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

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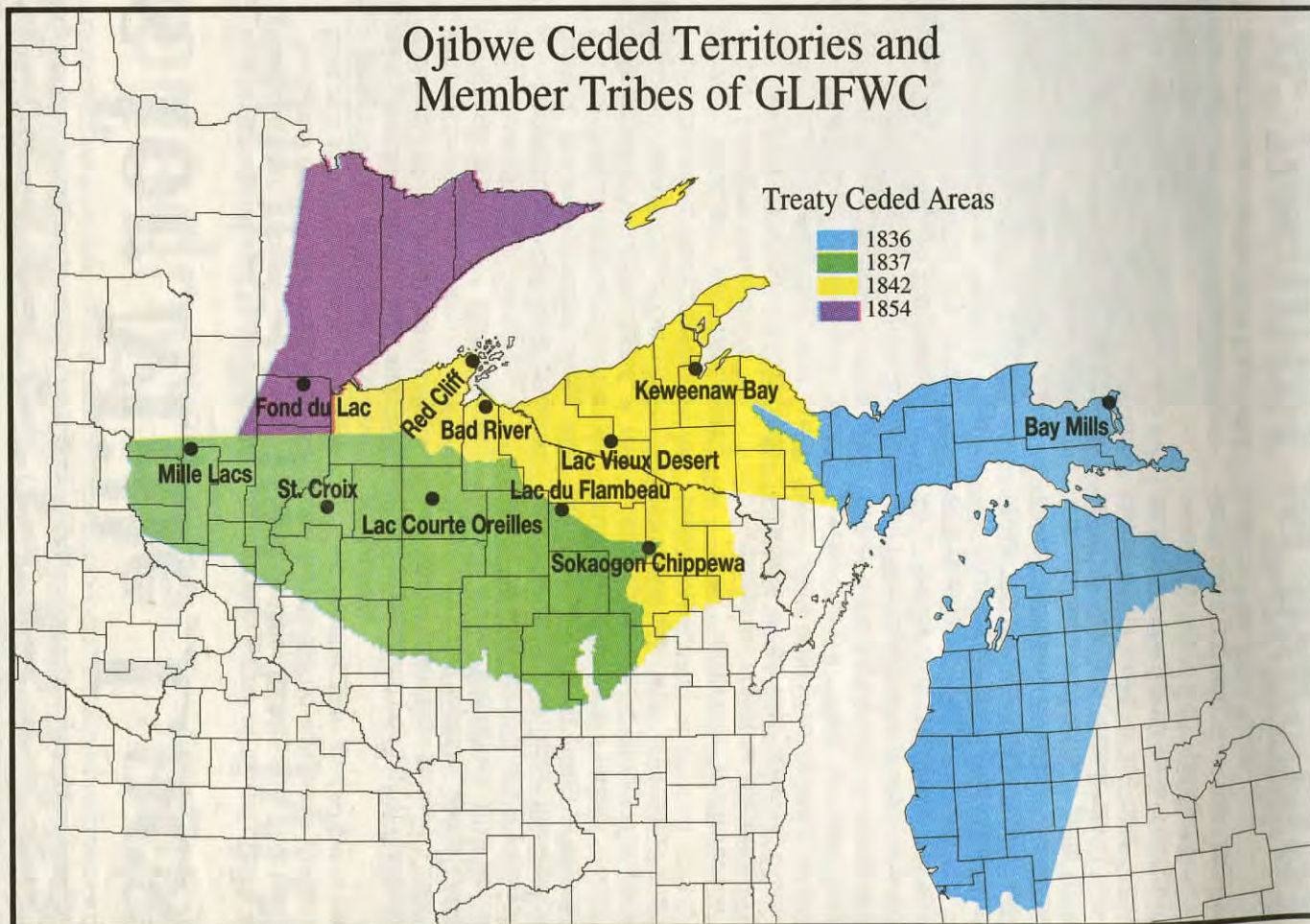
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Masinaigan

A Chronicle of the Lake Superior Ojibwe



Ojibwe Ceded Territories and Member Tribes of GLIFWC



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A Chronicle of the Lake Superior Ojibwe

Published by the Great Lakes Indian Fish & Wildlife Commission

Summer 2000

Wisconsin spring spearing season long, cold, bountiful

By Sue Erickson, Staff Writer

Odanah, Wis.—The earliest season, the longest season, and the season with the most walleye on the supper table of tribal members. Spring 2000 was a record-setter in both Wisconsin and Michigan. While not always offering the best conditions, it provided well for the committed fishermen who ignored wind, snow, sleet and rain.



Fisheries biologists remove a spine sample from a walleye netted in Mille Lacs Lake this spring. Spine samples are used to determine age of the fish. Other information, such as weight, length and sex, is also recorded to enhance the database on the lake's walleye fishery. (Photo by Sue Erickson)

Wisconsin's six Ojibwe bands took home a total of 30,367 walleye this year, topping the 1995 record of 30,249. Both Lac Courte Oreilles and Red Cliff came very close to harvesting their total declarations.

In Michigan, the Lac Vieux Desert band harvested 3,678 walleye. The previous record was in 1998 when the band took home 3,479 walleye.

In addition to walleye fishing, the tribes were successful with muskellunge, although no records were set. The six bands took a total of 1,410 muskellunge this spring, a few fish less than the 1999 harvest of 1,431. The 1996 take of 1,555 muskellunge remains the record year.

Bad River tribal members opened the season on March 24 with a trip to Lake Wissota and Long Lake in Chippewa County. The spring season drew to a close nearly six weeks later with St. Croix fishing for muskellunge on Sand Lake, Barron County and Big Mckenzie Lake, Burnett County.

By band the Wisconsin 2000 spring season looked like this:

Tribe	Walleye	Muskellunge
Bad River	3,806	5
Lac Courte Oreilles	5,574	94
Lac du Flambeau	11,315	127
Mole Lake	5,722	30
Red Cliff	2,202	1
St. Croix	1,748	1

Despite the early ice-out, GLIFWC Chief Warden fishing was slow at the start, lengthening the treaty season. GLIFWC Inland Fisheries Section Leader Joe D. Without a sharp and well-defined peak in walleye season and frequently un- into the record harvest. Fish came in steadily despite weather conditions made fishermen who kept coming out benefited.

The walleye run in northern lakes typically "peak" at about the same time, making excellent fishing for a short period. But following the peak, opportunity greatly diminishes. With no peak run this season, decent fishing opportunity remained available over a greater period of time. (See Wisconsin spring spearing season, page 3)

Tribal fishing tug assists in lake trout survey Lake trout in MI-3 looking good

By Sue Erickson
Staff Writer

Hancock, Mich.—With the help of Red Cliff tribal commercial fisherman Gilmore Peterson, a spring lake trout assessment was completed in MI-3 (a Lake Superior lake trout management unit in Michigan waters). Results indicate the lake trout population is doing fine within the unit.

The lake trout population in MI-3 is designated as "rehabilitated," according to Great Lakes Indian Fish and Wildlife Commission (GLIFWC) Great Lakes Biologist Bill Mattes, which means the wild lake trout stock is naturally reproducing. The goal is to see the wild lake trout population return to historic levels.

The gill net assessment, performed jointly by the Michigan Department of Natural Resources (MDNR) and GLIFWC, included both lean and fat lake trout.

In 1999 there were increased numbers of lean lake trout from the past seven years, and this year's assessment looked positive also, Mattes says.

Mattes worked with the MDNR in the spring lake trout assessment for the first time this year, using a tribal commercial fishing tug owned and operated by Peterson.

Aboard Peterson's tug, which is moored in Hancock, Michigan, Mattes and Shawn Sitar, MDNR fisheries research biologist, set and lifted 33,000 feet of gill net during a two-week period.

The goal of the assessment is to describe the lake trout population in the unit as a whole, says Mattes, so the nets are set to target all areas, including high population density and low density areas.

In addition to population numbers, biologists collect information on size, age, and feeding habits. Smelt remain a primary forage food for lake trout in the spring, Mattes says. Also, the freshness of sea lamprey wounds is noted to estimate sea lamprey-induced mortality rates in lake trout.

Scale samples from smaller lake trout and otoliths from larger lake trout are collected to determine age. The otolith is a small bone in the ear. Under (See Lake trout, page 21)



Fisheries biologists Sean Sitar, MDNR, and Bill Mattes, GLIFWC, worked cooperatively on the spring assessment aboard a commercial fishing tug owned by Gilmore Peterson, Red Cliff. (Photo by Sue Erickson)

Wallhangers and eaters: Muskie in northern Wisconsin

Commentary by:
Charlie Otto Rasmussen, Masinaigan staff

Flashback. April 20, 1986. It's the tail-end of the spring spearing season, only a few weeks away from the Wisconsin fishing opener. The St. Croix Chippewa are planning a traditional feast for Governor Tony Earl complete with wild rice, venison, walleye, raccoon, muskrat, and beaver. One Ojibwe mainstay, however, is in short supply—muskie.

With an off-reservation permit for two muskies on nearby Shell Lake, feast planners recruited Ojibwe spearer Ken Pardun to top off the menu. Then all hell broke loose.

* * * *

Back in the old 'n days—well, a few decades ago anyway—white and Indian fisherman had similar attitudes toward muskies. They were fun to catch and even better on a plate. That's right, catch n' eat.

The emergence of the modern fish and game trophy ethic, however, successfully eroded that common ground. Although anglers and spearmen fancy muskies for different reasons today, their combined impact on the overall muskie fishery is quietly creating better opportunities for both user groups.

The notion of catch and release became popular in the late 1970s, prescribing that anglers release fish back into the water. Other fishermen were then afforded the opportunity of recatching them; moreover, the little fish could grow larger and become trophy fish. Today an estimated 98% of all hook-and-line muskies are let go and muskie populations are booming.

"Before catch and release, a lot of people had a different mindset," said John Dettloff, **Musky Hunter** magazine historical editor. "Muskies were food, and throwing away food was stupid."

While Ojibwe Indians continue to harvest the big fish for the dinner table, hook-and-line fishermen rarely take home a muskie, unless it's badly injured or a suitable wallhanger of 50 inches, or better. That causes friction.

In a 1994 research paper, the Wisconsin Department of Natural Resources (WDNR) reported that anglers felt that Indian treaty rights were the "biggest problem in muskellunge fishing." Since few anglers are keeping even one fish, state bag limits are a non-issue. The myth that Ojibwe spearing is destructive to fish populations, the tourist industry, and lakeshore property values is fodder for history books.

What's left is trophy anxiety: that smaller and mid-sized muskies are speared before reaching their trophy potential; or that big meaty fish may be feeding some Ojibwe family instead of posing for a picture or hanging on a vacation cottage wall.

Lost in cultural intolerance, a few notables in the trophy muskie industry continue to rouse apprehension over Ojibwe spearing in print and at speaking engagements. Hecklers still find the time each spring to harass spearmen from the shoreline with tired anti-treaty rhetoric. For this vocal minority, it's like being trapped in the late-1980s, northern Wisconsin's social nadir. Shortfalls in educating the angling public and die-hard misconceptions about treaty spearing perpetuate the dramatic fiction of a trophy holocaust at the hands of spear-waving Indians.

* * * *

At the boat landing, high winds and whipping snow greet Pardun and his companion, Mike Murphy. A St. Croix electrofishing survey boat swamped by the wintry storm has been pulled on shore.

