conducting seasonal, lake trout assessments under a protocol established by the GLFC. This information is shared with other Lake Superior resource agencies including other tribes, states and federal entities.

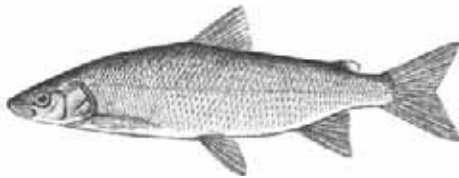
KBIC initiated a fish hatchery in 1990 on the L'Anse Indian Reservation with an active stocking program for lake and brook trout. Through 2004, KBIC has been responsible for stocking over 1.1 million 7-inch lake trout into Lake Superior and over 500,000 brook trout (average size 5 inches) into western Upper Peninsula streams. KBIC currently maintains the Jumbo River brook trout broodstock and incubates its own brook trout eggs.

KBIC will continue to apply sustainable management towards Lake Superior fisheries and work with various user groups to improve these valuable resources.

Please direct inquiries to the Keweenaw Bay Indian Community Natural Resources Department at 906-524-5757 or kbncrd@up.net.

Lake Superior contaminant study to include whitefish *GLIFWC testing major fish species*

*By Charlie Otto Rasmussen
Staff Writer*



Odanah, Wis.—Whitefish, a staple of Lake Superior commercial fishing industry, is the latest species included in a broad, GLIFWC-sponsored contaminant study.

With financial support through an Environmental Protection Agency grant, GLIFWC staff is collecting whitefish samples this fall from routine assessment nets and commercial fishermen in the Michigan 1842 Treaty waters of Lake Superior. Whitefish tissue from fish in the commonly harvested 17 to 24-inch size range will be ground and analyzed for more than three-dozen contaminants at two Wisconsin-based laboratories.

"The whitefish research project is a continuation of detailed studies GLIFWC has spearheaded over the years to identify the risks of eating fish from ceded territory waters of Lake Superior," said Matt Hudson, GLIFWC environmental biologist. "All the principal Lake Superior species harvested by tribal members will ultimately undergo contaminant testing."

Hudson said later in the year GLIFWC is planning to release the results of its multi-species dioxin testing project that includes lake trout, siscowet trout, whitefish, sturgeon, and herring. Laboratories in Superior and Madison are currently analyzing lake trout fillets collected by GLIFWC staff from Michigan waters of Lake Superior over the past year.

"Generally in Lake Superior we find there isn't much of a difference where you acquire fish samples. Most of the pollutants that end up in fish

comes from the air attached to rain and snow particles," he said.

Coal-fired power plants like those in Ashland, Wisconsin and Marquette, Michigan are among the largest contributors of mercury pollution in the atmosphere, some of which ends up in Lake Superior as well as inland lakes. Backyard barrels used to burn household trash send a long list of toxins into the air, including arsenic, carbon monoxide and dioxin, which cause some of the most serious health problems, particularly in children.

Earlier research has demonstrated that consumers can significantly reduce their exposure to contaminants like chlordane, PCBs and other pesticides by trimming the fat tissue from fillets and removing the skin from siscowet and other Lake Superior fish. Trimming fillets, however, does not reduce mercury exposure because it binds to muscle tissue.

Hudson said additional Lake Superior fish species consumed by tribal members like herring are slated to undergo similar testing in the future. GLIFWC plans on creating a consumption advisory based on the current research that will enable tribal members and other consumers to choose safer fish and reduce their risk of exposure to harmful chemicals.

For more information visit www.glifwc.org to view GLIFWC's "How to Enjoy Fish Safely," or call (715) 685-2150 to receive a copy by mail.



Sharon Brunk, Keweenaw Bay Natural Resources Department (KBNRD) secretary, assisted with assessments in Lake Superior's Huron Bay last July. She is pictured with a modified Windermere trap net used to catch small fish, such as minnows, in order to assess the forage base for larger predator species, such as lake trout. In addition to regular assessment activities and monitoring the tribal commercial catch, KBNRD has operated a successful fish hatchery program since 1990. Through 2004, the hatchery has stocked over 1.1 million seven-inch lake trout into Lake Superior. (Photo submitted)



Matt Hudson, GLIFWC environmental biologist, prepares to transfer walleye fillets to Sean Bailey, University of Wisconsin-LaCrosse (UWL) lab assistant outside GLIFWC's central office in Odanah. GLIFWC is providing walleye tissue samples for a UWL study to identify alternate ways of measuring mercury in fish. (Photo by Charlie Otto Rasmussen)

Tribes manage 1842 Treaty commercial fishery in Michigan waters of Lake Superior

By Bill Mattes, GLIFWC Great Lakes Section Leader

Odanah, Wis.—Starting in the 1960's and continuing through today, tribal members and tribal governments began challenging the authority of the states to apply their resource regulations against tribal members hunting on ceded lands and fishing in ceded waters, both inland and Lake Superior. In a series of federal and state court decisions, the treaty-reserved rights of the Ojibwe were reaffirmed (e.g. in Michigan the 1971 *Jondreau* decision; in Wisconsin, the 1972 *Gurnoe* decision, and the 1983 *Voigt* decision; and recently during the 1990's in Minnesota, the *Mille Lacs* and *Fond du Lac* decisions).

In some instances, after the existence of the rights was reaffirmed, further litigation followed to establish the scope of state regulation, the adequacy of tribal regulations, and how the resources should be allocated. In other cases, further litigation did not follow, and the parties chose to negotiate regulations and allocation issues on a periodic basis. Also, in some cases, management authority was an issue.

Different types of written agreements, approved by the courts, were used to set up institutional arrangements to coordinate management.

Thus, in the Ojibwe ceded territories, coordinated or cooperative management arrangements are normally founded in court decisions reaffirming treaty-reserved rights, but each arrangement differs in various ways. In all cases, the Ojibwe as governments and as nations view that harvest rights carry with them the responsibility to protect and manage resources.

In the 1842 Treaty ceded area within Michigan waters of Lake Superior, the Bad River, Keweenaw Bay, and Red Cliff Bands of Lake Superior Chippewa entered into an agreement to establish an inter-tribal off-reservation assessment fishery (from the Wisconsin-Michigan state line to the West Entry in the Keweenaw Peninsula) on August 23, 1984.

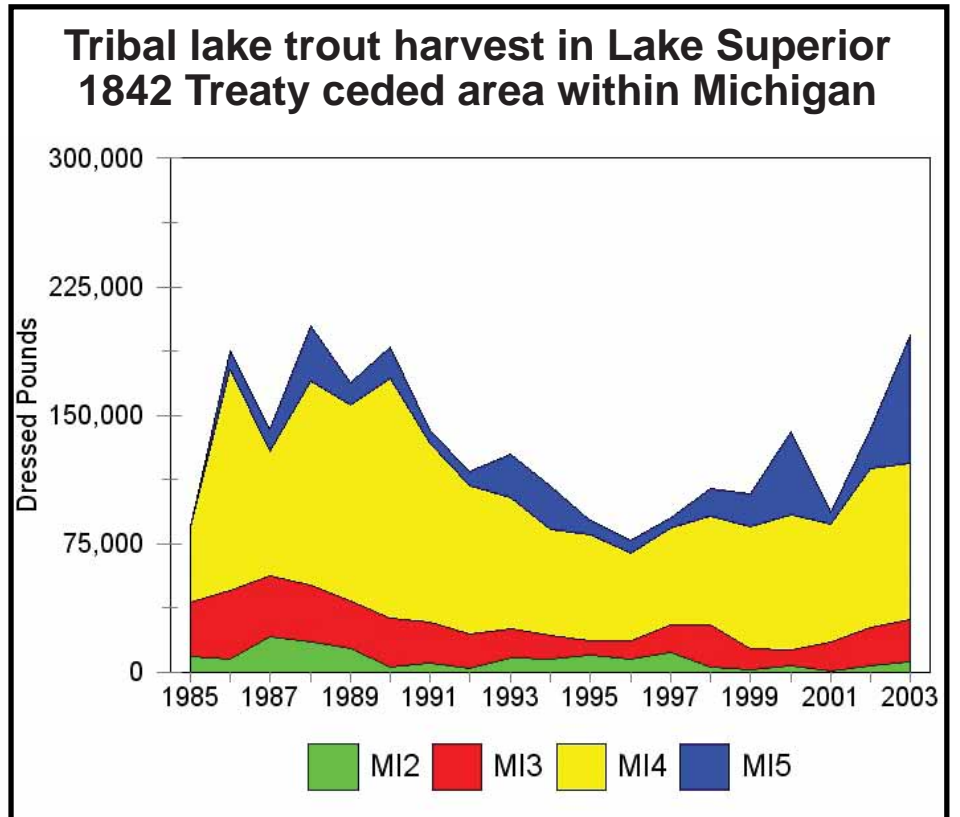
In 1988 tribal off-reservation commercial fishing expanded to include more fishermen and fishing in waters east of the Keweenaw Peninsula. An inter-tribal agreement was developed to manage this expanded fishery.

Since 1990 Bad River and Red Cliff have managed their fishery within the guidelines of this inter-tribal agreement, while Keweenaw Bay manages their fishery through a fisheries management plan. Results of the early assessment fishery and the expanded commercial fishery have been reported annually as administrative reports to the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) Biological Services Division, titled "Biological and commercial catch statistics from the Chippewa inter-tribal gill net fishery within Michigan waters of Lake Superior."

The commercial fishery has consisted of as many as 18 large boats and 24 small boats, but in 2003 consisted of six large boats and 15 small boats, representing 21 tribal licenses from the Bad River, Keweenaw Bay, and Red Cliff Bands. Gill nets are the primary gear used in the fishery. However, hook and line and trap nets have also been fished. Harvest of whitefish and lake trout from this fishery has varied considerably since 1985 (see graphs).

Fishing is primarily targeted at whitefish and lake trout. The fishing season for whitefish and lake trout is closed from November 1 through November 27, and fishing for siscowet is prohibited in water less than 35 fathoms during the closed season. Commercial fishing is also prohibited during October in seasonal spawning refuges, of which four were created in 1988, three in 1989 and one in 2000. Target fishing for lake trout in other areas was prohibited during October to reduce the impact of fishing on spawning stocks of lake trout.

Since 1984, the tribes have used a quota management system to regulate harvest of lake trout to limit mortality on recovering lake trout stocks. Since 1986, Total Allowable Catch (TAC's, expressed as number of fish) have been estimated annually for each management unit. TAC's are calculated for each fishing year,



beginning in November and running through October of the next year. The Keweenaw Bay Tribe also employs a quota system for regulating lake herring harvest by its fishermen.

Stock assessment models and their associated lake trout quotas have been a primary tool used to assess the rehabilitation and continuing restoration of lake trout stocks in Lake Superior. These models are continually being updated by a team of biologists from the State of Michigan, GLIFWC, and the Bad River, Keweenaw Bay and Red Cliff Bands of Lake Superior Chippewa. The statistical catch-at-age (SCAA) stock assessment models estimate lake trout stock size which is done to answer what policy makers and fishermen want to know: "How many fish can be taken while leaving sufficient spawning stock to give rise to the next generation of fish?"

It is important to note that stock assessment is distinct from setting harvest levels. Stock assessment is the use of statistics and math to make predictions about the reactions of fish stocks to various management regimes. The stock assessment "model" predicts fish stock size over the same time period at which data has already been gathered from the fishery. Once a stock is assessed to determine stock size, the decisions about how to set harvest levels still remain. Model projections of stock size are then used to determine harvest (total allowable catch or TAC) by forecasting stock size based on what is known from the past.