White-capped waves rose and crashed as the fishermen set out on Shell Lake in search of a sheltered bay and calmer water. On the far side of the lake, they found their spot, a wide, shallow bay where a handful of muskies cruised just below the surface.

Pardun scanned the lake with his miner-style headlamp for a large muskie, reasoning if he can only harvest two fish for the feast, they might as well be big. Like hook-and-line fishermen, he also appreciates large fish. Obviously, not for bragging rights at the local resorts where the credo encouraged folks to "save a walleye, spear an Indian." But the privilege of receiving the gift of a veteran fish. If such a fish were meant to be harvested, it would make itself available.

One did. And it was a dandy. Murphy speared a second muskie, and they made their way back to the boat landing where a creel team and a WDNR warden waited to register the fish.

* * * *

Today's avid muskie anglers are not of a single mindset, however. In recent years some fisheries biologists and experienced muskie guides have figured out



Raymond LaBarge hauls in one of several muskies he harvested from Trout Lake near Woodruff, Wisconsin, on April 24. Dennis Thompson (center) served as a guide on the outing and young Arthur LaBarge learned the finer points of muskie spearing. All three are Lac du Flambeau tribal members. (Photo by Charlie Otto Rasmussen)

that massive stocking programs coupled with unilateral catch and release fishing actually reduces trophy fish numbers.

"When you have too many muskies, competition for food is too high and they don't reach the maximum growth potential," said Scott Allen, former Chippewa Flowage Musky Study Coordinator. "There's a fanatical mindset that you have to release everything you catch. But that leads to a lot of small muskies that aren't going to grow anymore."

Allen and Dettloff are among several prominent non-Indian fishing guides breaking rank from the traditional view that no harvest is best. They recognize that Ojibwe spearing can be a helpful tool in providing balance to an overloaded muskie fishery.

"A light harvest is better than no harvest at all. If you're not harvesting any fish, you could be looking at diminishing returns," Dettloff explained.

Spearmen harvest an average of 213 muskies annually in northern Wisconsin. Not quite enough to bottom out an adult muskie population currently estimated at 85,000 in the ceded territory. The average length of Ojibwe harvested fish measured is just shy of 37 inches.

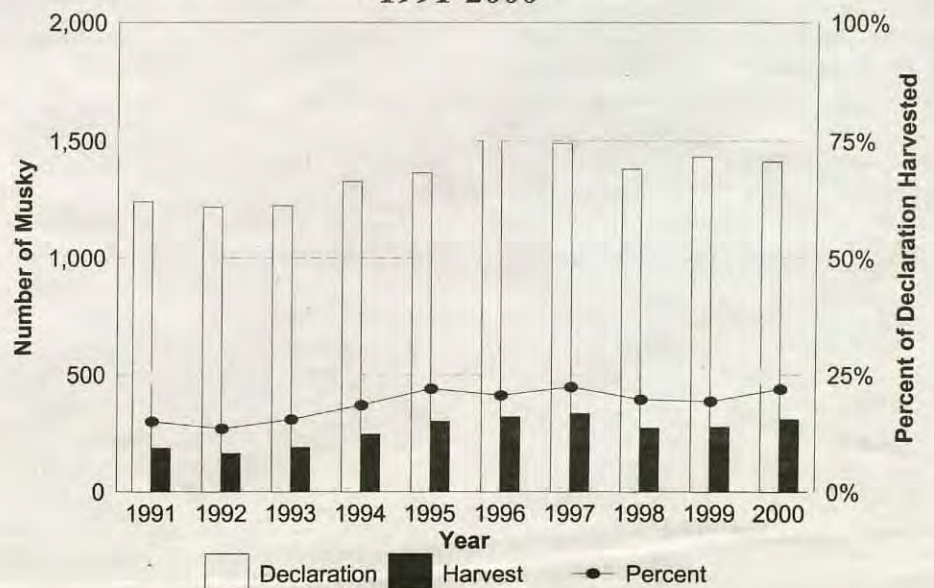
Many treaty harvesters consider the three-foot range as a good eating size fish while some like them smaller. Lac Courte Oreilles (LCO) fisherman Mark Bisonette prefers the taste of a 30-inch muskie. He likes to scale the whole muskie, cut it into steaks, and grill, seasoning with butter and lemon pepper. "That's a trophy fish," Bisonette said.

Like many tribal members, Bisonette harvests fish for family and elders at LCO. Bisonette said that some elders have requested a bigger female because they want eggs in addition to meat. There's a variety of ways to prepare muskie eggs from frying to mixing up something like corn meal, he said.

"I don't go 'trophy' hunting for big fish. A lot of times you're out there and don't see anything until that one muskie comes by," Bisonette said. "And then there's times when you can see 30 fish and can be more choosy. The weather, the water temperature, a lot of different things factor into what you see."

Bisonette said that exaggerated accounts of treaty harvests often inflame sentiments against spearmen. (See **The best for both worlds**, page 3)

Tribal musky declaration & harvest 1991-2000



On the cover

Steve (front) and Mike Wiggins, Bad River, haul in a net from Mille Lacs Lake with a nice catch of walleye to bring home. (Photo by Sue Erickson)



The best for both worlds

Sport and subsistence opportunities

(Continued from page 2)

"I speared a 49-inch muskie and by the time the rumors got around, it turned into a 65-pound fish," Bisonette said

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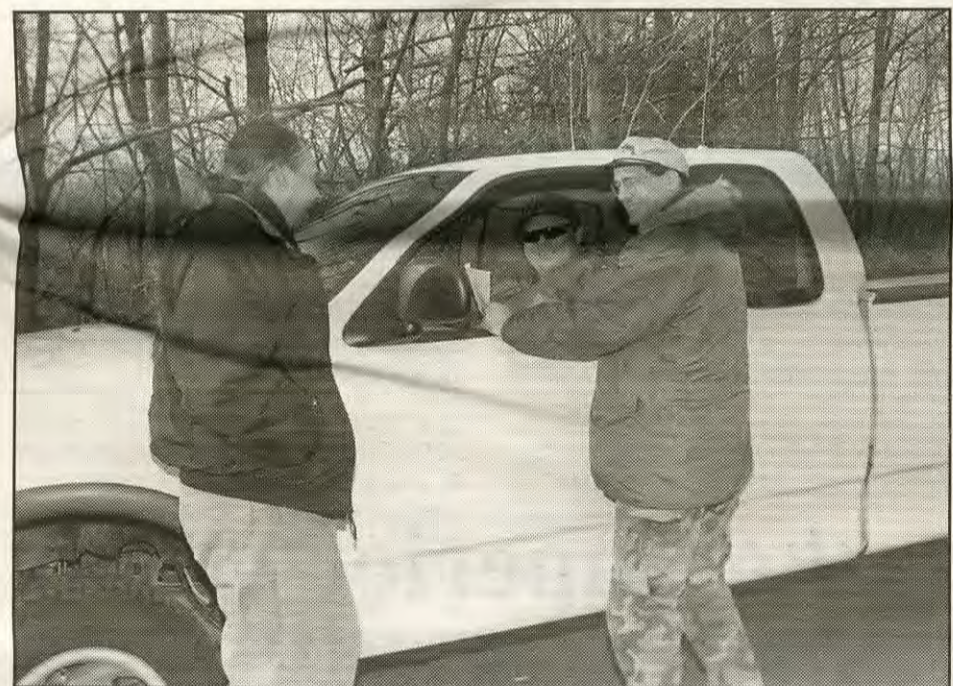
The news spread like a jack pine wild fire and the sportfishing community exploded. Outdoor columnists, WDNR spokesmen, and editorial writers across the state lashed out at Pardun and treaty fishing. The *Hudson Star Observer* decried the violation of a Chippewa Indian spearing "a fish that thousands of anglers would kill for." How dare he? Rage turned to sadness, as muskie worshippers slowly realized that the fish was truly gone. The *Milwaukee Journal* grieved for the loss of the big muskie, lamenting that "there is a sort of sadness in the land." The fish could have made some angler a hero, maybe a legend. That space above the cabin mantle never seemed emptier. The photo album would never be complete.

The 53-inch fish was the largest Pardun had seen in his 25 years. Before processing the meat, Pardun skinned the muskie and removed the head. He would later have it mounted and placed in his home—it's still there today.

Sliced thin and fried in a skillet, the muskie was served at the feast a few days later.

* * * *

We visit the recent past only to bring perspective to the present. Assuming primacy of this revered resource is the fundamental fallacy; a notion that permeates muskie fishing even today. Shaming those who eat muskie—Indian or white for that matter—benefits no one. What's left are bad feelings, stunted muskies, and a bunch of game fish looking for a place to hide.



A meeting of biological minds—Neil Kmiecik, GLIFWC biological services director; Joe Dan Rose, GLIFWC inland fisheries section leader; and Brian Borkholder, Fond du Lac fisheries biologist at Mille Lacs Lake this spring. (Photo by Sue Erickson.)

Fish managers, property owners to discuss Lake Namekagon fishery

By Charlie Otto Rasmussen
Writer/Photographer

Lac du Flambeau, Wis.—In response to a request made by the Lake Namekagon Area Improvement Association (NAIA), GLIFWC inland fisheries staff is scheduling a June meeting to examine the Lake Namekagon walleye population and discuss possible options for managing it.

The Wisconsin Department of Natural Resources will join tribal and NAIA representatives to consider how changes in bag limits, minimum size limits, and slot sizes for walleye and muskie could improve the overall fishery.

Representatives for NAIA appeared at the May 11 Voigt Intertribal Task Force (VITF) at Lac du Flambeau

to solicit involvement from GLIFWC member tribes.

Dick Sternberg, NAIA fisheries consultant, said local property owners were concerned that walleyes under the current angler size limit of 15 inches had become overabundant, hampering overall growth rates. Harvesting mostly smaller walleye and increased angler bag limits could be beneficial to the population, he said.

Sternberg said that any adjustment in fisheries management was contingent on up-to-date walleye population assessments.

Bad River and Red Cliff bands generally harvest walleye from Lake Namekagon during the spring spearing season. Bad River has assisted Lake Namekagon property owners in the past with fish culture and restocking efforts.

There is a new spirit in the air, however, and muskie anglers and treaty spearkers should realize they're setting foot back onto common ground. This time around, fishermen are working with a significantly larger muskie population. Thinning out some smaller muskies, enables more fish to achieve trophy status. Whether you want to eat 'em, mount 'em, or snap a photo, it's a pretty good set up.

The northern Wisconsin muskie fishery is thriving, managed by a blue-chip cast of tribal, state, and federal biologists, providing ample opportunity for all user groups. For some, spearing any muskie will remain absolutely unconscionable. And the occasional trophy fish taken by spear will only fuel their misguided resentment. The rest of us can look forward to the dawning hey day of muskie fishing, be it with spear or hook.

Eat a muskie, save a walleye

Rising muskie numbers on ceded territory lakes affects the composition of the muskie population as well as other fish species. Aggressive stocking and voluntary catch and release fishing creates artificially high numbers of muskies at the expense of smaller forage fish.

A 31-year WDNR study of Bone Lake (Polk County) in northwest Wisconsin revealed that the creation of a high density muskie population significantly decreased the average weight of those fish. Over the same time period, large yellow perch, the principal prey species, declined.

While conducting an electrofishing survey of Crescent Lake (Oneida County) in northeast Wisconsin last spring, GLIFWC fisheries crews encountered "extremely high" numbers of walleye (5%) exhibiting scars and bite marks on their underbelly—indicative of attempted esox predation. Although some northern pike were shocked to the surface, the majority of the big predator fish that showed up were muskies.

Wisconsin spring spearing season sets new records

(Continued from page 1)

From an enforcement standpoint, White says the season went very well overall. No incidents in Wisconsin or Michigan were recorded. The number of citations were down this year. He believes many of the larger fish remained out in the deeper water. Therefore, fewer size violations were issued.

White was pleased with the participation in the season. "Despite bad weather, the people still fished. This shows a lot of interest in the fishing opportunities the treaty right offers," he says. "I also noticed some new faces out there spearing. It's nice to see that, especially parents bringing children."

For enforcement and biological staff assigned to monitoring all open landings on a nightly basis, the spring 2000 season may have set another record—the most grueling.

The spring spearing season is always intense, requiring enforcement

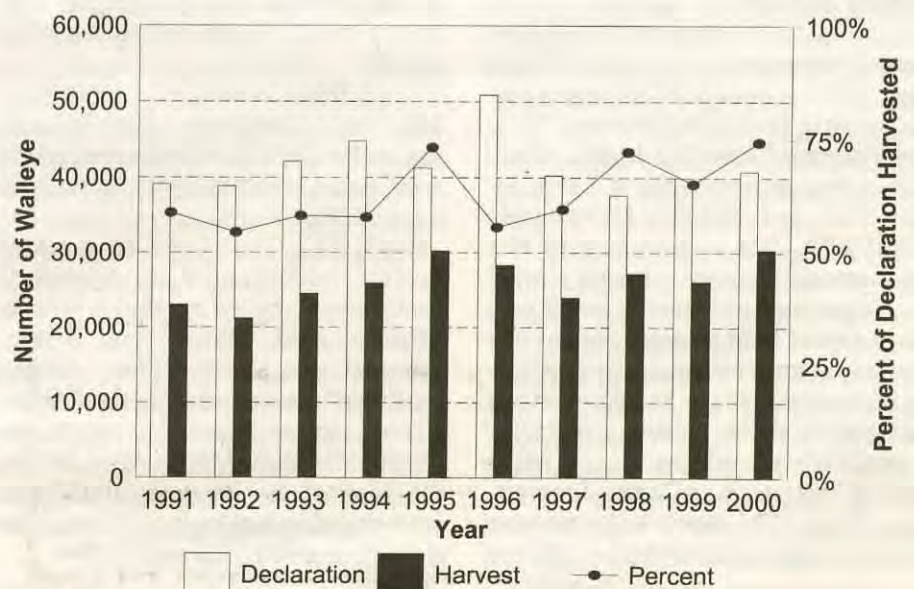
and creel staff to be on landings night after night during the season. The schedule requires endurance. This year's extended season and frequently unfavorable weather conditions made a tough year for an uncomplaining staff.

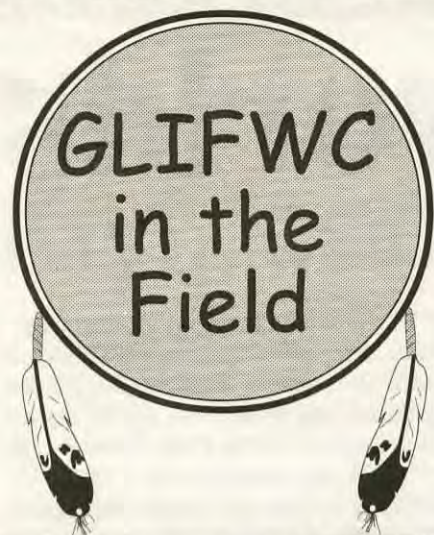
"There were some pretty miserable nights," says Sgt. Larry Mann, Lac du Flambeau, "but they got their fish." Mann says the season was nearly double in length from previous years.

Typically, warden/creel teams meet around 5:00 p.m. on each reservation to determine landing assignments. From there they disperse to the lakes where they check permits and gear, and wait until the fishermen return off the lake to count and measure the fish. The last boat can arrive around 2:00 to 3:00 a.m.

Nightly catch reports are filed with GLIFWC's main office, so daily bag limit adjustments on each lake can be made.

Tribal walleye declaration & harvest 1991-2000





Kentuck Lake walleye revival continues in 2000

By *Charlie Otto Rasmussen*
Writer/Photographer

Eagle River, Wis.—The Kentuck Lake boat landing passed for a walleye spawning bed on April 19 when tribal and federal fisheries biologists fertilized an estimated 1.3 million walleye eggs.

Fisheries staff from the Great Lakes Indian Fish & Wildlife Commission (GLIFWC), Mole Lake Sokaogon, Red Cliff, Lac Vieux Desert, and the U.S. Fish and Wildlife Service (USFWS) are teaming up again this year to help revive the dwindling walleye population of Kentuck Lake in northeast Wisconsin.

Combining eggs from Kentuck Lake females with milt from male walleyes captured on nearby Butternut Lake, biologists hope to rebuild a walleye fishery that plummeted in the early 1990s.

"At this point, there's no clear reason why the population crashed," said Glenn Miller, GLIFWC inland fisheries biologist. "The males were hit the hardest, and there is some speculation that they may have been more susceptible to harvest by all resource user groups."

Recruitment surveys by GLIFWC fisheries staff in the early 1990s revealed that young walleye were largely absent from the 950-acre lake. After a request by Sokaogon officials, GLIFWC consulted with the Wisconsin Department of Natural Resources (WDNR) and forged a plan to stock walleye on the popular lake.

The joint stocking program got off the ground last year when nearly 50,000 walleye fingerlings and 2,300 extended growth fingerlings were released into the lake. Fisheries staff hope to more than double that number this year with a target of 125,000 fingerlings, Miller said.

Large female walleyes and mid-sized males were collected by GLIFWC fisheries crews with the aid of fyke nets and electroshocking the previous

evening. In the morning, fisheries biologists and technicians met at the boat landing to harvest eggs, strip milt, and then blend the two together in shallow plastic bowls. In addition, water and bentonite, a clay-like substance designed to keep the eggs from sticking together, was added to the mix.

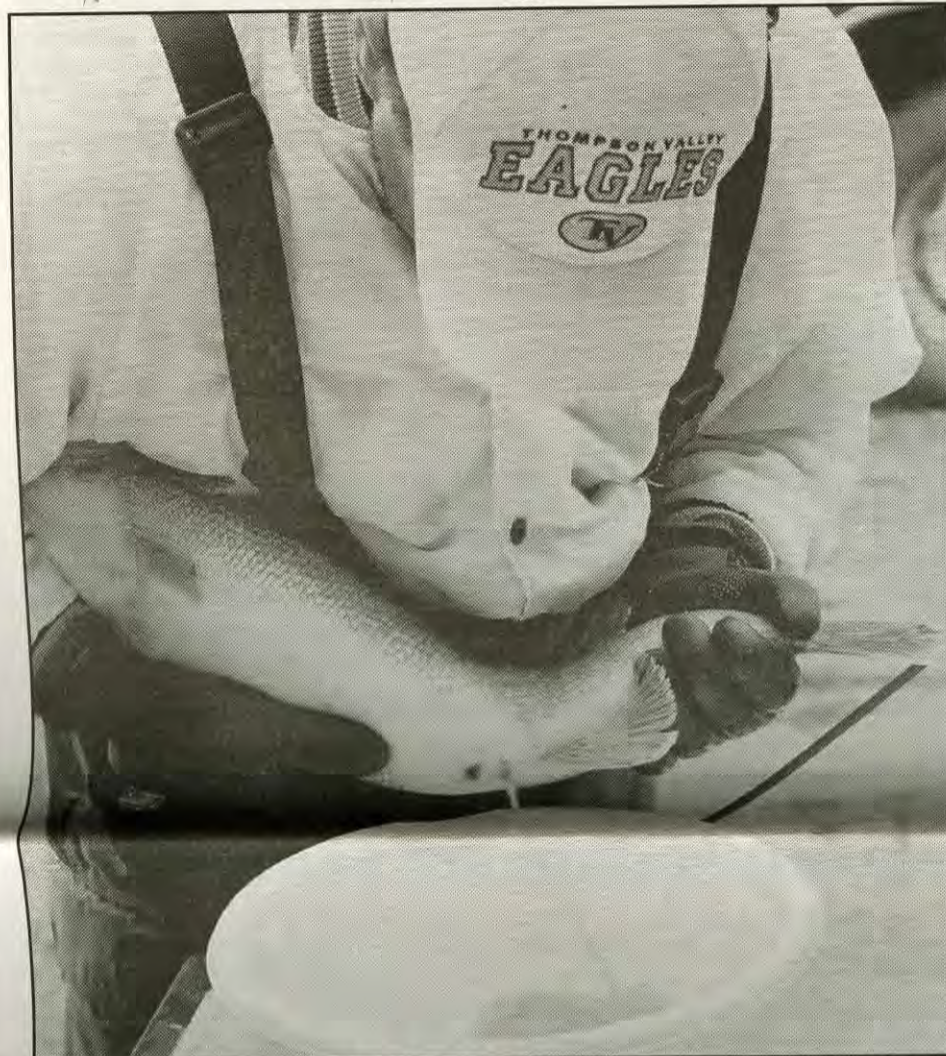
Fertilized eggs were immediately trucked to the Sokaogon and Red Cliff hatcheries. After eye-up (about one week after fertilization), one-half of the eggs from Red Cliff were shipped to the USFWS Genoa hatchery near La Crosse. The remaining eggs at Red Cliff and Sokaogon were incubated until hatched and placed in rearing ponds at Lac du Flambeau.

By mid-June the young walleye will reach fingerling size, 1.5 to 2.0 inches, and will be released at Kentuck Lake by tribal and federal fisheries staff.

Before entering the lake, fingerlings will be "marked" with oxytetracycline, or OTC, a fluorescent compound that stains the walleye's inner ear bone. This process enables GLIFWC fisheries personnel to sample fish captured in surveys to determine the ratio of stocked fish versus those resulting from natural reproduction.

Miller said that the program will continue through next spring and then possibly switch to alternate year stocking until biologists determine that sustainable natural reproduction is occurring.

The Sokaogon Ojibwe previously announced a self-imposed moratorium on walleye spearing at Kentuck Lake; the last harvest occurred in spring 1997. The WDNR has followed suit, restricting angler bag limits to one fish over 28 inches daily.



Sokaogon Fisheries Biologist Mike Preul harvests eggs from a large Kentuck Lake walleye. (Photo by Charlie Otto Rasmussen)

Lamprey numbers in Lake Superior climb

Reasons for increase undetermined

By *Sue Erickson*
Staff Writer

Odanah, Wis.—The numbers of sea lamprey in Lake Superior's south shore tributary rivers appear to be on the rise. The 1999 estimate of 70,000 lamprey was over double of the 1998 estimate of 30,000. While figures have not been finalized for 2000, the number of lamprey trapped this spring exceeded the 1999 figure, according to the U.S. Fish and Wildlife Service Sea Lamprey Control Program.

"The 1999 count of 70,000 lamprey represented the highest estimate since 1986, when GLIFWC began participating in the USFWS Lamprey Control Program," says Bill Mattes, Great Lakes section leader, Great Lakes Indian Fish and Wildlife Commission (GLIFWC), "but we are not sure why the dramatic increase is taking place."