For more information contact Bill Mattes, Great Lakes section leader at bmattes@glifwc.org or call (715) 685-2120.

Study targets Lake Superior siscowet

By Bill Mattes, GLIFWC Great Lakes Section Leader

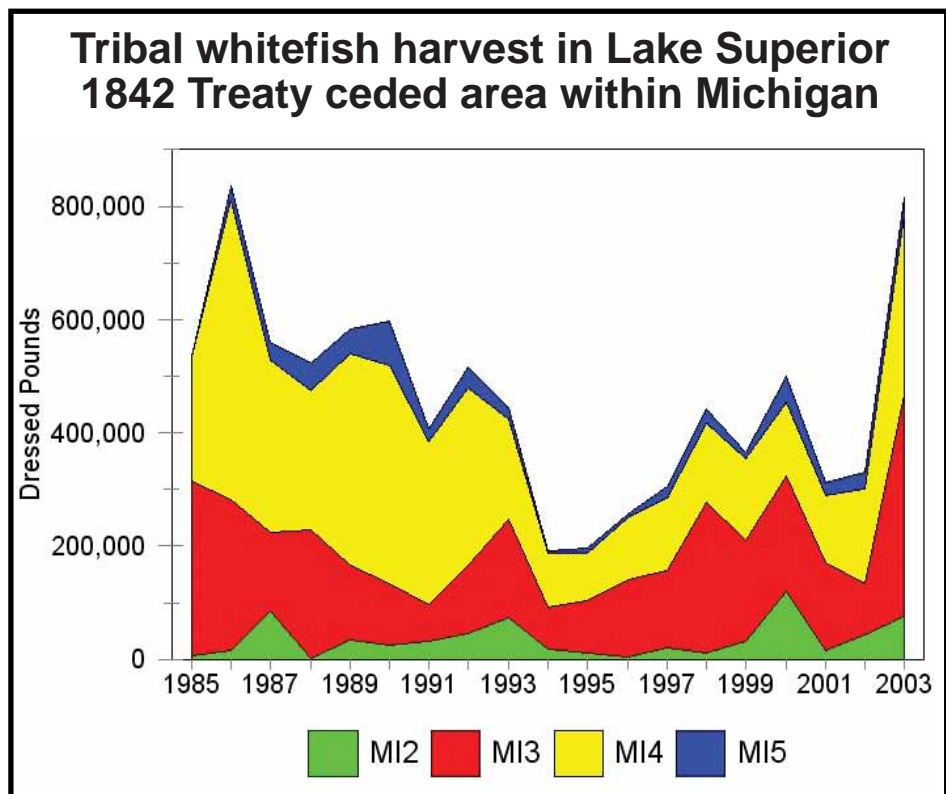
Eagle Harbor, Mich.—Staff from the Great Lakes Indian Fish & Wildlife Commission's (GLIFWC) Great Lakes Section, led by Mike Plucinski, fishery technician, sampled waters from shore to 800 feet deep over a two-week period in mid-July off the Lake Superior shoreline near Eagle Harbor in Michigan's Upper Peninsula.

Each day a gill net, 2,700-feet long by six-feet high and consisting of nine panels of differing mesh sizes from 2 to 6-inch mesh in 1/2 inch increments each 300-feet long, was set to capture fish. Captured fish were identified by species, measured to the nearest 1/10 inch, weighed to the nearest 1/10 pound, and otoliths (ear bones) and stomachs were removed for aging and diet analysis.

This data will be used in the project "Dynamics and Biology of siscowet lake trout in Lake Superior," which was recently approved for funding from the U.S. Fish and Wildlife Service's Great

Lakes Fish and Wildlife Restoration Act. Dr. James Bence at Michigan State University; Bill Mattes, GLIFWC Great Lakes section leader; Shawn Sitar, Michigan Department of Natural Resources; and Mark Ebener, Chippewa Ottawa Resource Authority Intertribal Fisheries and Assessment Program, are co-investigators on the project.

The project has four objectives designed to summarize and analyze the current information available on siscowet in Michigan waters of Lake Superior: 1) compile relevant biological data and abundance index data from surveys and fisheries, 2) evaluate trends in abundance, age and size composition, growth, and diets of siscowet by depth and management unit, 3) use observed trends to estimate carrying capacity and productivity of siscowet stocks, and 4) evaluate spatial overlap of siscowet and lean forms of lake trout and the extent to which observed diets overlap, growth rates, or population characteristics in areas of spatial overlap suggest competitive or other interactions.



Getting numbers on sea lamprey

GLIFWC crews trap in Lake Superior tributaries

By Bill Mattes, GLIFWC Great Lakes Section Leader

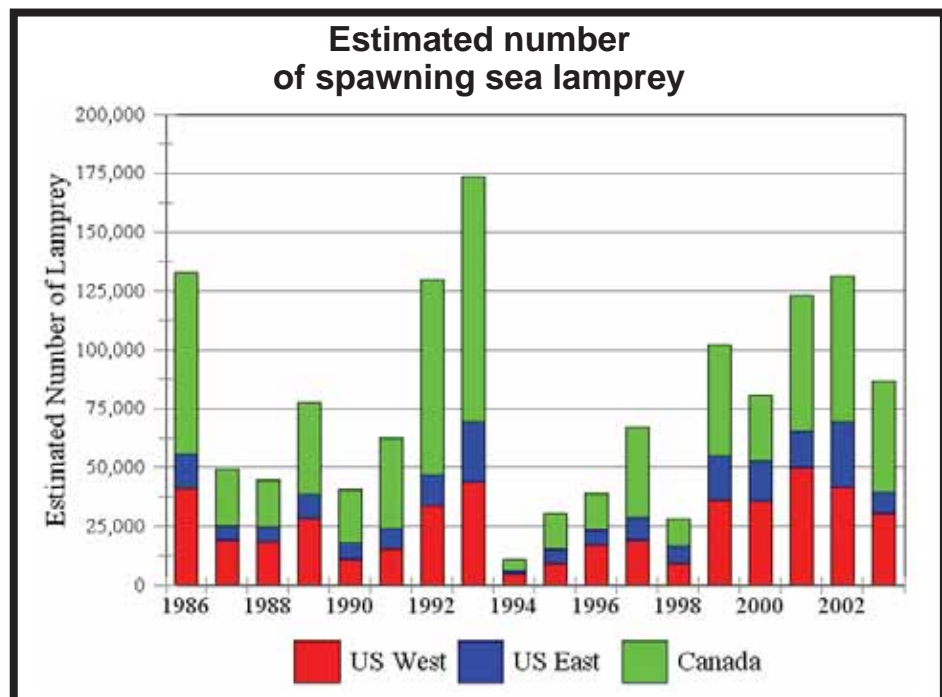
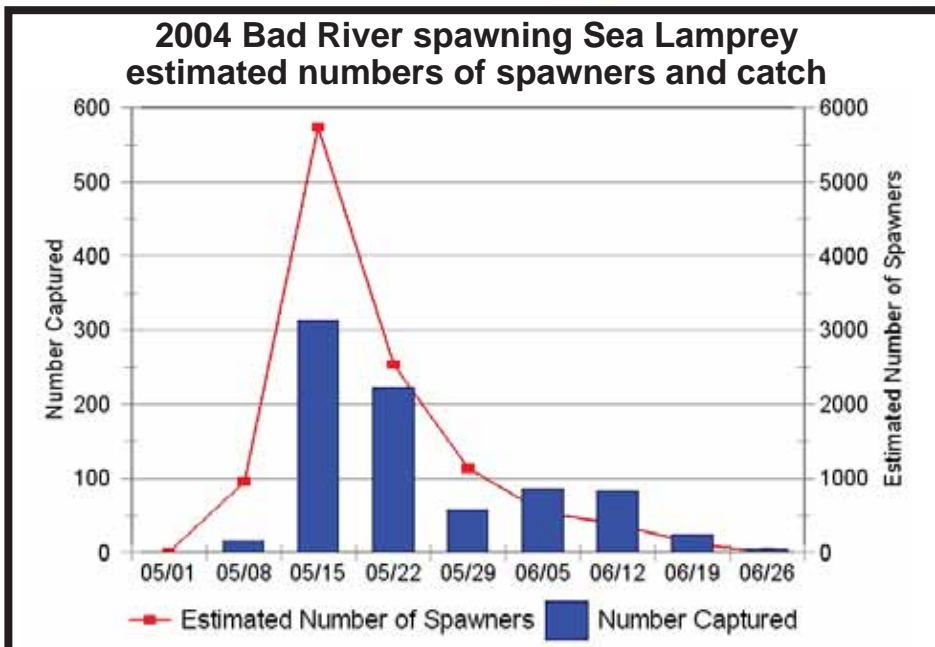
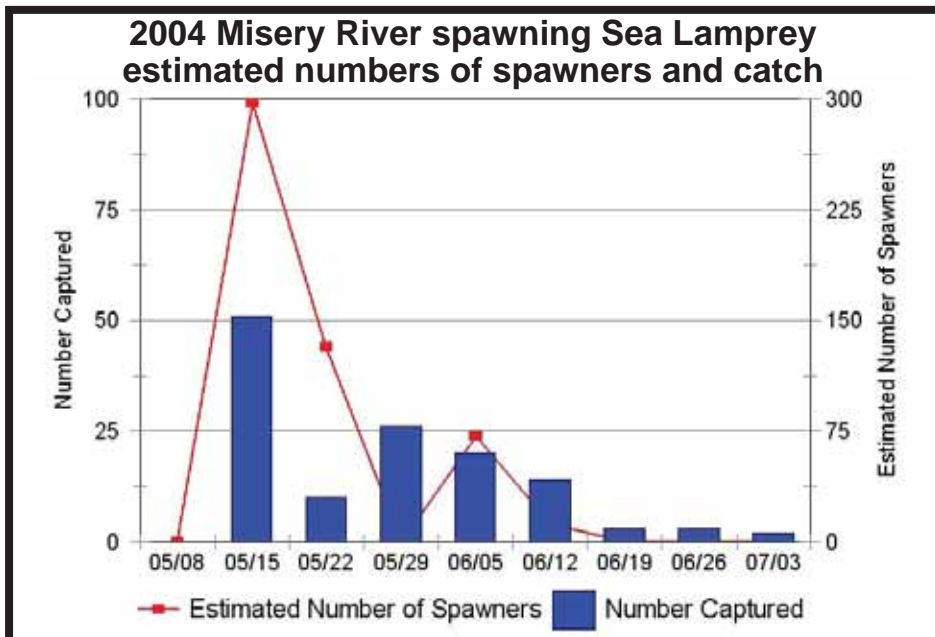
Ontonagon, Mich.—Led by Crew Leader Mark Pero and assisted by Fisheries Aides Muskadee Montano and Mike McMullens, Great Lakes Indian Fish & Wildlife Commission (GLIFWC) Great Lakes section carried out adult spawning lamprey assessments on three tributaries to Lake Superior in Michigan. GLIFWC and U.S. Fish & Wildlife Service have coordinated efforts to carry out the adult lamprey assessments on these rivers since 1986.