Treatment of tributary rivers with the chemical TFM continues as do other lamprey control measures, such as sterile male release in the St. Mary's River and barrier dams. Rivers are treated with TFM on a priority basis through the USFWS Lamprey Control Program.

While TFM appear to be the most effective treatment, it is both costly and

controversial because it is a chemical treatment. The number of rivers treated each year depends on the expense per river, as some are more costly to treat than others.

Research is currently being done on a possible pheromone treatment to broaden lamprey control options. They are using a pheromone excreted by larval lamprey that seems to attract spawning lamprey.

Mattes notes that although the spring lamprey assessments show an increase in numbers this year, lake trout assessments do not indicate the lake trout populations have been impacted as yet.

GLIFWC crews led by Mattes and Mike Plucinski, Great Lakes fisheries technician, participate in the spring lamprey assessments in cooperation with the USFWS.

GLIFWC sets traps on seven of twelve rivers along Lake Superior's south shore, including the Amnicon, Middle, Bad, Ontonagon, Silver, Firesteel, and Misery Rivers. Among GLIFWC's seven rivers, the Middle River lamprey population seems exceptionally high, Mattes says. During the peak of the spawning run, crews were trapping hundreds of lamprey per day, up to a thousand per week.



Mike Plucinski, Great Lakes fisheries technician and Dan North, Great Lakes fisheries aid attach a lamprey trap in the Bad River. (Photo by COR)

Crews use a mark and recapture system for the population estimates. Lamprey return from the lake in the spring to swim upriver, spawn and die. Traps are set in the rivers during the spring spawning season. Trapped lamprey are marked and released back to the river. Traps set at a later date once again capture the lamprey. The number of marked lamprey recaptured provides

the basis for the population estimate, Mattes says. (See sidebar, page 28)

The sea lamprey was once responsible for the near decimation of Lake Superior's lake trout population. One lamprey destroys about 15 lbs. of lake trout in its life cycle, which is three to seven years, Mattes says.

After hatching in the river system, (See *Increase in lamprey*, page 22)

Rugged conditions plague fish assessment crews

By Sue Erickson
Staff Writer

Odanah, Wis.—Spring 2000 offered nasty conditions to the fishery assessment crews who took to the lakes on March 28, the earliest start for the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) electrofishing crews on record.

"It rained, snowed, stormed or sleeted twenty-four of the twenty-seven nights our crews were out," says Glenn Miller, GLIFWC inland fisheries biologist who coordinates the electrofishing surveys each spring.

So despite the early start, assessment work did not finish up early. Battling the elements, it took the crews 5 to 7 nights to assess lakes that normally take 3 to 5 nights.

Many nights the boats and equipment froze up on the lakes, making it impossible to continue the assessment. Hardly a day went by when crews did not have to knock thick ice off their boats with hammers before beginning work. Hauling buckets of hot water out to thaw the boats was a daily occurrence. Boat landings were icy, making launching the boats difficult. Rather than warming up as the season progressed, the nights got colder, Miller commented.

Adding to the pot of troubles, many cottage owners took advantage of the early ice-out and put docks in early, creating another obstacle for electrofishing boats to circumvent on their run around a lake's shoreline.

The unusual weather, with the early thaw and break-up on the lakes and the inclement conditions that followed, made other aspects of the spring 2000 electrofishing assessments remarkable.

"We found fish spawning at a 38 degree temperature, several degrees colder than normal," Miller says. On two of GLIFWC's long-term study lakes, Kentuck and Butternut, Vilas County, water temperatures at the start of the assessment were 44 degrees and 38 degrees at the finish, the opposite of the normal pattern.

Butch Mieloszyk, GLIFWC fisheries technician, said the walleye spawn never seemed to have a peak as in other

years. It was just a steady run of fish through the whole time period.

This probably aided the survey crews to complete surveying all 19 Wisconsin lakes targeted for spring assessments. If the spawning run had peaked in the selected lakes, the crews may have been hard pressed to complete them all when the walleye were still in the shallows.

Electrofishing boats are designed to deliver a mild electric current into the shallow shoreline waters which briefly stuns the fish. They are scooped up with nets and placed into a holding tank. Biological information is taken, such as number, length and sex of the fish, and the fish are released back into the lake.

Among the list of aberrations observed this spring was the simultaneous spawning of different fish species. "This is the first time I've seen northerns, perch, walleye, suckers and musky all spawning at the same time," Miller says. "Usually the northerns come in first, followed by walleye and perch, and the musky come in last." He thinks the early warm weather and subsequent break up of the ice signaled the fish early, since they depend both on light and temperature as cues for the spawning run. Overall, survey results showed few changes in fish populations.

A total of twenty-eight crew members participated in the spring 2000 assessments, twenty-two provided by GLIFWC. The U.S. Fish and Wildlife Service provides three additional electrofishing boats and three crew leaders under a reimbursable agreement with GLIFWC. The St. Croix tribe also provides one electrofishing boat and three crew members to assist with the assessments. All together eight electroshocking boats and two work-up, fyke net boats participated in the assessment run.

In addition to the 19 Wisconsin lakes where adult walleye population estimates were completed, GLIFWC survey crews completed juvenile walleye population estimates on Siskiwit Lake, Bayfield County and Bass-Patterson Lake, Washburn County.

GLIFWC assessment crews also completed a post-spawning electrofishing survey of the entire 78 mile shore-

line of Mille Lacs Lake in Minnesota to sample juvenile walleye.

Both Miller and Mieloszyk want to extend a special thank-you to all the crew, especially the seasonal staff, who worked through a cold and trying field season on the lakes, making the spring assessment run successful despite Mother Nature's uncooperative spirit this spring.



Royce Bresette, GLIFWC fisheries aid, takes a scale sample from an age 1 walleye as part of the young-of-the-year assessments on Mille Lacs Lake in Minnesota. (Photo by Sue Erickson)



Ed White, GLIFWC inland fisheries technician, carefully navigates one of GLIFWC's electrofishing boats along the shoreline of Siskiwit Lake, Bayfield County. The crew performed a juvenile walleye population estimate on the lake this spring. Manning the nets are Shane Cramb and Ed Whitebird, GLIFWC fisheries aids. (Photo by Sue Erickson)

Joint effort pumps lake sturgeon into Bad River system

By Sue Erickson
Staff Writer

Odanah, Wis.—Over a two week period in May, biologists stocked 23,000 sturgeon fry into the Bad River on the Bad River reservation as part of effort to enhance the Bad River's lake sturgeon population.

The Bad River is one of two U.S. rivers where a spawning sturgeon population remains. The other is Michigan's Sturgeon River. Seven Canadian rivers also have sturgeon populations. The once prolific lake sturgeon experienced a dramatic decline due to habitat degradation and overharvest in the early 1900s.

Over the past several years, the US Fish and Wildlife Service (USFWS), the Bad River and Red Cliff bands, and the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) have been working cooperatively on lake sturgeon enhancement and assessment in the Bad River system.

Earlier this spring USFWS and Bad River fisheries staff collected 60,000 eggs from sturgeon spawning in the Bad River. Half of the eggs were transported to the Red Cliff Tribal Hatchery and half to the Bad River Tribal Hatchery where 90-95% successfully hatched, according to Rick Huber, Bad River fisheries biologist.

Fry from the Bad River Hatchery were released on May 11, and on May 19 fry from the Red Cliff Tribal Hatchery swam away into the river. The fry still had their egg sacs attached, which provides nutrition until they are able to feed.

Sturgeon are somewhat tricky to rear, Huber says, but this year's crop is doing good so far. Getting them to accept artificial feed is difficult. At the Bad River hatchery the sturgeon fry menu includes brine shrimp and a beef heart/liver puree. "They love that mixture," Huber says.

Stocking fingerling sturgeon into the Bad River will continue through the

summer. Plans are to release marked three inch, five inch, and five-plus inch fingerlings.

Later this summer the USFWS and Bad River will do a trawling survey to study the success of hatchery-reared and naturally-reproduced sturgeon in the river system, Huber says.

Some of the difficulties with sturgeon enhancement lie within the patterns of this prehistoric species. Lake sturgeon, which live for 100-150 years, do not reach reproductive maturity early. For males it is usually 15 and females 20 years. The females also only reproduce every five to seven years.

If something happens to one year class of sturgeon, it can have a major impact on the population as whole. Also, fish can be harvested before they have even had a chance to reproduce.

A database on the Bad River's lake sturgeon is being established, but it is a long-term process, Huber says.

This spring the USFWS, the Bad River band, and GLIFWC recorded in-

formation on adult sturgeon. A total of 28 adults were marked.

GLIFWC has been performing juvenile sturgeon assessments since 1994. In the summer months, GLIFWC sets assessment nets at the mouth of the Bad River, a feeding area for the juvenile sturgeon. Netted juveniles are marked and released. Information is gathered when recaptures are made at a later date, says Mike Plucinski, GLIFWC Great Lake fisheries technician. The study is to gain information on the sturgeon's growth over time.

GLIFWC has also applied for an Environmental Protection Agency Coastal Environment Management (CEM) grant to assess the White River sturgeon population. The White River is a tributary to the Bad River where some sturgeon have been observed, Mattes says. The Aquatic Community Committee of the International Joint Commission's Binational Program encouraged GLIFWC to apply for the CEM grant to study lake sturgeon.



Northland College assists GLIFWC in Moquah sharptail survey

By Charlie Otto Rasmussen
Writer/Photographer

Ino, Wis.—Through wind, rain, and snow, male sharp-tailed grouse were out performing their annual spring mating ritual again this year, dancing for

hens in northwest Wisconsin's Moquah Barrens. Unlike past years, there were many more eyes watching their every move.

Since 1990, wildlife staff from the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) have conducted spring sharptail surveys in the Barrens to determine population trends. GLIFWC Wildlife Biologist Peter David has supervised the annual survey for the last decade and has worked intermittently with state biologists and private individuals to track the birds. This spring, help arrived in force with nearly one dozen Northland College students.

Armed with funds from a research grant, Northland College Biology Professor Gus Smith contacted David and offered to assist with the annual survey. David welcomed the assistance and from late March to early May a student research group organized by Smith monitored sharptail activity in the Barrens.

"It was great to have Gus and his students step in. All resource agencies are stretched in terms of time and budgets," David said. "This kind of

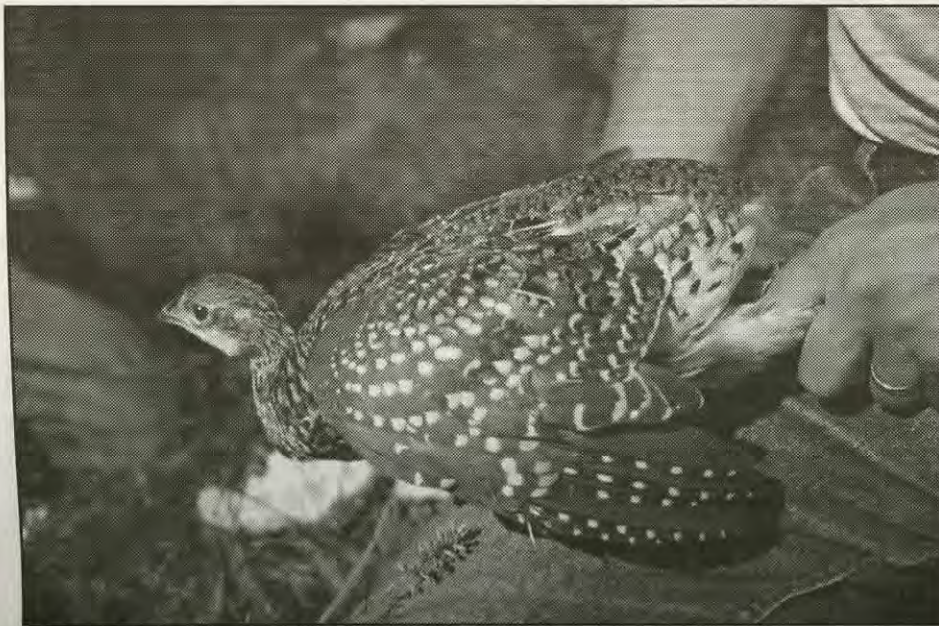
cooperation helps us while being a terrific opportunity for the students to gain some exposure to field surveys."