The data collected by the Great Lakes section crews are used to estimate the number of adult spawning lamprey in the rivers (see graphs) and to track changes in lamprey biology over time. A portion of the lamprey captured each day are given a mark which is unique by week, with the remainder of the lamprey and recaptured lamprey being destroyed and transferred to a landfill. As lamprey are recaptured, a ratio of marked to unmarked animals is tracked and fed into a statistical formula to generate an estimate of the overall numbers of lamprey in the river.

The preliminary estimate of the spawning sea lamprey population in the Firesteel River, where 97 lamprey were captured, is 133. In the Misery River, where 129 lamprey were captured, it is 513, and in the Bad River, where 830 lamprey were captured, the estimate is 11,401. Only four lamprey were captured in the Silver River, which is not enough information to calculate a population estimate. These estimates, as well as others from various rivers of different sizes and flows, will be fed into a larger statistical model to generate an estimate of abundance for all of Lake Superior.

In the Great Lakes Basin sea lamprey control and assessment work is led by the Great Lakes Fishery Commission, which was established in 1955 by the Canadian/U.S. Convention on Great Lakes Fisheries. It is their mission to provide an integrated sea lamprey management program that supports the Fish Community Objectives for each of the Great Lakes and that is ecologically and economically sound and socially acceptable.

If you would like to know more about this subject, please feel free to contact Bill Mattes, Great Lakes section leader at 715/685-2120.



Data courtesy of the U.S. Fish & Willdife Service Marquette Biological Station.

KB smelt run

By Lauri Denomie, Ojibwa Community College Intern

L'Anse, Mich.—Everyone loves a tasty smelt meal. This seasonal treat is available to anyone who is willing to wade a river and scoop them up in a large metal net. Smelt run in the darkened evenings of early Spring. When the day is warm and evening temperatures are above freezing, the smelt will swim up river to spawn. A warm rain shower will usually spark the beginning of the smelt run. A smelt run can last nearly a week. However, this year and in other recent years, they haven't been as plentiful. Instead of scooping nets full, you'll get three or four smelt with each dip.

At Falls River, L'Anse, Michigan, on April 23rd, the smelt were running. Approximately 200 individuals were at the river (and in the river) dipping their nets for a fresh batch of smelt. People in their hip boots and waders were walking right down the middle of the river, dip net in hand and a bucket strapped on their body in some form and manner. Others were reaching from the riverbanks, but all were succeeding in their endeavor.

Around midnight people were catching two or three smelt per net, however, some said that they ran more plentifully around 3 a.m. Many Native American families were out enjoying the annual event. These families will take the smelt home, clean them and share them with their relatives. My family enjoyed a smelt dinner on Saturday as well.



Great Lakes Fishery Technician Mike Plucinski examines the hull of GLIFWC's soon-to-be enforcement and assessment boat for use on Lake Superior. The new 30-foot, aluminum boat will replace the 25-foot Ojibwa Lady formerly used for enforcement and fish assessment purposes on the big lake. The new boat will be sea-tested mid-August and should be ready for duty by the end of the month.



Keweenaw Bay Indian Community members Mike and Christine Lofquist set up to catch their smelt dinner. (Photo by Lauri Denomie)

Lake trout angler gets quite a byte

By John Myers
Duluth News Tribune
Staff Writer

Duluth, Minn.—When Larry Mattson boated an average lake trout during a weekend Jaws Fishing Derby, he didn't expect it would net him any cash.

Indeed, the six-pound lake trout didn't win Mattson any contest prizes. But the Duluth angler still earned \$100 for his catch.

"We caught a wanted fish," Mattson joked. "The tag said 'reward if returned.'"

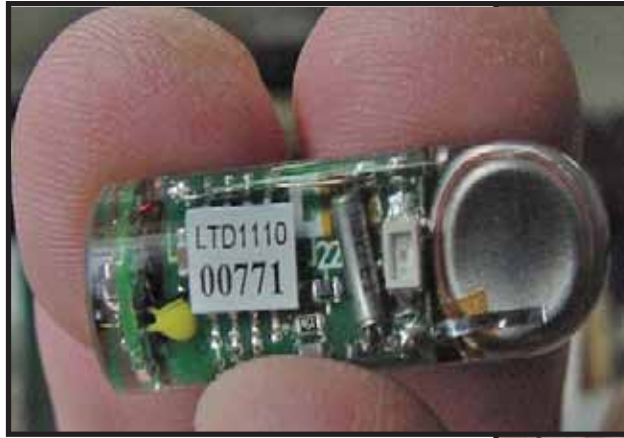
It's not that researchers wanted the lake trout so much as what was inside—a \$400 microcomputer that had been gathering valuable research data for the past 19 months.

The fish hit just below the surface on a green and black Bomber-brand lure trolled behind the boat. Mattson noticed an orange tag almost immediately.

Catching a tagged fish isn't that unusual. The thin, spaghetti-noodle tags are stuck in the back of fish as researchers try to track fish movements. If anglers cooperate, researchers know where the fish was tagged and where it was caught, but not much else.

But in small print on this tag was an unusual note: \$100 reward for fish and its internal tag—the microcomputer.

Mattson hadn't paid much attention to the writing, but found the tiny computer—smaller than a pinky finger—in the fish's belly cavity as he was cleaning the trout. It wasn't until after



Microcomputer recovered from a six-pound lake trout near Duluth, Minnesota. (Photo by Bill Mattes)

his catch had been eaten that Mattson realized he was supposed to turn in the whole fish, too.

"It tasted good. Just like lake trout," Mattson said.

On Monday, Mattson called the phone number on the computer and explained what he had found. Bill Mattes, fisheries biologist for the Great Lakes Indian Fish & Wildlife Commission, was ecstatic.

It was only the eighth computer returned among 124 planted during November 2001 by the commission, an agency representing 11 Ojibwe tribes dedicated to protecting natural resources.

Mattes drove to Duluth from Odanah, Wis., to pick up the computer. "This is huge for us. The (computer) tag is worth about \$400. But it's the data inside that's the most valuable," Mattes said, later adding that he would still



Ed Leoso, Bad River Natural Resources Department, sutures a lake trout that was implanted with a tiny computer. A total of 124 fish were fitted with the units. The computers record depth and temperature data. (Photo by Bill Mattes)

offer Mattson the \$100 even though he ate the fish. "We won't dock him any."

Mattes brought his laptop computer to Mattson's Lincoln Park/West End shop Monday and, using an infrared pen, scanned the tiny fish computer. Within seconds, 19 months of data was recovered.

The computer had been recording both the depth and the water temperature every 15 seconds. It then averaged the data about every two hours. The data gives researchers real information on where lake trout go in the water column, up or down in the lake, and what temperature water they spend their time in.

It's the first time the new microcomputers have been used in Lake Superior, and the first time anywhere they have been used inside fish to record depth and temperature.

The lake trout originally were caught in nets in Traverse Bay, on the east side of the Keweenaw Peninsula.

They were anesthetized by clove oil in a water tank before fish surgeons in a mobile operating room went to work. They made a small incision in each fish's belly near their stomachs. Computers were placed inside, and the fish were sutured and released into recovery tanks until the anesthetic wore off. Then they were set free in the lake.

So far, five trout have been caught and returned by commercial netters and three by sport anglers like Mattson. Most have been caught within five miles of where they were originally netted, but one fish swam all the way to Ontario. And Mattson's fish swam more than 150 miles—all the way to the western end of Lake Superior.

"We know they move around in the lake. But this is unusual. We really don't know why it came this far," Mattes said.

It's unclear how many computers researchers will get back. Biologists also hope to recatch some fish by casting their own nets.

"We're hoping for a 10 percent return by the end of it. The (computers) will keep recording data for up to three years" until tiny internal batteries run down.

Even after three years, if the tagged fish are caught and the computers are recovered and returned, Mattes can send the computers to the manufacturer to recover data.

Depth and temperature information recovered from Mattson's fish shows this particular trout spent much of the year near the bottom of Lake Superior. In summer months, however, the fish varied its depths greatly, often coming near the surface. That's probably in response to its food sources, Mattes said, as the trout hunts for smelt, alewives and other bait fish.

Very similar results have been recovered from the other seven trout computers. This trout, however, may have gone the deepest—it hit more than 400 feet at least once. The fish spent most of its time between 75 and 100 feet. And the water temperature it swam in ranged from 33 degrees to 66 degrees.

The temperature data also is helpful in bioenergetic studies of how fish process their food under various conditions—eating more in warmer water and less in colder water. The data also is expected to help researchers learn more about how lake trout react to lamprey, the parasitic suckers that attach themselves to trout.

"Using this data, along with information collected on what lake trout eat, we can get a good idea about how many prey fish—herring, chubs, smelt—need to be in the lake to support the lake trout numbers," Mattes said.

Depth data will be used to determine where lake trout travel during the year.

"Prior to these tags, we only knew where lake trout were when they were caught, not where they were throughout the year," Mattes said. Researchers didn't know how regularly they travel between water layers, that they are in near-freezing water during February and March and that they venture to depths of more than 300 feet.

The microcomputers don't record geographically where the fish has traveled before being caught. So far, there's no technology that will record satellite mapping information underwater—at least not in a unit small enough to fit inside of a fish.

The computers may be reused in more fish until the batteries run out.

The project was paid for with a \$55,000 grant from the U.S. Fish and Wildlife Service. Anyone who catches a fish within an internal computer tag should call (715) 682-6619.

Editor's note: John Myers covers the environment, natural resources and general news. Reprinted with permission.

2004 Partners in Fishing

(Continued from page 2)

Interagency assessment

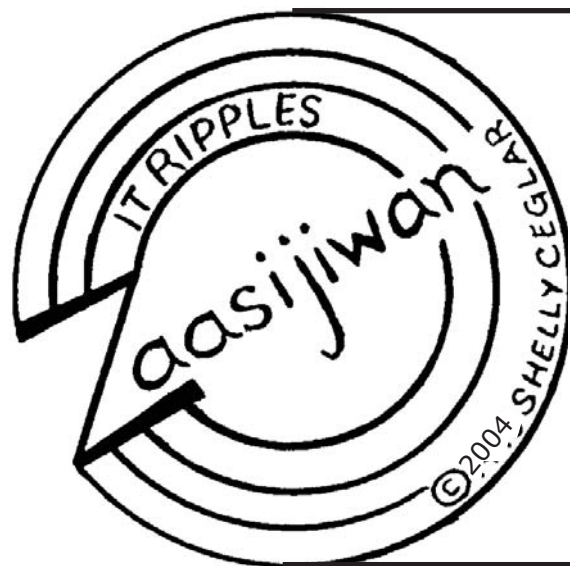
The brainchild of Jackson and the late Discover Wisconsin Television founder Dick Rose, Partners in Fishing has brought together members of the Joint Assessment Steering Committee since 1991. Comprised of fisheries professionals from individual Ojibwe tribes, Wisconsin DNR, Great Lakes Indian Fish & Wildlife Commission, U.S. Fish & Wildlife Service and Bureau of Indian Affairs, the Committee closely monitors the health and abundance of fish populations in the ceded territory. Fisheries assessment crews coordinate surveys of juvenile and adult walleye numbers across northern Wisconsin lakes in the spring and autumn.

"Through our combined efforts we're able to survey lakes at a rate four times higher than prior to the start of the modern spearing in 1985," said Jackson, chairman of the Steering Committee. "We have excellent fisheries data on the region, and it's clear that treaty spearing has not harmed the resource."