Grouse are observed from camouflaged blinds situated on the edges of leks, or dancing grounds. Males take center stage on the lek, engaging in a showy display by fanning their wings and tail feathers, then rapidly pounding their legs while in a bent-over position. Females generally skirt the perimeter of the lek until they're ready to select a male to mate with.

Smith said preliminary data indicated that there were 36 males observed dancing at three different leks. That's a slight increase over last year when 30 males were tallied. Those figures may be a little misleading, Smith indicated, because the Northland crew took a more aggressive approach to the survey.

"What's different this year is that we looked at a lot of new areas," Smith said. "We had a lot of student hours."

Smith plans on continuing sharptail survey work in association with GLIFWC in the years ahead and hopes to provide increased opportunities for public involvement in field work.



Sharp-tailed grouse. (Photo by M.J. Kewley.)

Bad River biologist trains goshawk

By Sam Maday,
Ashland Middle School

Odanah, Wis.—Tom Doolittle, biologist, Bad River Natural Resource Department, is raising a goshawk (a young raptor) to train it to hunt for duck, quail, or pheasants. He got it from a nest in the most southern nest known in Wisconsin. The adult goshawk has been nesting for five years in an old couple's back yard in Waushara County. It is unusual for a goshawk to nest that close to humans.

There are about four to five baby goshawks in each nest. About 80% of all babies die before they reach the age of one. They can weigh up to 34 ounces (2 pounds) and get up to two feet long. In captivity, they can live up to 25 years. Outside of captivity, they can live up to 19 years.

"We train them while they're young so they learn to trust us and to hunt for the various birds," says Doolittle.

When they start the training, Doolittle has to make sure that the goshawk always has food. Usually he puts Japanese quail down for the bird. While it is feeding, Doolittle makes a noise repeatedly so the goshawk can associate the noise with food.

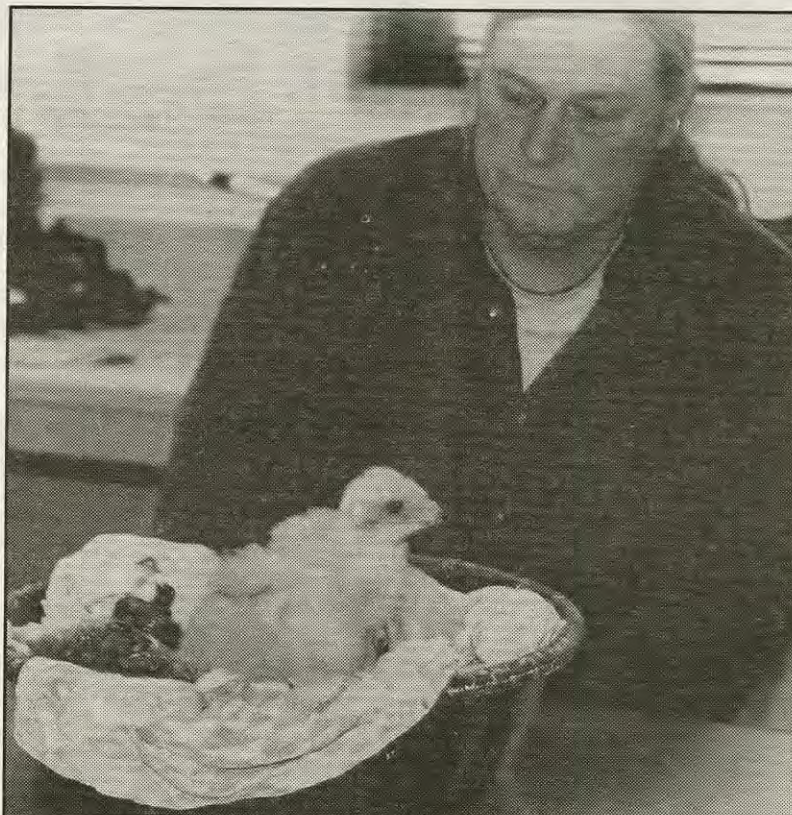
While it is still in training Doolittle attaches a bell to its tail and attaches a radio transmitter, so he knows where the bird is at all times. He uses a hood to put on the goshawk's head to get rid of its aggression.

"It is a good idea to rub its head and to let the goshawk get used to your hands so it won't associate you with food. In doing this the bird will be just like a dog by the time you start to hunt with it," says Doolittle.

As it gets older and learns to fly, Doolittle releases pigeons to kill as an

exercise for the bird. He then attaches food to a lure so the goshawk will learn to come back to him and learn not to eat the prey. The lure is also to help the goshawk to understand that the trainer is not food.

(Editor's note: Sam Maday is an 8th grade Ashland Middle School student interested in photojournalism and writing. In conjunction with a careers class during the 2000 spring semester, Sam worked with the Great Lakes Indian Fish & Wildlife Commission Public Information Office gaining experience in writing and photography, including processing in the darkroom.)



Tom Doolittle, Bad River biologist and falconer, has this young goshawk in training. Eventually the goshawk will hunt for Doolittle on command. (Photo by Sam Maday.)

Long-term study of plants gathered by Ojibwe

By Karen Danielsen
GLIFWC Forest Ecologist

Odanah, Wis.—GLIFWC staff have again entered the woods to continue data collection for a long-term study designed to identify the impacts of logging practices on understory plants in the northern hardwood forests.

The field season started early this year with warm temperatures triggering plant growth by late April. John Heim, a GLIFWC plant and wildlife technician, has begun his sixth season on this study. Newcomers include Ron Parisien, a GLIFWC wildlife technician and Mark Pero, a new GLIFWC intern.

Six study sites have been established on the Medford Ranger District of the Chequamegon-Nicolet National Forest. At each site, two 0.5 hectare plots are sampled for plant species frequency and cover along a series of 50 meter transects. One plot will eventually be logged, while the second plot will be left untouched. By comparing long-term changes in plant species between the two plots, this study will ultimately determine if logging practices cause any significant impacts.

Trees found growing at these sites include maple (*aninaatig*), ash (*aagimaak*), basswood (*wiigob*), and ironwood (*maananoons*). Understory plants include trillium (*baushkindjibgwan*), wild leek (*bagwaji-zhi/agaagawanzh*), spring beauty (*meeautikwaeuggpineeg*), trout lily (*numaegbugoneen*), bloodroot (*meskojiibikak*), blue cohosh (*bezhigojiibik*), hepatica (*animozid*), and various ferns and mosses.

Tribal members who depend upon the gathering of these wild plants need to know the consequences, both adverse and beneficial, of the various logging practices occurring throughout the northern hardwood forests.

Waabizhesh—A species which spans cultures

By Dr. Jonathan Gilbert
GLIFWC Wildlife Biologist

Odanah, Wis.—I have been studying the American marten (*Martes americana*) in Wisconsin for more than 10 years. In that time I have come to know this animal from my scientific perspective. I know of its habits and its ecology. I have seen what they eat, where females have their young, how they seek shelter in the winter, what kinds of forests they prefer.

During the spring, Ron Parisien, wildlife technician, searches for and locates maternal den sites. These are locations where the female martens have their young. These are important sites for the conservation of the species and can help tell us much about the species.

The picture below is a female marten in her den. The den was located at the base of a large yellow birch tree. There was at least one kit observed in this den. This is the second time Ron has found a den for this female, and it is

a good indication that martens are successfully reproducing on the Chequamegon-Nicolet National Forest (CNNF).

However, I have also learned another perspective on this species: the cultural view of the Ojibwe Indians. I have come to respect waabizheshi (marten) because of its importance to both the scientific, western-based culture and to the Ojibwa culture. That is why I believe that waabizheshi is a species which spans cultures and can be used to link cultures as well.

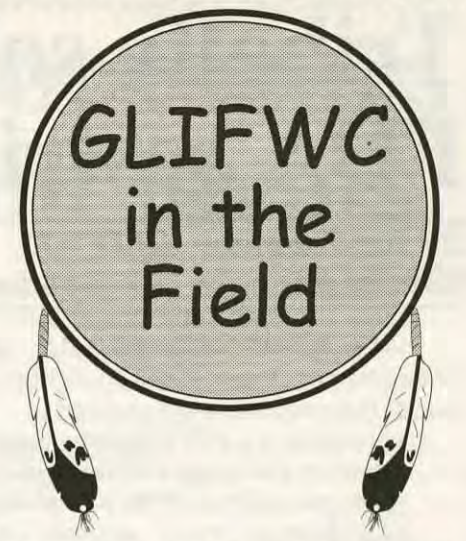
According to Ojibwe history, Gitchie Manito gave the Ojibwe people their clan system in order to provide a framework of government and to give them strength and order.

There were seven original doodemag (clans); Ajijaak (crane), maang (loon), giigoonh (fish), makwa (bear), waabizheshi (marten), waawaashkeshi (deer) and bineshiinh (bird). Waabizheshi is the clan animal of the warrior clan.

It is the role of the waabizheshi clan to provide the force to protect the village at all costs from outside invaders, and they are master strategists in planning the defense of their people (see *The Mishomis Book*, by E. Benton-Banai for more information).

The American marten is a species whose importance is just becoming understood to resource managers. The marten is recognized as an indicator species for forest health. We know that the forests martens use tend to have properly functioning ecosystems with adequate coverage of older to old-growth forests.

Martens tend to disappear from forests with inadequate tree canopy cover, inadequate amounts of coarse woody debris (dead wood on the forest



floor), and which occur in small, fragmented patches. Large blocks of forests with complete canopy coverage and lots of coarse woody debris support martens, and these tend to be older forests.

The marten is mostly a northern animal whose range is centered in the boreal systems of Canada and the arctic. The upper Great Lakes region is at the southern edge of the marten range in North America.

The marten is designated as a threatened species in Wisconsin, protected (unharvested) in Michigan and a game animal in Minnesota (nearly 2,500 marten harvested annually). It was extirpated (eliminated) from Wisconsin in the 1920's due to habitat destruction (cutting of the old-growth forests), and over-harvest and was reestablished in the 1970's and 1980's. The marten is designated as a sensitive species by the USDA Forest Service for the CNNF. The Forest Service recognizes the value of American marten and its role as an indicator of forest health.

Perhaps the marten is doing for our forests what members of the marten clan do for their village: protect it from invaders and help plan the strategy for the forest's defense. In this case, protecting the forest from invaders can include ensuring that the resources in these forests are properly managed and protected from degradation. The marten can act as a "miner's canary" to determine if forests are protected from degradation.