Data gathered by interagency survey crews is published by the Committee in *Fishery Status Update in the Wisconsin Treaty Ceded Waters*, a comprehensive analysis of walleye harvest and population trends. The fifth edition of *Fishery Status* was released in 2003 is available at no charge from GLIFWC.



New fish market opens in Baraga, Michigan. Brad Dakota, Keweenaw Bay tribal member and commercial fisherman, recently opened Keweenaw Bay Fisheries. The shop features fresh Lake Superior fish, including lake trout and whitefish.



Dagwaagin Anishinaabewaking.

Dagwaaging, nindede bakazhaawe. Nwaajigiigoonyiwed. Gaye nimishoomis giyose. Mii nange giyosewininiwag ayaawag. Miinawaa nandawishibewag. Apane nandawenjigewag. Gaawiin wewiibishkaasiwag. Onzaam, gaawiin nitaagesiiwag. Gaawiin gagiibaadizisiwag.

It is Autumn in Indian country.

(When it is fall, my father he cleans fish. The fisherman/The one who seeks fish. Also my grandfather he hunts. Certainly hunters they are. And also they seek ducks. Always they fish/hunt with a purpose of getting food. They do not hurry. Excessively, they do not kill game. They are not foolish.)

Bezhiig—1

OJIBWEMOWIN (Ojibwe Language)

Double vowel system of writing Ojibwemowin.

—Long vowels: AA, E, II, OO

Wiigwaas—as in father

Miigwech—as in jay

Bijjinaago—as in seen

Nookomis—as in moon

—Short Vowels: A, I, O

Gaye—as in about

Imaa—as in tin

Onzaam—as in only

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

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

Say “no” first—“gaawiin,” then add the negation marker sound sii or zii (after an “n”) to the verb, before any conjugations.

- Giige.—S/he heals up.
- Gaawiin giigesii.—S/he doesn't heal.
- Nimboogid.—I fart.
- Gaawiin nimboogidisii.—I don't fart.
- Gibaap.—You are laughing. LOL
- Gaawiin gibaapisii.—You don't laugh.
- Zhoomiingweniwag.—They smile.
- Gaawiin zhoomiingwenisiiwag.—They are not smiling.

VAI-Negation, Use Gaawiin & sii/zii

Niizh—2

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

- A. Nimaamamawinzo. Odoonaabandaanamiinan.
- B. Gitigaaning nindonaabandaanan wiingaashkoon.
- C. Anishinaabeggaayosejig idash mayaamiginaajig.
- D. Noopiming bijjinaago, ningii-mawinz. Gaawiin ningii-wanishinzii.
- E. Nimbaanizhaan wiigob. NindoZHitoon i'iw makak.
- F. Ningii-wiigwaasike. Ninzaagitoon i'iw wiigwaas imaa.
- G. Wiigwaasi-jiimaan. Wiigwaasigamig. Mii'iw, miigwech.

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

Niswi—3

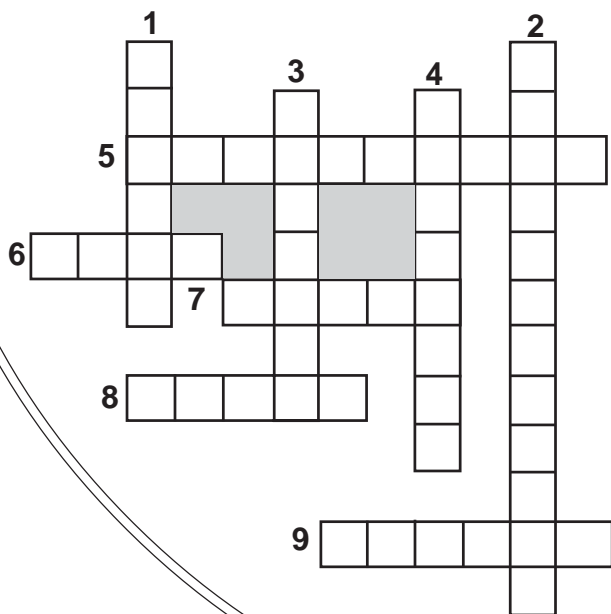
IKIDOWIN ODAMINOWIN (word play)

Down:

1. You laugh.
2. S/he hurries.
3. No.
4. S/he answers.

Across:

5. S/he cleans fish.
6. There
7. S/he heals up.
8. Always
9. Too much



Niiwin—4

VAI Negations

- Gaawiin nimbakadesii noongom.—No, I do not have hunger pains now.
- Gaawiin nimaajaasiimin.—We are not leaving.
- Gaawiin niminikwesii.—No, I do not drink.
- Gaawiin nibaasiiwag.—They are not sleeping.
- Nakwetam.—S/he answers.
- Gaawiin nakwetanzii.—S/he doesn't answer.
- Gaawiin nakwetanziiwag.—They do not answer.

Goojitoon! Try it! Translation below.

1. Zaaga'iganing a'aw ikwe gaawiin giigooyike_____.
2. Dagwaaging zhiishiibag gaawiin minwendan_____.
3. Nookomis gaawiin gashkendan_____.
4. _____ niminwendanzii giisinaag.
5. Gaawiin nindizhaa_____ oodenaang noongom.

zii
sii
siimin
ziiwag
gaawiin

Translations:

Niizh—2 A. My mother she picks berries. She picks blueberries. B. In the field, I pick sweetgrass. C. The people, hunters and gatherers. D. In the bush yesterday I picked berries. I did not get lost. E. I cut it into strips, inner basswood bark. I make a basket. F. I did remove birchbark from the tree. I love that birchbark there. G. Birchbark-canoe, birchbark lodge. That's it, thank-you.

Niswi—3 Down: 1. Gibaap. 2. Wewiibishkaa. 3. Gaawiin. 4. Nakwetam. Across: 5. Bakazhaawe. 6. Imaa 7. Giige. 8. Apane. 9. Onzaam.

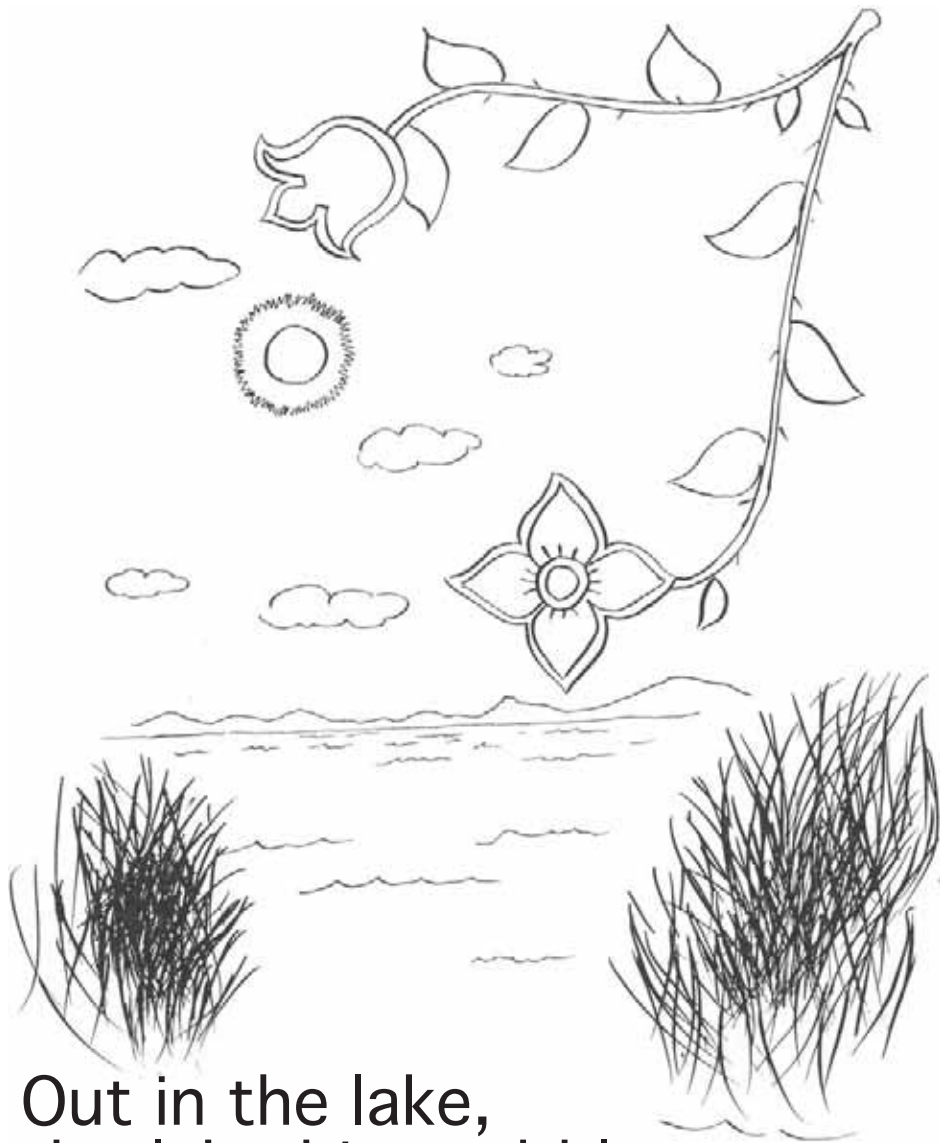
Niiwin—4 1. At the lake that woman she is not fishing. 2. When it is fall ducks they are not happy. 3. My grandmother she is not sad. 4. No, I am not happy when it is cold weather. 5. We are not going to town today.

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.

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Ricing time



Out in the lake,
the lake big and blue,
the wild rice grows
for me and for you.



Away, away,
away I go.
I go where the wild rice
grows and grows.



Up in the sky
the sun looks down
on me and the wild rice
singing our song.



Wild, wild,
wild rice,
real wild
wild rice.

(Reprinted with permission from Real Wild Rice, written by David Martinson, illustrated by Vince Cody and published by School District 709, Duluth, Minnesota.)

Language Camp combines language & traditional skills

Some depart with “Ojibwe version of a Winnebago camper”

Story & photos by Sue Erickson, Staff Writer

Red Cliff, Wis.—“What’s exciting is that some of the people who could only say one word of Ojibwe last year can now speak a whole sentence,” comments Eileen Skinaway, St. Croix elder, author and instructor at Red Cliff’s third Ojibwe Language Camp. “That shows people have been working on language through the year,” she says, showing her big, warm smile, obviously happy to see positive results and the use of the language gaining momentum.

The growing interest in reviving Ojibwemowin (Ojibwe language) is witnessed at most Ojibwe reservations, where language classes are commonly held. The intent of the week-long language camps, such as the one at Red Cliff, is to provide a setting where the language can be used more intensively than in a classroom setting. The camp combines cultural activities with use of the Ojibemowin to provide hands-on practice using the language, producing traditional Ojibwe items, and participating in other cultural activities as they arise.

Early in Red Cliff’s 2004 Language Camp week at Raspberry Bay Campground an interested circle of onlookers gathered round Sis Wiggins and Sharon Nelis, Bad River tribal members, who provided a day-long session on brain-tanning deer skins. Participants got an opportunity to help scrape a hide—a tedious process, while other aspects of brain tanning were also demonstrated and explained.

Sis had one hide ready to be smoked at the camp, but high winds prevented her from actually demonstrating the process for fear of starting a forest fire or burning her hide. However, she did prepare a brain solution and showed onlookers how to soak the hide in the solution, a process that yields the very soft-textured buckskin.