In Wisconsin and Michigan, martens do not occupy all available habitat. We do not know why they have not returned to portions of their native range. Perhaps there are barriers to their successful colonization. Perhaps there are factors which prevent them from thriving in these areas. Perhaps they have just not had enough time to find all suitable habitat. This is certainly an area in which we need to learn more about these important animals. Active research which addresses questions of resource management and impacts on martens is required.

We can, and should, do everything possible to allow these protectors of our environment to find suitable areas to live and to thrive in these spots. In this way, this emblem of the warrior clan will continue to provide the Ojibwe Indians with a cultural connection and living example of their clan.

The expansion of this species into unoccupied habitat will allow this defender of old forests help resource managers keep track of the health of the forests they manage. Both cultures can look to the marten as a symbol of strength and strategy; both cultures can take pride in the restoration of an important species, and both cultures can benefit from the presence of the marten on the landscape.

The American marten, waabizheshi, *Martes americana*, a species which spans and unites cultures.



Marten #8, a female marten with a radio collar, peeks out from her maternal den on the Chequamegon/Nicolet National Forest. At least one kit was observed inside. (Photo by Jon Gilbert)

Protecting the resource, preserving the knowledge

GLIFWC undertakes new wild plant project

By Sue Erickson
Staff Writer

Odanah, Wis.—The Great Lakes Indian Fish and Wildlife Commission (GLIFWC) is embarking on a new program aimed at gathering more traditional Ojibwe knowledge about wild plants and their uses through a recently approved grant from the Administration for Native Americans (ANA).

The wild plant project seeks to keep traditional environmental knowledge (TEK) from being lost by gathering information from elders, archiving information as approved by the elders, and transferring it to youth, says Karen Danielsen, GLIFWC botanist.

In part, the project seeks to integrate traditional knowledge of specific plants with scientific knowledge, hoping not only to retain information on traditional plant use, but to also preserve those plant species for future harvests.

If the needed species are no longer present, the right to gather off-reservation has no meaning, Danielsen said, so

the project relates very directly to protecting the treaty rights in the 1836, 1837 and 1842 ceded territories.

Input from elders is the crux of the two year project, which will be coordinated by Jim St. Arnold, GLIFWC's ANA program director. Elders from each of the ten participating Ojibwe bands will be asked to form a TEK working group.

Each of the ten Ojibwe communities will also identify ten plants of primary importance to them. Those will become the primary species of interest for the project. The project does limit itself to plants used for food or utility and not medicines, Danielsen says.

Information sought from the elders will relate to traditional harvesting techniques, seasons, traditional harvesting sites, plant uses, traditional enhancement techniques, and the Ojibwe plant name.

In addition, five threats, past and present, to traditionally important wild plants will be elicited, along with suggestions on how to overcome these threats and reestablish food and utility plants in historical gathering sites.

All information will be recorded using both video and audio tapes and elders credited for their contributions. GLIFWC will ensure that the information is protected, archived, and placed in a library.

Another aspect of the project relates to GLIFWC's understory plant study (see story, page 6), which examines the impact of logging on understory plants. Understory plants refer to plant communities beneath tree canopies.

The object is to protect culturally important species by protecting the native plant community as a whole, says Danielsen.

Assessment of the status of northern white cedar and identification of traditional gathering sites for paper birch and maple sap are also incorporated into the grant's program.

Miles Falck, GLIFWC wildlife biologist and John Heim, GLIFWC wildlife technician will assist with the project. A research associate will also be hired to do a literature review on plants of interest to the ten Ojibwe communities.

Tribally sold Lake Superior fish easily meet FDA restrictions for chemical contaminants

By Jim Thannum, GLIFWC
Natural Resource Development Specialist

Odanah, Wis.—On December 18, 1997 the Seafood Hazard Analysis Critical Control Point (HACCP) regulation became mandatory. Under this federal law all fish processors are required to:

- complete a HACCP training program;
- develop and adopt a HACCP plan to fit the specific needs of a processor;
- reassess and modify the plan annually as the result of verification activities;
- maintain and review adequate HACCP records.

The HACCP process examines biological threats, chemical threats, and physical threats on a product-by-product basis. For the Lake Superior region, federal HACCP regulations require commercial fishermen and fish processors to address potential threats, such as botulism in smoked fish products, and to control bacterial levels in fish and chemical contaminants found in the environment.

The regulation is enforced by the U.S. Food and Drug Administration (FDA) through on-site inspections of fish processors. The Detroit District inspects fish processors in Michigan, and the Minneapolis District inspects fish processors in Wisconsin and Minnesota. Sometimes federal HACCP inspections are conducted by FDA employees, and other times FDA contracts out to the Michigan Department of Agriculture to conduct federal inspections.

The Bad River, Keweenaw Bay, and Red Cliff tribes have entered into FDA Partnership Agreements for the purpose of implementing this federal regulation and retaining tribal control over commercial fishing related activities of their membership in the 1842 waters of Lake Superior.

Control of chemical contaminants

Federal tolerances, action levels, and guidance levels are established for some of the most toxic and persistent contaminants that are found in fish. States often use the federal tolerances, action levels, and guidance levels for issuing consumption advisories or to close waters for harvesting of all or certain species of fish. Some states have made the decision to adopt stricter guidelines for commercial sale of fish that are harvested and sold within their respective state boundaries.

The table below compares FDA's tolerances, action levels, and guidance levels with those used by the states of Minnesota, Wisconsin, and Michigan to govern the commercial sale of fish.

Chemical Contaminant	FDA action level for edible portion in parts per billion and (parts per million)	MN restrictions on commercial sales	WI restrictions on commercial sales	MI restrictions on commercial sales
Polychlorinated Biphenyls (PCB's)	2000 ppb (2.0 ppm)	same as FDA	same as FDA	same as FDA
Chlordane	300 ppb (0.3 ppm)	same as FDA	same as FDA	same as FDA
Methyl mercury	1000 ppb (1.0 ppm)	same as FDA	same as FDA	500 ppb
Benzene Hexachloride	300 ppb (0.3 ppm)	same as FDA	same as FDA	same as FDA
DDT, TDE, DDE	5000 ppb (5.0 ppm)	same as FDA	same as FDA	same as FDA
Aldrin/Dieldrin	300 ppb (0.3 ppm)	same as FDA	same as FDA	same as FDA
Heptachlor/Heptachlor epoxide	300 ppb (0.3 ppm)	same as FDA	same as FDA	same as FDA
Mirex	100 ppb (0.1 ppm)	same as FDA	same as FDA	same as FDA

Table 1. (note 1000 ppb = 1 ppm)

Contaminants in fish is a health issue. Federal and state agencies continue to debate the human health risks associated with exposure to chemical contaminants in the environment. The issue of fish contaminants has also turned political. The Sierra Club is calling for FDA to further reduce its methyl mercury action limit and increase the frequency of testing fish products.

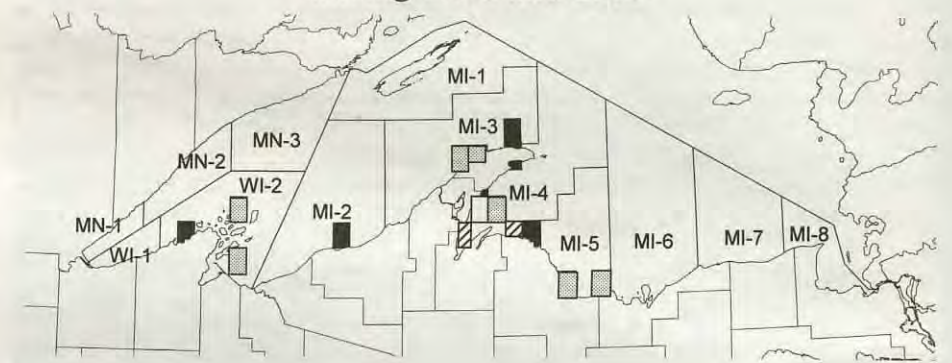


Three Suns, a fishing tug owned and operated by Red Cliff Fisherman Gilmore Peterson, was used by biologists for spring assessment work in the Michigan waters of Lake Superior. Bill Mattes, GLIFWC Great Lakes section leader, stands by the tug after the assessment was completed. (Photo by Sue Erickson)

Realizing that the treaty fishery and its markets are impacted by publicity surrounding fish contaminant issues and FDA's new Seafood HACCP regulations, the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) contracted funding from the Administration for Native American's (ANA) program to undertake a contaminant study of Lake Superior fish and develop a tribal regulatory structure in compliance with FDA's HACCP seafood safety regulations.

Tribes were particularly interested in determining how the removal of belly and back fat from Lake Superior fish species could reduce chemical contaminant levels in the edible portion of fish sold by tribal fishermen.

Lake Superior management units in U.S. waters and areas of collection for ANA-HACCP contaminant analysis during 1998 and 1999



Species collected in area

- Lake Trout
- ▨ Siscowet Trout
- ▩ Whitefish
- Lake Herring

Project design

In designing the project, GLIFWC realized the study needed to address the following:

- Adequate sample size and statistical power to determine if the test results were less than the FDA Action levels and state contaminant guidelines.
- Analyzed fish tissue needed to be representative of the edible portion that is to be sold.
- Analytical results needed to be supported by good quality control and quality assurance procedures including documentation.

Furthermore, in order to limit the number of samples needed to be analyzed, the following were considered:

- Within a species, larger and older fish tend to have higher contaminant concentrations.
- Species of fish at the top of the food chain tend to have higher contaminant concentrations than species of fish lower in the food chain.
- A single species of fish from a given water body tend to be exposed to similar amounts of environmental contaminants.

Collecting Lake Superior fish samples

Sample size ranges were selected after analyzing data of the lengths of Lake Superior fish measured from the tribal commercial catch from 1986 to 1999. Within a species, up to 48 fish were collected per size range.

Common Name	Genus and Species of Fish	Size Range (in)	No. Composites (C)	No. Fish/C	Total No. Fish
siscowet	<i>Salvelinus namaycush siscowet</i>	17.0-18.0	4	12	48
siscowet	<i>Salvelinus namaycush siscowet</i>	19.5-20.5	4	12	48
siscowet	<i>Salvelinus namaycush siscowet</i>	22.0-23.0	4	12	48
siscowet	<i>Salvelinus namaycush siscowet</i>	24.5-25.5	4	12	48
siscowet	<i>Salvelinus namaycush siscowet</i>	24.5-25.5	4	12	48
lake trout	<i>Salvelinus namaycush namaycush</i>	25.0-26.0	4	12	48
lake trout	<i>Salvelinus namaycush namaycush</i>	27.0-28.0	4	12	48
lake trout	<i>Salvelinus namaycush namaycush</i>	27.0-28.0	3	8	24
whitefish	<i>Coregonus clupeaformis</i>	22.0-24.0	4	12	48
lake herring	<i>Coregonus artedii</i>	15.0-17.0	4	12	48

Table 2.

With the help of tribal fishermen, GLIFWC and tribal biologists collected four species of fish from the southern shore of Lake Superior (See map). Fisheries biologists then measured fish for total length, recorded their round weight, determined their sex, and collected otoliths and scales for aging purposes. Each fish collected was then tagged, placed into a specialized storage bag, cooled, and placed into a freezer.

A chain-of-custody form was also started for each species of fish collected from a given location on a given date and updated as samples were transferred between freezers and laboratories. This enabled GLIFWC to trace back testing results to the specific fish collected and at a specific sampling location.