A few folks who had tried the process unsuccessfully in the past also got some tips from the experts that would make their next ventures successful. For instance, when scraping the hide, it is not only the hair that must be removed, but also a very thin, first layer of skin.

Also, new at Red Cliff’s Language Camp was a guided tour of plant life in the area surrounding the Raspberry Bay campground. This tour was led by Jim St. Arnold, Great Lakes Indian Fish & Wildlife Commission (GLIFWC) Administration for Native Americans (ANA) director along with GLIFWC Forest Ecologist



Jim St. Arnold, ANA program director, along with other GLIFWC staff provided a guided tour of plants around the Raspberry campsite.

Karen Danielsen and Tanya Aldred, GLIFWC wild plant technician. They pointed out a variety of native plants and talked about their Ojibwe names and traditional uses.

The cattail was one plant talked about on the tour and also found as part of a beautiful wigwam constructed on site by Marvin Defoe, Greg Kingbird and Brian Goodwin. The wigwam was constructed in a traditional fashion, using birch and cattail mats tied together with basswood, according to Andy Gokee, camp coordinator.

When the camp concluded, the men braced the wigwam from inside, cut the bottom poles flush with the ground and placed it



The demonstration on brain-tanning deer hide was a hit at the immersion camp this year. Sis Wiggins assisted by Sharon Nelis, both of Bad River, demonstrated the process for interested participants.

“There are more and more language camps being organized each year among Ojibwe communities in the region of Wisconsin, Michigan and Minnesota, which of course is a very positive sign; I think we are all starting to see the importance of engaging ourselves in this work.

These language camp programs however, are only part of a much larger, ongoing effort to retain and revitalize Ojibwe language use in our communities. This goal requires us to come together, to work together, to help each other out.

We should all be especially grateful for the elders who have managed to hang on to the language, and who now share their knowledge with us, so that we are still able to carry forward our Anishinaabe identity into the future. Without these elders and our dedicated teachers, our language and all that which makes us Anishinaabe would already be gone. Because of them, we can still maintain much hope for the future, in terms of knowing and preserving who we are as Anishinaabeg people; and that’s what this work is all about.”

—Andy Gokee, Outreach Specialist, UW-Stevens Point Native American Center



Vivian Brooks, Red Cliff, watches as Eileen Skinaway, St. Croix elder and instructor, demonstrates moccasin making during Red Cliff’s Language Immersion Camp held at Raspberry Bay Campground this summer. The week-long camp combines language sessions with traditional Ojibwe activities and skills.

on a flat trailer. Once secured, they drove it away, commenting that this was “the Ojibwe version of a Winnebago camper.”

Besides lodge construction, Defoe also taught how to make cedar ricing sticks during the language camp. “We Red Cliffers are all ready for the ricing season now,” Defoe quipped, waving a set of newly fashioned ricing sticks. “We’re just waiting for Bad River to invite us over to rice.”

Camp Coordinator Andy Gokee, UW-Stevens Point, was pleased to see involvement of more youth this year. He estimates about 60 to 65 people participated throughout the week, with about half being youth “The numbers seemed just about right,” Gokee says. “There was also an increase in the number of local Red Cliff youth, thanks to the efforts of Michael (Scooter) Charette, who works with the local Red Cliff youth programs.”

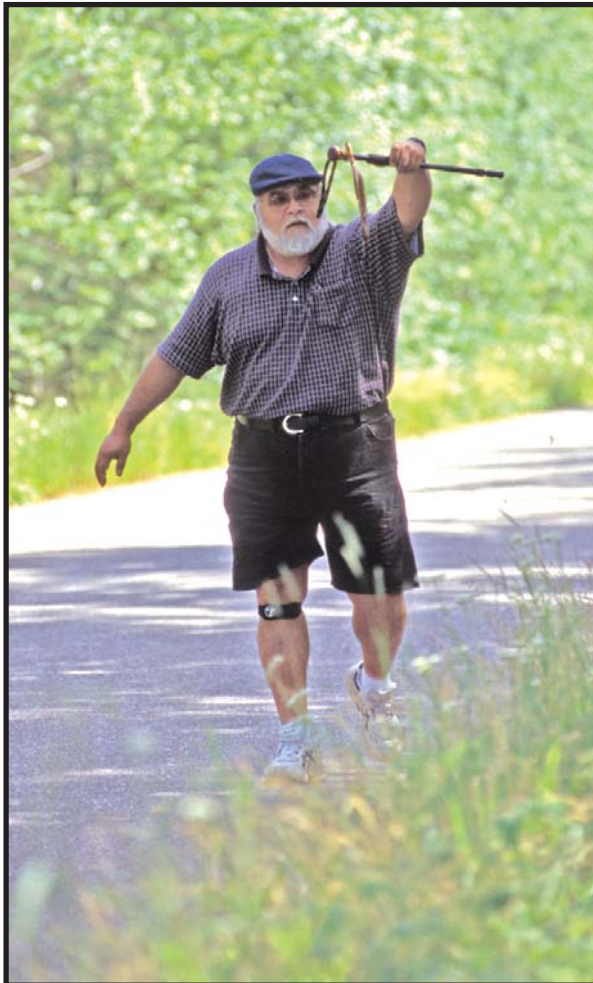
Gokee feels that the quality of activities during the camp increased significantly this year, and the camp went smoothly. In addition to regular language sessions, which focused on building vocabulary and practicing communicating in (See Language Camp, page 23)



Getting ready for ricing season (and waiting for an invitation from Bad River to rice the Kakagon Sloughs), Red Cliff’s Marvin Defoe (far left) led a workshop on making cedar ricing sticks.

2004 Healing Circle Run

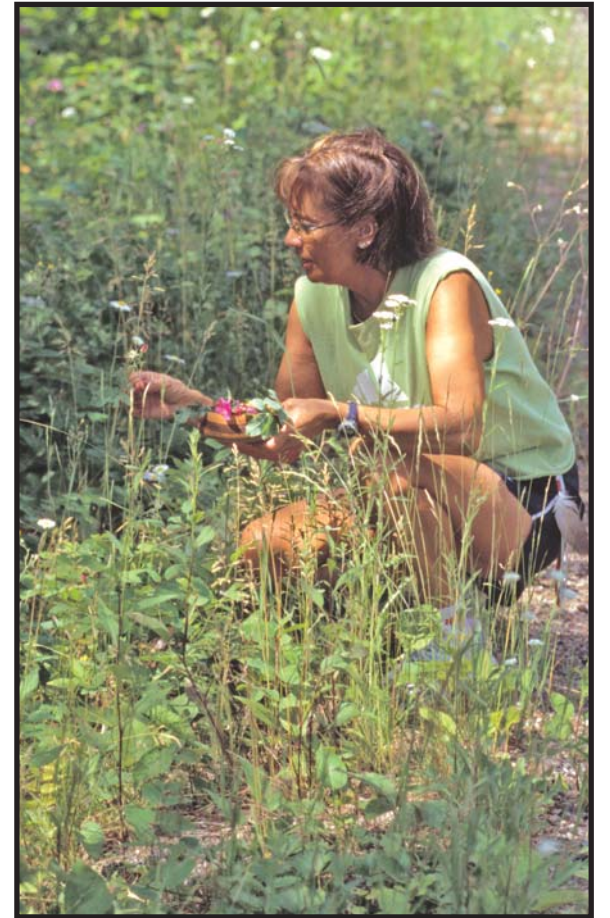
Photos by
Charlie Otto Rasmussen



Participants on roller blades and bicycles joined walkers and runners in an active prayer for healing July 10-16. The 2004 Healing Circle Run connected eight Ojibwe reservations in Wisconsin, Michigan and Minnesota, attracting people from throughout the region. Opening ceremonies were held at Lac Courte Oreilles, in addition to a healing ceremony when the run came full circle back to the reservation.

The annual event is intended to provide support for individuals, families and groups recovering from illness, loss, discrimination and other challenges.

Participants included Jim Schlender (left), Bob Kovar and Ernie St. Germaine, and giwewigizhigookway Martin (right). Run organizers thank all of this year's participants—miigwech.



Unity Ride welcomed by Ojibwe communities as riders & runners pass through the ceded territory

By Sue Erickson
Staff Writer

Odanah, Wis.—Members of the Bad River tribal community greeted riders and runners with the 2004 Unity Ride and Run as they arrived at the reservation on July 21st needing accommodations for runners, riders and their mounts.

Following a "circle in" ceremony that opens and closes each day of the ride and the appropriate retirement of the sacred staffs, Unity participants made themselves comfortable at the Methodist Church on the reservation, and the horses leisurely munched long grass in an adjacent field.

The 21st had been a tiring day, struggling with 100 degree heat and humidity, the Northland's biting flies and a vehicle breakdown. But challenges are expected on the long ride, which began in Sioux Valley, Manitoba and will conclude at the International Indigenous Elders Summit at Six Nations of the Grand River, Ontario—about two months in the saddle for riders. Especially tricky is finding a route compatible with horses, whose feet can become sore from walking on gravel and pavement.

Riders, runners and horses were scheduled to rest for two days at Bad River before heading east towards the Lac du Flambeau reservation and then on towards Oneida Country in eastern

Wisconsin before ferrying across Lake Michigan into Michigan and on up to Canada.

The Bigfoot Ride to Wounded Knee in 1986 was the predecessor of the numerous annual Unity Rides. The Bigfoot Ride took place after Lakota elders from North and South Dakota, heeding Black Elk's vision that the Sacred Hoop had been broken after the Wounded Knee massacre of 400 men, women, and children in 1890, were shown in visions that they must retrace the path of their ancestors and "wipe the tears for the seventh generation to have a better life."

Since 1986 hundreds of men women and children have ridden and ran thousands of miles to retrace those footsteps and pray for healing in the annual rides.

Unity Ride 2004 organizer and spiritual leader Chief Arvol Looking Horse rode in the original Bigfoot Ride and since then participated in the "Wiping Tears Ceremony" every year, part of the process of mending the Sacred Hoop, he says.

"After Bigfoot we rode north to find relatives and unite nations," Looking Horse comments. "It is a spiritual ride, and we carry our staffs across country. Those staffs are used to carry a message; sometimes we use tobacco to carry a message. We circle-up each day to pray and bring in elders to pray and complete the circle."

Participants in the Ride span generations, but organizers promote youth involvement, Looking Horse says. The Ride encourages youth leadership and involvement, and the Ride is often a tremendous learning experience for young people. Problems and issues that may arise are dealt with in a traditional way, promoting respect, honesty and courage.

The long Unity Ride brings participants from across the United States and Canada. "Sometimes people from local communities join for a segment of the ride. Participants change from day-to-day," he says.

As they carry the Sacred Staffs, riders and runners promote a message of peace and caring for the environment. Looking Horse sees a world confronted with many challenges—war and environmental problems such as global warming among them. "We have prophecies that relate to those problems," he says. "The White Buffalo calf being born and other sacred animals showing the sacred color, white, are due to the changes faced in the environment."

Once at the Elders Summit, the riders will join with other indigenous elders from across the Americas to discuss issues facing indigenous people, to search for solutions for problems within indigenous communities, and to formulate a statement to the United Nations and the world.

Until then, the Unity Ride will be on the trail of many miles, uniting nations and seeking, especially, to promote leadership and responsibility in indigenous youth.

The Unity Ride has no governmental sponsors and relies on the generosity and assistance of people along the way.

More information can be found at the Unity Ride website as well as at: wolakota.org—a website for the Wolakota Foundation, an outgrowth of the annual World Peace and Prayer Day celebrations begun in 1996 by Chief Arvol Looking Horse.

GLIFWC joined the Bad River Tribe in welcoming the Unity Ride as they passed through the ceded territories and provided a lunch on their second rest day.



Bad River tribal members greet the Unity Ride as participants arrived on the reservation en route to the International Indigenous Elders Summit at Six Nations of the Grand River, Ontario. (Photo by Sue Nichols)

Interns give GLIFWC staff a boost with summer assessment work

Wild rice interns spend summer on the water

By Brooks Bauer, PIO Intern

Seth Lanning and Travis Neebling are both seniors at Northland College in Ashland, Wisconsin. Lanning and Neebling spent their summer on 30 lakes and 10 rivers and flowages within the ceded territories of Wisconsin while working as interns with GLIFWC's Wildlife Section.

Lanning has a triple major in biology, environmental science, and natural resources with a minor in chemistry. The 2004 summer internship allowed Lanning to utilize his classroom education in a real life application.

Neebling has a natural resource major with an emphasis in fish and wildlife ecology. "Working with the GLIFWC staff has been fun," said Neebling.

The three month wild rice internship kept both Lanning and Neebling busy as they traveled the ceded territory beginning in the southwest corner and continuing northeast. Lanning and Neebling measured wild rice on the bodies of water and estimated the acreage on a given lake. They also identified common and exotic species of flora and fauna found in the waters.

Along with the measuring of wild rice on the lakes, the wild rice interns conducted invertebrate samples. According to Lanning and Neebling, the "invert" samples are new this year. Three samples are taken per body of water, using a dipnet, to measure amounts of aquatic invertebrates. By comparing the results of different bodies of water, the interns, along with GLIFWC staff can judge water qualities.



Interns Travis Neebling (left) and Seth Lanning prepare to measure wild rice density at a northwest Wisconsin lake. (Photo by Brooks Bauer)



Interns Ben Michaels and Corey Bradzil (center) examine the contents of a seining net along Lake Superior. Also pictured are GLIFWC's Nate Bigboy (left) and Mike Plucinski. (Photo By Brooks Bauer)

Great Lakes interns assess fish on Gichigaming

Ben Michaels and Corey Bradzil were interns for GLIFWC's Great Lakes section. Michael and Bradzil both attend Northland College in Ashland, Wisconsin and spent their summer assessing fish and sea lamprey.

Michaels, a senior and second year GLIFWC intern, has a natural resources major and biology minor. "The work environment is great and co-workers are friendly and cool," commented Michaels. "We learned a lot, and it was a fun internship."

Bradzil, also a senior, has a biology major and history minor. Bradzil, who initially attended Northland for soccer, has taken advantage of the great biology program and welcomed the great experiences afforded to her by GLIFWC. "It has a casual atmosphere, and you get your work done although it does not seem like it," stated Bradzil.

Michaels and Bradzil spent the spring semester and summer assisting in sea lamprey control on the Bad River; the lamprey is a parasite that kills more trout than anglers. The interns also monitored fish on Lake Superior such as whitefish and lake trout by setting nine nets totaling 3,000 feet of net then retrieving the nets and counting their catch.

The interns also conducted seining operations on several beaches in the Upper Peninsula of Michigan. Using a seining net they dragged the shoreline for juvenile whitefish to estimate future whitefish populations in the lake.

An ear for history

By Charlie Otto Rasmussen, Staff Writer

Public Information Office (PIO) intern Brooks Bauer did a lot of listening this past summer. While he completed some traditional PIO work—namely developing articles for *Mazina'igan*—the bulk of his duties revolved around GLIFWC's oral history project. Bracketed by the seminal period between two major treaty rights court decisions—the 1983 *Voigt* decision and the 1999 *Mille Lacs* decision—the oral history project is designed to preserve the observations and experiences of people involved in off-reservation treaty harvesting.

Brooks conducted interviews of former GLIFWC conservation wardens and tribal spearers. That was the easy part. He was also responsible for transcribing the audio-taped interviews, typing up a hard copy for each one. As a recent double-major graduate from the University of Wisconsin-Eau Claire's American Indian Studies and History programs, Brooks has done his share of typing papers—but never this much.

Besides honing his typing skills, Brooks traveled to the Menominee and Mille Lacs reservations, snapping pictures and gathering material for *Mazina'igan* articles. He also spent time with fellow GLIFWC interns in the field to document their summer activities on inland Wisconsin lakes and Michigan waters of Lake Superior.

Brooks is continuing his education at UW-Eau Claire this fall, pursuing a masters degree in American History. Special areas of study include Ojibwe history and the 1825 Treaty at Prairie du Chien. Brooks spent four years in the Marines prior to beginning studies at the university.

Along with his wife and son, he lives in Eau Claire.



Brooks Bauer pictured with DeLanna Studi and Juliana Serrano at AIS summer institute.

Have info will travel PIO gets summertime help

By Sue Erickson
Staff Writer

Odanah, Wis.—GLIFWC's Public Information Office (PIO) got a boost this summer when Colt St. Arnold came on board as a part-time summer employee. Possessing a major PIO qualification, namely a driver's license, Colt hit the road with PIO's information booth this summer.

His travels took him to Lac du Flambeau's Bear River Pow-Wow, Keweenaw Bay's Pow-wow in Baraga and will ultimately take him to the Mille Lacs Band's Pow-wow in mid-August.

Besides traveling with the information booth, Colt gave PIO a hand in the office, assisting with tasks such as mail-outs, folding brochures and getting things to and from the storage unit.

Colt is the son of Jim St. Arnold, GLIFWC's Administration for Native Americans (ANA) program director, and Gina Goss of Bessemer. He's a Keweenaw Bay tribal member and will be a junior this year at Bessemer High School.

A long-time, avid rider, Colt does well showing his horse in Western pleasure classes but had to limit some showing this year while his horse recovered from some lameness. He also enjoys paint ball games, has an interest in cars and is a grass dancer, so is familiar with the pow-wow trail.

PIO thanks Colt for his time and energy this summer. He's been a great help.



Colt St. Arnold.

Growing scientists for the future

De-bunking myths about Indian kids & science

By Sue Erickson, Staff Writer

Cloquet, Minn. – Cinderella was always beautiful; it just took the help of a fairy godmother to make the world see it. Cinderella's godmother may have a human counterpart in Holly Pellerin, activities director and coordinator for the Gidakiimanaaniwigamig (Our Earth Lodge) Camp II whose aim is to reveal the scientists and mathematicians inside many Indian children. Only Pellerin has no magic wand, just determination, a whole lot of love and numerous partners in helping achieve the goal.

"We're growing them right here. That's what we're doing right here and now is growing scientists and mathematicians," she said, as she looked around a Knife Island campsite, Cloquet, Minnesota, bustling with the youthful energy of thirty some kids—all busy and having a blast learning science.

Gidakiimanaaniwigamig Camp is a ten-day, hands-on learning adventure geared to middle school Indian children from the Fond du Lac Band and focused on developing their interest and proficiency in science and math.

"Our camp is composed of teachers and teachers," Pellerin said, noting that many of the camp's teachers are from Fond du Lac's Ojibwe School and also that the kids are teaching the teachers that they can do math and science. Pellerin aims at de-bunking a myth that Indian kids are not good in math and science and also at making sure more Indian scientists will be on staff at reservation programs, or elsewhere, in the near future.

On Tuesday, July 20, the kids were transported from Fond du Lac Tribal and Community College (FDLTCC) to Knife Island Campground where they split up into groups, each with a teacher, and headed into the woods. There each group selected a research site, cordoned off 50-foot plots with string and began taking samples from their section. (It looked similar to the research the Great Lakes Indian Fish & Wildlife Commission is doing in the long-term understory plants survey to determine the impact of logging on understory plants!)

They collected plants, insects, set homemade live traps for small animals, even set pit traps for bugs. Armed with bug repellent and identification guides for insects, plants and the like, samples collected by the kids were all identified and recorded. All in all, the research on the sites will take four days, keeping daily records.

Each research group donned their own colored t-shirt—red, blue, yellow, green—not an unpremeditated selection of colors, but rather the colors of the Medicine Wheel, Pellerin noted. She also carried asemaa (tobacco) with her, making sure the students put down their asemaa before taking from nature.

And this is what the Giidaanaangiwiigamig Camp, now in its second year, is all about—melding traditional values and knowledge with contemporary science and math—a concoction that does mix, said Tom Yellowman, instructor at the camp from FDL's Ojibwe School. "I like to emphasize how math and science connect us with our environment. They provide the numbers and terms to record and present our information." He also takes note of the traditional information shared while learning. He gave the example of one student who noted it was about to rain one day by observing that the leaves on the trees would curl up like small cups—a sign she had learned to read from her grandmother.

Once the sampling was complete, the day was yet to include time for good food, games and canoeing. Program Director Diana Dalotten, Director of Diversity and K-12 Education Program, University of Minnesota, arrived on site with Geographical Positioning System (GPS) equipment. The kids were yet to get a lesson in GPS, enabling them to pinpoint specific sites for future reference.

The day before had involved a trip to the Tower Soudan Research site, near Ely, Minnesota, actually an old underground ore mine. The study there centers on how the universe will decay and the release of neutrinos (an energy entity). The kids will be following through on that research also. A visit to the Bois Forte Cultural Museum followed the Soudan site.

Meanwhile, back at the FDLTCC, participants in the Ando-giikendaasowin (seek to know) Camp II were examining materials collected at Dark River the day before. This camp is for high school age students and includes participants from as far as New Mexico and Minneapolis as well as Fond du Lac. It is also a ten-day



Identifying plants found at one of the Gidakiimanaaniwigamig (Our Earth Lodge) Camp II research sites, Holly Pellerin, activities director and Tom Yellowman, teacher from the Ojibwe School check out a plant identification guide. (Photo by Sue Erickson)

camp. The students involved studied the dynamics of upstream and downstream sites on a rocky stream bed.

Working in a lab at FDLTCC, some were jotting down notes on the nature of the sites, especially relating to possible human impact. Others were extracting various insects and plants from water taken from upstream and downstream sites and identifying various insects as "shredders," "scrapers" and "predators." Using tweezers, various small entities were extracted from trays of sampled water and placed on Petri dishes for further study. One goal of the study was to determine if the sites were suitable habitat for trout.

Their ten-day experience included sampling several river sites as well as observing the river sturgeon re-introduction at the St. Louis River, and it also included outdoor recreational experiences such as white water rafting and canoeing.

At the end of camp, both the high school and middle school participants prepared presentations on their research, then as a grand finale headed for Valley Fair, a huge recreational park near Minneapolis.

The summer camps are actually the longest camps of a year-around program, Pellerin explains. There are three other camps—fall, winter and spring, coinciding with the solstices—but those are limited to weekends.

In 2005 the camps are going to be moved to the Laurentian Environmental Center site, Isabella, Minnesota.

For Pellerin and camp staff summer science camps are ten days of go-go-go, but the satisfaction of seeing children learning, interacting with their environment, developing skills in science and math, while incorporating their own traditional knowledge is well worth the time and effort.