Processing Lake Superior fish samples

All fish were aged using standardized techniques adopted by the Lake Superior Technical Committee of the Great Lakes Fishery Commission. Each set of 48 similarly-sized fish was then divided into 4 groups of up to 12 similarly-aged fish.

(See Biologists verify, page 9)

Biologists verify tribal fish processing reduces chemical contaminant levels

(Continued from page 8)

Fish samples were then processed at the Lake Superior Research Institute, UW-Superior, Superior Wisconsin. Larry Brooke, LSRI research chemist, and Joe Duffy, Red Cliff tribal fisherman, teamed their talents to process the fish samples. Two fillets were collected from each fish.

One fillet was processed raw and divided into three separate tissues of skin, muscle and fatty tissue, and the other fillet was saved for commercial smoking. During this process, data was also recorded on weights and water content of samples.

Laboratory staff then cut skin and fat tissue into small pieces, froze the tissue with liquid nitrogen, and ground the tissue into a course powder. Muscle tissue was also ground. Similar tissues (i.e., skin, muscle, or fatty tissue) were then combined from up to 12 fish of similar age to form a single composite sample.

An equal weight of each set of tissues (skin, muscle or fatty tissue) was combined (i.e. composited) into a single sample and placed into several special sample bottles (i.e. critically cleaned, amber, borosilicate glass containers) and stored in a freezer. Chain-of-custody forms were then updated and samples were sent to EN CHEM, Inc., an analytical laboratory in Madison, Wisconsin for chlorinated organic chemical analysis. Samples were also archived for future research.

Testing Lake Superior fish samples

Each composite sample was analyzed for total mercury, polychlorinated biphenyls as PCB's, and a suite of chlorinated pesticides. Mercury testing was completed at the Lake Superior Research Institute at the U.W. Superior and the University of Minnesota Duluth. Chlorinated organic analyses were conducted by EN CHEM, Inc. Laboratory testing incorporated quality control and quality assurance testing of blank, spiked NIST certified reference samples.

Overall findings

- All lake trout, whitefish, and herring samples tested under this project were below U.S. FDA action limits for chemical contaminants.
- Concentrations of chemical contaminants varied between Lake Superior fish species. Fish lower in the food chain, such as whitefish and lake herring, had significantly lower PCB, chlordane, and mercury concentrations than do predators such as lake trout and siscowet trout.
- The concentration of chemical contaminants such as PCB's, chlordane, and mercury increased with age and length of the fish.
- Trimming fillets and removing skin significantly reduced the concentration for PCB's, chlordane, and other organic persistent contaminants.
- Trimming fillets and removing skin did not reduce mercury concentrations in Lake Superior fish due to mercury being bound to muscle tissue.

Polychlorinated biphenyls (PCB's) findings

None of the Lake Superior fish samples (lake herring, whitefish, lake trout, or siscowet trout) exceed the U.S. FDA's PCB Action limit for PCB's of 2000 ppb (2.0 ppm).

Trimming fillets lead to reduced PCB contaminant levels by 12% to 40% depending on the fish species. For example, PCB contaminant levels in whitefish were reduced 32% and in lake trout 23-25%. PCB's contaminant levels in siscowet trout were reduced between 12-40% depending upon the length of the fish.(note: see Trimmed Skin-On figures in Table 3)

Removing skin from fillets further reduced PCB concentrations in whitefish, lake trout, and siscowet trout between 17 and 20.5 inches.(note: see Trimmed Skin-Off figures in Table 3)

Length Group Inches	Processing Fillets	Age (Range) years	Location (see map) Management Unit	Number of Composites (4 - 12 fish each)	Processing Reduction Percentage	Total Polychlorinated Biphenyls	Exceeds US FDA Action Limit
						Mean Lower Upper	
Lake Herring (Total = 48 fish)							
15.0-17.0	Untrimmed Skin-On	9 (7 to 13)	MI-4	4		68 61 75	No
Lake Whitefish (Total = 47 fish)							
22.0-24.0	Untrimmed Skin-On	9 (7 to 12)	MI-4	4		57.8 49 67	No
22.0-24.0	Trimmed Skin-On				32%	39.4 28 51	No
22.0-24.0	Trimmed Skin-Off				44%	32.3 20 45	No
Lake Trout (Total = 128 fish)							
25.0-26.0	Untrimmed Skin-On	9 (6 to 14)	MI-4	4		313 244 382	No
25.0-26.0	Trimmed Skin-On				23%	241 185 297	No
25.0-26.0	Trimmed Skin-Off				27%	229 178 280	No
27.0-28.0	Untrimmed Skin-On	10 (6 to 16)	MI-2,3,4,5; WI-2	8		551 378 724	No
27.0-28.0	Trimmed Skin-On				25%	415 279 551	No
27.0-28.0	Trimmed Skin-Off				29%	391 274 509	No
Siscowet Trout (Total = 208 fish)							
17.0-18.0	Untrimmed Skin-On	13 (10 to 17)	MI-4	4		216 177 255	No
17.0-18.0	Trimmed Skin-On				12%	190 152 227	No
17.0-18.0	Trimmed Skin-Off				13%	189 151 226	No
19.5-20.5	Untrimmed Skin-On	15 (9 to 20)	MI-4	4		407 326 487	No
19.5-20.5	Trimmed Skin-On				30%	286 249 324	No
19.5-20.5	Trimmed Skin-Off				31%	283 260 305	No
22.0-23.0	Untrimmed Skin-On	16 (11 to 24)	MI-4; WI-2	8		1078 422 1734	No
22.0-23.0	Trimmed Skin-On				40%	647 375 919	No
22.0-23.0	Trimmed Skin-Off				39%	660 383 937	No
24.5-25.5	Untrimmed Skin-On	18 (15 to 23)	MI-3,4,5; WI-2	6		1145 890 1401	No
24.5-25.5	Trimmed Skin-On				19%	926 780 1071	No
24.5-25.5	Trimmed Skin-Off				17%	852 802 1101	No

Table 3.

Chlordane Findings

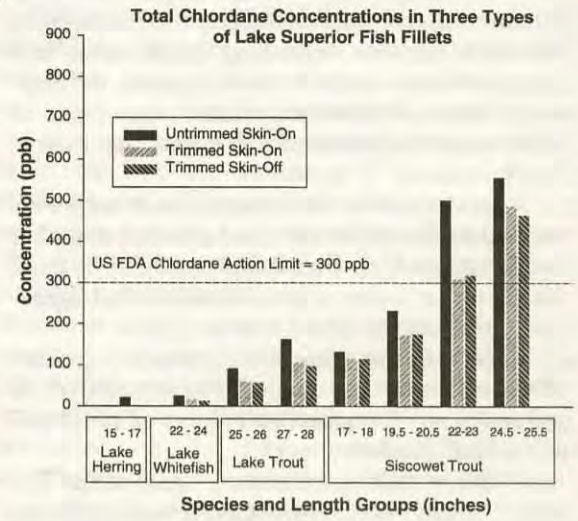
None of the Lake Superior fish samples of lake herring, whitefish, or lake trout exceeded the U.S. FDA's chlordane action limit of 300 ppb (0.3 ppm).

Siscowet samples in the 17-18 inch size group and 19.5-20.5 inch size group did not exceed the U.S. FDA's chlordane action limit for chlordane of 300 ppb (0.3 ppm).

Mean siscowet values from the 22-23 inch size group and 24.5-25.5 inch size group did exceed the U.S. FDA's chlordane action limit of 300 ppb (0.3 ppm).

Trimming fillets lead to reduced chlordane concentration levels by 13% to 38% depending on the fish species. For example, chlordane concentration levels in whitefish were reduced 33% and in lake trout 34%. Chlordane concentration levels in siscowet trout were reduced between 13-38% depending upon the length of the fish. (note: see Trimmed Skin-On figures in Table 4)

Removing skin from fillets further reduced chlordane concentrations in whitefish, lake trout, and siscowet trout between 17 and 20.5 inches.(note: see Trimmed Skin-Off figures in Table 4)



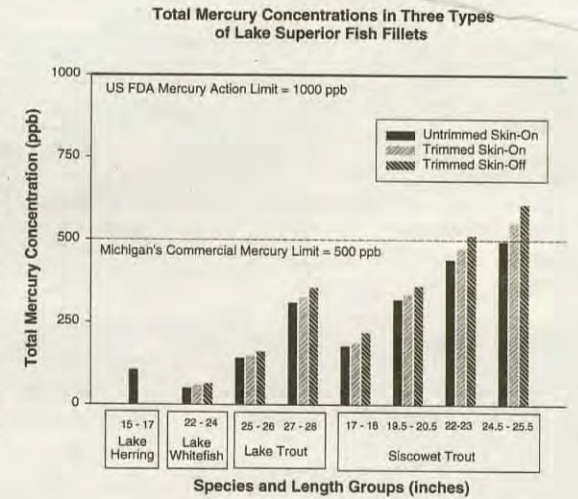
Length Group Inches	Processing Fillets	Age (Range) years	Location (see map) Management Unit	Number of Composites (4 - 12 fish each)	Processing Reduction Percentage	Total Chlordane			Exceeds US FDA Action Limit
						Mean	Lower	Upper	
Lake Herring (Total = 48 fish)									
15.0-17.0	Untrimmed Skin-On	9 (7 to 13)	MI-4	4		22	21	23	No
Lake Whitefish (Total = 47 fish)									
22.0-24.0	Untrimmed Skin-On	9 (7 to 12)	MI-4	4		26.5	25	28	No
22.0-24.0	Trimmed Skin-On				33%	17.6	15	21	No
22.0-24.0	Trimmed Skin-Off				47%	14.1	11	17	No
Lake Trout (Total = 128 fish)									
25.0-26.0	Untrimmed Skin-On	9 (6 to 14)	MI-4	4		83	71	115	No
25.0-26.0	Trimmed Skin-On				34%	61	46	79	No
25.0-26.0	Trimmed Skin-Off				38%	58	43	72	No
27.0-28.0	Untrimmed Skin-On	10 (6 to 16)	MI-2,3,4,5; WI-2	8		164	119	210	No
27.0-28.0	Trimmed Skin-On				34%	108	75	141	No
27.0-28.0	Trimmed Skin-Off				40%	99	72	127	No
Siscowet Trout (Total = 208 fish)									
17.0-18.0	Untrimmed Skin-On	13 (10 to 17)	MI-4	4		133	112	153	No
17.0-18.0	Trimmed Skin-On				13%	116	95	137	No
17.0-18.0	Trimmed Skin-Off				13%	116	94	137	No
19.5-20.5	Untrimmed Skin-On	15 (9 to 20)	MI-4	4		233	167	299	No
19.5-20.5	Trimmed Skin-On				25%	174	131	216	No
19.5-20.5	Trimmed Skin-Off				24%	176	131	220	No
22.0-23.0	Untrimmed Skin-On	16 (11 to 24)	MI-4; WI-2	8		502	207	797	Yes
22.0-23.0	Trimmed Skin-On				38%	310	180	440	Yes
22.0-23.0	Trimmed Skin-Off				36%	319	186	452	Yes
24.5-25.5	Untrimmed Skin-On	18 (15 to 23)	MI-3,4,5; WI-2	6		557	393	721	Yes
24.5-25.5	Trimmed Skin-On				12%	488	309	666	Yes
24.5-25.5	Trimmed Skin-Off				15%	466	353	579	Yes

Table 4.

Mercury findings

None of the Lake Superior fish samples (lake herring, whitefish, lake trout, or siscowet trout) exceed the U.S. FDA's methyl mercury action limit for of 1000 ppb (1.0 ppm).