Better known around the camp as "grandma," Pellerin's regular, full-time job is running the State of Minnesota's "Get Ready Program." Based at FDLTCC, the program aims at gearing children towards higher education. Consequently, she knows many of the children and parents in the community—in some instances, she is working with the second generation.

The success of both the high school and middle school camps is not only attributable to staff and student involvement, but also to many partners contributing to the experience as a whole. Partners in producing the camps include: FDL's Ojibwe School, FDLTCC, University of Minnesota, St. Anthony Falls Laboratory, the National Center for Earth Surface Dynamics, River Watch and also the historic Knife Island Campground, owned and operated by Marcie and Mark Solberg.



In the Fond du Lac Tribal and Community College's science laboratory, high school students and participants in the Ando-giikendasowin (seek to know) Camp II work on identifying insects collected from two sites on the Dark River. The group is studying the dynamics of upstream and downstream sites.



During the research project, small groups of students, each with a teacher, collected a variety of specimens from fifty-foot plots that were cordoned off with rope. Each group had a different colored t-shirt. Above Eve Stein, teacher from Fond du Lac's Ojibwe School with students from the yellow group have completed collecting samples for the morning.

Organization encourages tribes and tribal members to develop agri-business

By Sue Erickson
Staff Writer

Red Cliff, Wis.—Outreach to tribal members engaged in, or interested in, agri-business is the name-of-the-game for Jean Buffalo-Reyes, outreach and education coordinator for the Midwest Region of the Intertribal Agriculture Council (IAC). Agri-business could mean producing anything from blueberries to bison.

The IAC is a non-profit organization established in 1987 to promote the conservation, development and use of agricultural resources for individual tribal member businesses or tribally-owned agricultural enterprises.

“Our job is to encourage tribal agricultural development and assist individuals or tribes in production and marketing,” says Reyes. Nationally, there are 163,000 individual and tribal agricultural enterprises marketing products that range from fish, vegetables, apples, bison, blueberries, and wild rice, to mention a few.

IAC applies for contracts through the U.S. Department of Agriculture (USDA) to provide services to Indian Country. Four specific agencies are involved, including: the Foreign Agriculture Service which deals with marketing; the Natural Resource Conservation Service which involves conservation; Risk Management that deals with indemnities and problems such as crop

loss, and the Animal, Plant Health Inspection Service (APHIS) which handles disease control and health issues.

Reyes remarks that there has been a tremendous growth in the agricultural business for tribes. One fast-growing area is the production of fish, whether for sale to other hatcheries or for the food market. She also points to the red deer farm successfully run by the Forest County Potawatomi and the bison raised by the Oneida.

One IAC initiative is the Marketing Access Program (MAP), which helps get Indian products into international markets. IAC sponsors seminars that focus on how to get products overseas, how to access the people that purchase products, and how to authenticate an Indian product. IAC also helps Indians in agri-business attend trade-shows abroad where they can actually meet the buyers and display their products, says Reyes. Interpreters are even provided.

Also, IAC has produced an Indian trademark and issues stickers with the trademark free to Indian agri-businesses. One local maple syrup producer already uses the trademark that authenticates the product as being produced by Indians. Indian authenticity is important to the foreign market, says Reyes.

Another area of assistance is financial. IAC helps Indians access financial assistance through low-interest Farm Service Agency loans.



Planning is yet another area where IAC can lend a hand. For example, Reyes was recently involved in developing a plan for an agri-business on farm property acquired by the Red Cliff Band.

She and a co-worker actually developed a five-to-ten year plan for the business, utilizing an existing apple orchard and proposing the raising of hogs and chickens for the first five years, with expansion into bison and cattle by the tenth year. The plan estimates expenses and revenues.

Also, tribal members, she said, could possibly tie into the farm through a voucher program or through community shares, first meeting the needs of the Elderly Food Program, the WIC program and the food distribution program.

“The farm would be an Indian agri-business,” Reyes says, “but it could also tie into the school program for educa-

tional purposes.” The plan was submitted to the Red Cliff Tribal Council.

IAC works closely with the Wisconsin Tribal Conservation Advisory Council, which has \$284,000 earmarked for tribes. Some of those funds will be used for “value-added” workshops, says Reyes. This means sponsoring workshops where a tribe or tribal member already in an agri-business introduces and explains the business to interested tribes or tribal members. For instance, Oneida is already in the business of bison production. They would be able to provide a workshop for Indian parties interested in starting to raise bison.

Another new program is the Farmer-to-Farmer Program sponsored through the Winrock Company. The program recruits Native producers to go overseas and teach growing methods and techniques at successful production sites in other countries.

To advance IAC’s outreach they are currently implementing programs through tribal community colleges. This May IAC held an event at the Bay Mills Community College with all Michigan tribes invited to attend. IAC will be promoting partnerships with the USDA.

According to Reyes, there are multiple opportunities available for Native Americans through the USDA, but many tribes are unaware of them. Her challenge is let them know about the variety and extent of programs that can help promote and develop successful Native agri-entrepreneurship.

Mille Lacs unveils new wastewater plant *An example in community, government cooperation*

By Brooks Bauer, PIO Intern

Garrison, Minn.—With about 100 people in attendance battling the cool and windy weather conditions, the Mille Lacs Wastewater Management Inc., held its grand opening ceremony on June 18.

Under ownership of the Mille Lacs Band’s Corporate Commission, the wastewater plant is operated as a non-profit corporation. The facility is located on a 135-acre lot near the south end of Wigwam Bay along Lake Mille Lacs and will eventually serve the 10,000 residents of the City of Garrison, the townships of Garrison and Kathio, and the Mille Lacs Reservation when the Garrison Kathio West Mille Lacs Lake Sewer District comes online in 2005.

“The facility is able to treat 625,000 gallons of water a day, with capability to expand,” according to Facility Manager and Mille Lacs Band Member David Sam.

At a cost of approximately 20 million dollars, funding came from a \$7.7 million federal grant that was obtained thanks to U.S. Representative James Oberstar; \$3 million came from the Band; and \$3 million came from the Sanitary District. The Band also secured a loan for up to \$7.4 million to cover the balance of the costs of building the plant. No local or state tax money was involved in construction of the plant.

Facility Manager Sam, Mille Lacs Band Chief Executive Melanie Benjamin, Secretary-Treasurer Herb Weyaus, Commissioner of Corporate Affairs Mitch Corbine, Garrison Mayor John Schley and Ken Hasskamp, Staff Assistant for U.S. Representative James L. Oberstar, spoke to the people in attendance.



Mille Lacs Band President Melanie Benjamin and John Schley, Mayor of Garrison, at the wastewater plant grand opening, June 18. (Photo by Brooks Bauer)

The theme of the speakers was community cooperation. The communities of Kathio and Garrison townships, the city of Garrison and the Mille Lacs Band will all benefit from the facility.

According to Ken Hasskamp, the Mille Lacs Wastewater Facility is a “nationwide model for the cooperation of tribal, local, state, and national governments.” The wastewater project is an excellent example of inter-cultural cooperation that demonstrates that Indians and non-Indians near Mille Lacs Lake can work together to help solve a mutual problem and benefit the entire state.

The largest obstacle before the facility could begin water treatment was the appeal by Mille Lacs County that challenged the federal jurisdiction of the Mille Lacs Wastewater facility. The Mille Lacs County Board of Commissioners, which has filed a federal lawsuit against the Mille Lacs Band regarding the existence of the 61,000-acre Mille Lacs Reservation boundaries, delayed the

plant from beginning operations for nearly a year by challenging an Environmental Protection Agency discharge permit. After the delay, the wastewater facility began water treatment operations on the June 1, 2004.

“We worked together to address the fears and bias’ and provided a vehicle for our relationships to grow through cooperation and collaboration. In spite of obstacles throughout the process, it is an honor and a privilege to be here today. I am proud to move forward,” said Sam.

“Each one of us has responsibility for our future generations,” Benjamin added and reminded the audience that we must “create a good home, a place to raise children and to ensure they have a good life.”

Educators discuss sovereignty, stereotypes and Act 31

DPI convenes 8th annual summer institute

By Brooks Bauer
PIO Intern

Keshena, Wis.—The Wisconsin Department of Public Instruction (DPI) and College of the Menominee Nation (CMN) kicked off the 8th Annual American Indian Studies (AIS) Summer Institute held at the Menominee reservation in eastern Wisconsin.

"The greatest participants ever!" stated Summer Institute Facilitator Cliff Morton, a writer and retired teacher. Approximately 60 people attended the Summer Institute, June 21-25, an event that features classroom sessions and cultural events on the Menominee Reservation that comply with a Wisconsin Senate Bill known as Act 31.

Act 31 provisions are designed to fill gaps in the general understanding of Black, Hispanic, and Native Americans. Three provisions directly address Indian issues: lack of curricular materials on Ojibwe treaty rights, lack of knowledge about these topics by students and the general public, and lack of adequate training for teachers on these topics.

The result was a statute requiring the development of an appropriate curriculum on Ojibwe treaty rights; a statute requiring instruction in the history, culture, and tribal sovereignty of the federally recognized tribes as part of social studies; and a statute requiring anyone seeking a teaching license to receive instruction in history, culture, and tribal sovereignty.

"Most of our participants are experienced teachers who attended in-state schools. Many came because they sought to incorporate more information about native peoples in their lessons. Others came because they were looking to learn more about cultural issues and ways to better meet the educational needs of Native students," said J.P. Leary, consultant, AIS, DPI.

"Most teachers who were educated outside of the state need to receive this training to be fully licensed because it was not included in their teacher education program. This event is one of many opportunities that those with professional licenses can use to address this deficiency," stated Leary.

Monday and Tuesday activities began with opening ceremonies and presenters talking about "Cultural Considerations for American Indian Education," "ACT 31," "Wisconsin Indian History, Addressing Stereotypes, Bias, and Prejudices," "Developing Culture-Based Curriculum," "Overview of Wisconsin Indian History," and "Understanding Tribal Sovereignty."

Wednesday, the participants were taken on a day-long tour of the Menominee reservation led by Alan Caldwell, director, Menominee Culture Institute. The field trip concluded with a tobacco offering at Spirit Rock. Caldwell was also a central figure in the establishment of Act 31.

Weekday afternoons and all day Thursday were reserved for small group time; participants work in small groups to discuss each day's events and to begin to make connections to each person's work, issues, and concerns. Thursday is time for group members to collaborate on projects designed to connect their own learning to that of their students.

Weeknights were filled with cultural activities including a viewing of "Lighting the Seventh Fire," a look at the Ojibwe reserved rights to hunt, fish, and gather in the ceded territory.

This included performances of The National Conference for Community and Justice's (NCCJ/LA) "KICK," a single actor (DeLanna Studi) play dealing with the Indian Mascot Issue. The Woodland Boys and Girls Club on the Menominee Reservation had a Powwow and participants were encouraged to attend.

"We try to encourage participants to attend community events while they are here," said Leary.

A traditional feast at the Menominee Logging Museum was followed by guest speaker Patty Loew. Loew discussed how teacher's feedback from her book, "Indian Nations of Wisconsin" (2001), led to the development of the elementary version, "Native People's of Wisconsin," and teacher's guide (2003). Loew also talked about using less academic research and review process that allowed her to tell the communities' stories rather than working as an exclusive author.



Menominee Cultural Institute Director Alan Caldwell addresses participants at the 8th Annual American Indian Studies Summer Institute. (Photo by Brooks Bauer)

The Summer Institute brought together many people with diverse backgrounds, including educators, administrators, applicants for Wisconsin teaching licenses, artists, writers, activists, and many others with an interest in AIS and or American Indian Education.

"I thought the institute offered a great opportunity for people of many different backgrounds to come together

and learn about American Indian issues in a rich, cultural environment," said Matt Timm, a teacher at Seymour High School.

The AIS Summer Institute is open to anyone who would like to attend. Participants can receive undergraduate or graduate credits for an extra fee.

For more information go to www.dpi.state.wi.us/amind/aisummer.html.

Japanese barberry

(Continued from page 8)

spraying nontarget vegetation and to minimize human contact. The directions on the label should always be followed carefully.

Early fall spraying may be most likely to kill the plants, as systemic herbicides will be transported along with sugars and other materials down into the roots. On the other hand, spraying in early to mid-summer has the advantage of preventing seed production, at least for that year. Cutting large plants off near the ground and applying herbicide to the cut stumps has the advantage of reducing the amount of herbicide needed, while minimizing exposure to neighboring vegetation.

Because of the potential health and environmental risks associated with herbicide use, it is strongly recommended that those preparing to treat Japanese barberry or any other invasive plants with herbicide first consult their local resource agency for advice.

Fire is an effective tool to combat larger stands of Japanese barberry in fire-adapted communities such as prairies and pine barrens, as Japanese barberry is poorly adapted to fire. Use of fire is generally not effective or appropriate in northern hardwood forests or other communities that are not fire-adapted, though.

Biological control may someday be the long-term solution for controlling Japanese barberry populations in North America. But because Japanese barberry is widely sold and used for landscaping purposes, research into biocontrol organisms for this plant is unlikely to be attempted in the foreseeable future.

Of course the best way to avoid spreading barberry to new areas is to avoid planting it! Many good native substitutes exist. In sunny or lightly shaded areas, shrubby cinquefoil (*Potentilla fruticosa*, a low shrub with yellow flowers) can be used to make a decorative, low-maintenance foundation planting or border. Winterberry (*Ilex verticillata*) produces numerous bright-red berries along its branches that last well into the winter. It can grow to about 9 feet tall, and does fine in wet areas. Native roses such as meadow rose (*Rosa blanda*, not very prickly) and prickly rose (*Rosa acicularis*) are also good landscaping choices. Red elderberry (*Sambucus racemosa*) and American highbush cranberry (*Viburnum trilobum*) are both larger shrubs that produce clusters of bright red fruits and do well in partial shade.

Reporting

If you notice Japanese barberry on the landscape, it should be reported to the United States Forest Service, your state Department of Natural Resources, or the Great Lakes Indian Fish & Wildlife Commission.

For more information

This article was adapted from a more detailed article posted on GLIFWC's website—see <http://www.glifwc.org/epicenter/>.

Literature references for this article are listed at http://www.glifwc.org/epicenter/Berberis_thunbergii/refs.html.

Links to other websites on garlic mustard appear at http://www.glifwc.org/epicenter/Berberis_thunbergii/links.html.

Information on weed control can be found in the *TNC Weed Control Methods Handbook* at <http://tncweeds.ucdavis.edu/handbook.html>.



Tom Maulson, Chairman of GLIFWC's Board of Commissioners, provided information on treaty rights, spearing and growing up on the reservation during a Rural Leadership Program at Lac du Flambeau on July 15. The program was sponsored through the University of Wisconsin Extension. (Photo by Jim Thannum)

LVD adds personal touch to new Forest Service exhibit

By Charlie Otto Rasmussen, Staff Writer

Watersmeet, Mich.—Thin trails of sage smoke curled around the wigwam frame, over handcrafted utilities of birch bark and beads, and across a series of mounted illustrations inside the Watersmeet Visitor Center. An eagle feather in hand, Lac Vieux Desert's (LVD) Alan Shively fanned a round shell containing burning sage as he moved throughout the new exhibit area.

This traditional use of sage—known as smudging—helps cleanse and brings an overall goodness to the building said giwewigizhigookway Martin a few minutes later in an opening ceremony she conducted in both English and Ojibwemowin.

Martin, Shively and other tribal members joined Forest Service staff in the grand opening ceremonies of the revamped visitor center on July 2nd. The new exhibits highlight the natural resources of the Ottawa National Forest (ONF) along with the people who live, work and vacation on the near one million-acre forest in western Upper Michigan.

Speaker and Forest Supervisor Robert Lueckel said the effort to replace exhibits originally installed in 1970s was a lengthy process, hamstrung in recent years by major wildfire seasons in the western United States.

"We had the money, but it went to fight the fires," Lueckel explained. Supported by a large contribution from the non-profit Ottawa Interpretive Association, Forest Service planners were able to fully fund the project this year.

Where cultures meet

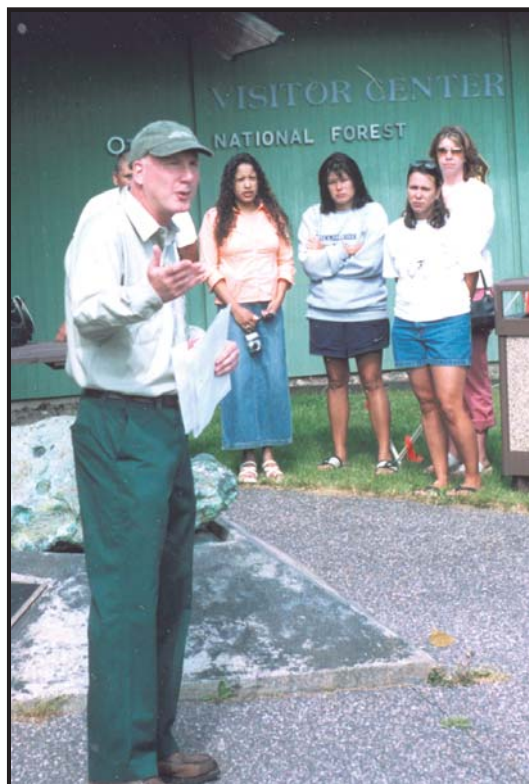
While the original exhibit contained elements of local Indian history, including a diorama and a few artifact replicas, the Forest Service wanted to better detail Ojibwe life in the region, said ONF Public Affairs Specialist Lisa Klaus.

"We started with an exhibit design and began working with tribal members about two years ago to incorporate their ideas," Klaus said. "Tribal members made sure the [wigwam] structure was authentic and brought in bead work and regalia that really makes the display vibrant."

Pelts from beaver and deer, sage bundles and colorful appliqué in traditional woodland Indian floral patterns are interspersed with interpretive panels that highlight seasonal Ojibwe lifeways. Logging, trapping and mining—vocations common to Indians and white immigrants—are also represented.

"Working with the Forest Service has been a good experience and a good opportunity to raise awareness about our people, our culture and our way of life," said Alina McGeshick from LVD's Tribal Historic Preservation Office who facilitated tribal participation in the new exhibit.

McGeshick said the LVD Cultural Committee comprised of around ten elders provided guidance in how the display should look, and additional tribal members



Ottawa National Forest Supervisor Bob Lueckel welcomes visitors outside the Watersmeet Visitor Center. Lac Vieux Desert members are pictured in the background. (Photos by Charlie Otto Rasmussen)



Alan Shively smudges a new Forest Service exhibit that includes local Ojibwe culture and history. Tribal members assisted with the design and content of the exhibit area.

provided materials and technical expertise. McGeshick's late grandmother, Josephine, created the beadwork on display.

While a few holdovers from the original exhibits remain at the center, displays and artifacts have been distributed to other regional sites. Perhaps the most prominent item, a 32-foot dugout canoe pulled from nearby Thousand Island Lake in 1953, was turned over to McGeshick and the tribe earlier this year. Dioramas depicting life and industry on the forest have been relocated to the Bergland Cultural and Heritage Center at the former Forest Service district office on Lake Gogebic's north shore.

The Watersmeet Visitor Center is open 290 days a year and attracts 25,000 to 30,000 people annually. For more information call (906) 358-4724

Language camp continued

(Continued from page 17)

Ojibwemowin, other activities focused on traditional skills. Besides the activities already mentioned, the camp featured a demonstration of the traditional and contemporary use of fish nets. There were numerous activities for youth, and participants could learn to make moccasins and birch bark baskets. Gokee says he received much positive feedback from Skinaway's moccasin-making class and Diane Defoe's birch bark basket session.

"Participants also had opportunities to benefit from various cultural teachings during the week," Gokee says.

The camp concluded Thursday afternoon with a giveaway and closing ceremony, and people departed, wishing the camp were not over. It was a positive learning experience, planned and operated in a good and respectful way with a sacred fire tended throughout.

Gokee says the camp will be funded for 2005, and people are also talking about having language camp more often during the year, possibly seasonal camps, such as during ricing season.

The 2004 camp staff was comprised of senior language associates Rose Tainter, Greg Kingbird, Larry Smallwood, and Lee Staples; language instructors Mark Gokee, Brian Goodwin and Keller Paap; cultural activity presenters Sis Wiggins, Eileen Skinaway, Diane DeFoe, Dennis White, Cleo White, Marvin DeFoe, Mike Montano and the Redbird Singers; and support staff Frank Dickenson, Wanda Baxter, Laurie Harper, Henry LaFernier, and Theresa LaFernier.

Water diversion continued

(Continued from page 1)

Wisconsin Governor and Council of Great Lakes Governors Co-Chair Jim Doyle called for public comments through October 18 on the initial agreements published in the Annex. "The Great Lakes are one of the greatest resources in North America and the draft implementing agreements are an important step in protecting them," Doyle said. "I hope during the next 90 days that everyone with an interest in the Great Lakes and the Great Lakes Basin will share their opinions about these protective measures by participating in the public meetings."

McCammon Soltis said GLIFWC is drafting comments on the proposed water regulation agreements and will discuss points of concern with state leaders associated with the Annex.

"GLIFWC member tribes have been and remain very interested in this issue and will be seeking additional consultation with the states as the review of this draft goes forward," she said.

2003-2004 Wisconsin off-reservation treaty fisher harvest by registration station

Registration Station	Males	Females	Totals
Bad River	5	0	5
Lac Courte Oreilles	54	38	92
Lac du Flambeau	6	1	7
Mille Lacs	0	0	0
Mole Lake	0	0	0
Red Cliff	11	6	17
St. Croix	21	13	34
Totals	97	58	155

2003-2004 Wisconsin off-reservation treaty otter harvest by registration station

Registration Station	Males	Females	Totals
Bad River	1	0	1
Lac Courte Oreilles	17	12	29
Lac du Flambeau	1	4	5
Mille Lacs	0	0	0
Mole Lake	0	0	0
Red Cliff	1	2	3
St. Croix	13	7	20
Totals	33	25	58

2003-2004 Wisconsin off-reservation treaty bobcat harvest by registration station

Registration Station	Males	Females	Totals
Bad River	1	2	3
Lac Courte Oreilles	3	1	4
Lac du Flambeau	2	1	3
Mille Lacs	0	0	0
Mole Lake	0	0	0
Red Cliff	2	2	4
St. Croix	5	2	7
Totals	13	8	21



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GLIFWC
P.O. BOX 9
ODANAH, WI 54861

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MAZINA'IGAN STAFF:
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Editor
Susan Erickson

Assistant Editor
Lynn Plucnski

Writer/Photographer
Charlie Otto Rasmussen

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