Only siscowet samples in the 22-23 inch size group and 24.5-25.5 inch size group exceeded 500 ppb (.5 ppm), a lower level used by Michigan for fish caught and sold in that state.



Length Group Inches	Processing Fillets	Age (Range) years	Location (see map) Management Unit	Number of Composites (4 - 12 fish each)	Processing Reduction Percentage	Total Mercury			Exceeds US FDA Action Limit
						Mean	Lower	Upper	
Lake Herring (Total = 48 fish)									
15.0-17.0	Untrimmed Skin-On	9 (7 to 13)	MI-4	4		107	65	149	No
Lake Whitefish (Total = 47 fish)									
22.0-24.0	Untrimmed Skin-On	9 (7 to 12)	MI-4	4		51	44	58	No
22.0-24.0	Trimmed Skin-On					61	52	70	No
22.0-24.0	Trimmed Skin-Off					65	60	70	No
Lake Trout (Total = 128 fish)									
25.0-26.0	Untrimmed Skin-On	9 (6 to 14)	MI-4	4		143	115	171	No
25.0-26.0	Trimmed Skin-On					150	122	179	No
25.0-26.0	Trimmed Skin-Off					163	133	193	No
27.0-28.0	Untrimmed Skin-On	10 (6 to 16)	MI-2,3,4,5; WI-2	8		310	204	415	No
27.0-28.0	Trimmed Skin-On					328	211	446	No
27.0-28.0	Trimmed Skin-Off					355	227	484	No
Siscowet Trout (Total = 208 fish)									
17.0-18.0	Untrimmed Skin-On	13 (10 to 17)	MI-4	4		179	148	210	No
17.0-18.0	Trimmed Skin-On					190	158	221	No
17.0-18.0	Trimmed Skin-Off					220	186	255	No
19.5-20.5	Untrimmed Skin-On	15 (9 to 20)	MI-4	4		320	265	376	No
19.5-20.5	Trimmed Skin-On					335	277	393	No
19.5-20.5	Trimmed Skin-Off					360	301	418	No
22.0-23.0	Untrimmed Skin-On	16 (11 to 24)	MI-4; WI-2	8		441	345	536	No
22.0-23.0	Trimmed Skin-On					476	360	592	No
22.0-23.0	Trimmed Skin-Off					515	396	633	No
24.5-25.5	Untrimmed Skin-On	18 (15 to 23)	MI-3,4,5; WI-2	6		496	437	556	No
24.5-25.5	Trimmed Skin-On					554	486	621	No
24.5-25.5	Trimmed Skin-Off					610	535	684	No

Table 5.

(See Lake Superior fish meet FDA restrictions, page 23)

Reviving tradition: The sugarbush

Bay Mills issues first sugarbush permit under new gathering agreement

By Jennifer Dale, Bay Mills News

Brimley, Mich.—Maple Sugar Moon was the time that Anishnabe conducted the sugarbush, the whole process of making maple syrup and sugar, often in camps. In some regions, the Sugaring Moon, Sizibaakwe Giizis, takes place in what is now called March. In others, sap runs in April.

This year, Bay Mills members Wanda Perron and Paula Parker obtained a permit to gather maple sap on U.S. Forest Service (USFS) land, the first ever under a new tri-state tribal agreement between the tribes and the USFS.

The two sisters succeeded in producing beautifully amber colored maple syrup. It took over 50 gallons of sap to make two gallons of syrup and a few hard candies.

"We're making memories," said Parker. The sisters wanted to revive the sugarbush tradition. They'd never done it before, but as tribal history department staff, they knew how to find out.

The historians researched the process out of old books and by talking to others. Many seniors around Bay Mills remember taping the trees in the crispy pre-spring days. The sap will run when the crows come—when it is warm in the day and cold in the night, learned Perron.



Paula Parker and Wanda Perron obtain the first sugarbush permit. (Photo by Jennifer Dale.)

They borrowed gathering buckets and taps from the Gnoozhekaaning Cultural Center. They kept plastic milk jugs on hand for extra taps, and with all their equipment on sleds, they made their way to the sugar maple trees.

Power drills quickly ran out of juice, so elbow grease and a hand drill with a 7/8-inch bit had to do. Perron said they would drill at a slight upward angle 2 to 3 inches into the tree for each tap. Trees had to be at least six inches in diameter. More than one tap could be placed in trees larger than 12 inches in diameter.

Taping took a lot of energy. Ken Hopper and Karol Perron from the Recreation and Health Promotions Department came by to help.

At once, the sap began to flow. This year's early warm up made the sap a little watery. After tapping their trees, Perron and Parker loaded up and left to wait for the buckets to fill. The snow continued to melt as the buckets filled up again and again.

As they became full, buckets were hauled out and contents dumped into big containers in the back of Perron's van. (No vehicles are allowed off road on U.S. forestland.)

Sap was stored outside in mounded snow to keep it cool. When they figured they had enough for a boil, they stoked up the old evaporator they had purchased for \$200. The equipment was a step above an old-time kettle, with a rectangular tray resting atop a wood stove.

Justin Carrick, one of the sisters' 12 siblings, occasionally snacked on a fried perch snack he'd reheated on the stove. Their mother Aggie Carrick had fried them a platter full for the occasion.

Carrick can remember neighbors using copper pipe spigots to collect sugar maple sap. He and Wanda's husband, Mike Perron, set up a canopy over the evaporator, in case of bad weather. And good thing, too, because of wind and occasional rainfall.

Sap was strained several times throughout the process. Before dumping the sap into the evaporator, the sisters strained the sap through flannel into warming pots. As the sap boiled down, the sisters strained more warm sap into the evaporator. They tended the sap all day and into the night while it boiled down to syrup, finishing up around 2 a.m. Using what looked like a giant candy thermometer, they boiled it to a certain temperature, and then it was syrup.

The two are considering holding their sugarbush camp in the woods next year, perhaps requesting a road to their site.

(Reprinted with permission from Bay Mills News, April 2000.)

Tribal members interested in establishing a sugarbush on national forest lands, contact Karen Danielsen at GLIFWC's main office (715) 682-6619.



Tapping sugarbush. Above buckets placed beneath small taps in the trunks of maple trees wait for the slow drip of sap as warm weather releases the flow. (Photo by Ron Parisien)

Free camping while exercising treaty rights in national forest campgrounds

By Sue Erickson
Staff writer

Odanah, Wis.—Campground fees will be waived for tribal members exercising treaty rights in national forests within the 1836, 1837 and 1842 treaty ceded territory.

Fee exemptions will apply to over 100 campgrounds in four national forests for members of tribes signatory to the USDA Forest Service-Tribal Memorandum of Understanding (MOU).

However, individual tribal ratification of the National Forest Campground Exemption Agreement and Implementation Plan is still necessary before tribal members can take advantage of the fee exempt camping provision.

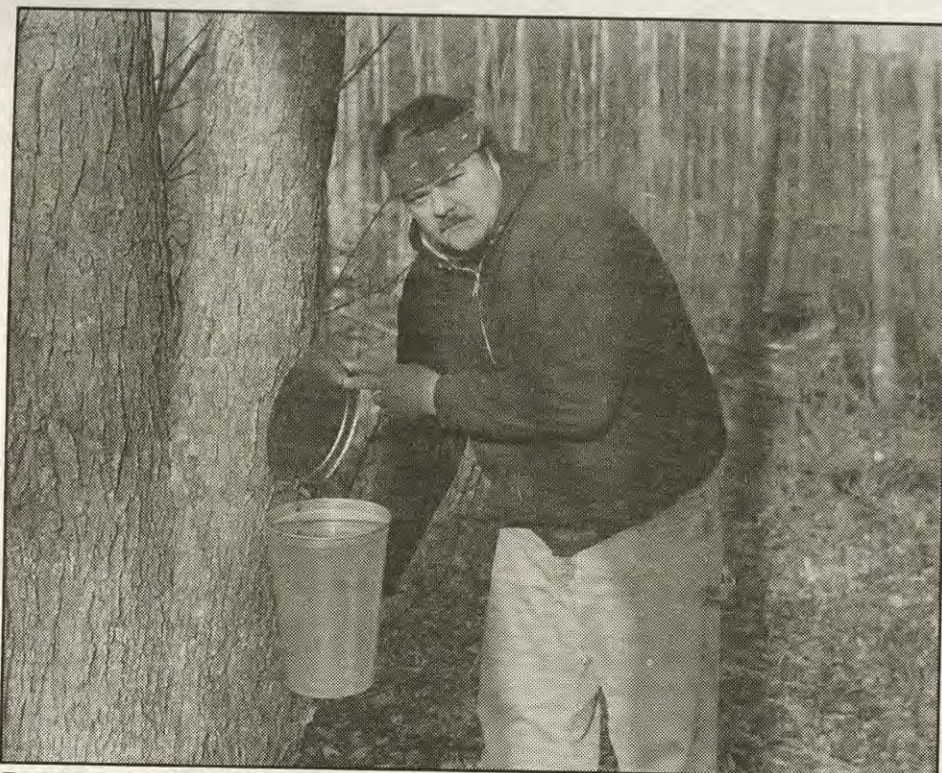
The Plan was approved by the Voigt Intertribal Task Force at their May 11 meeting at Lac du Flambeau and forwarded to member tribal councils for their ratification. Each tribe must ratify the agreement before its tribal members are eligible for free camping.

A total of 140 campgrounds are listed in the Plan, but 40 are currently under contract with campground concessionaires, and fees cannot be waived until new contracts are negotiated.

Great Lakes Indian Fish and Wildlife Commission (GLIFWC) has developed a document entitled National Forest Campgrounds which identifies campgrounds where there will be no fee for tribal members and where length of stay restrictions are waived. Most campgrounds waive length of stay restrictions, but some do not. Each tribe will have this listing available.

During the off-season, some campgrounds are closed. Camping is permitted there only with permission from the tribe. Other campgrounds are out-of-service during the off-season. Camping is permitted there without a permit, but no amenities will be provided. Closed and out-of-service campgrounds are identified in the campground listing.

The fee exempt camping provision has been discussed between the Forest Service and the tribes for a number of years. (See Free camping, page 18)



Ron Parisien, Bad River, gathers a bucket full of maple sap from his sugarbush this spring. The season started early, but was off and on again due to the temperature changes. Overall the extended season produced a good supply of maple sap. (Photo by Theresa Parisien.)

Mille Lacs provides good walleye harvest

Wind, waves and chilly weather characterize the season

By Sue Erickson
Staff Writer

Onamia, Minn.—Mille Lacs Lake didn't make it easy for tribal fishermen exercising the third treaty fishing season under the 1837 Treaty this spring. The vast inland lake frequently showed her dark and stormy side during the spring season, which ran from April 1 through May 2.

However, the lake still yielded a bountiful harvest to those who weathered the chilly winds and waves on the lake. All together, eight Ojibwe bands harvested a total of 45,304 lbs. of walleye from Mille Lacs Lake.

40,641 lbs. of walleye were taken by net and 4,662 lbs. by spear. The largest net lift during the season was 180 lbs. of fish.

In the 1999 season the combined bands harvested a total of 45,366 lbs. of walleye during the spring season.

A quota of 24,695 lbs. of walleye remains available to the bands this year

with the bulk of that belonging to the Mille Lacs band.

A total of 70,000 lbs. of walleye was available for treaty harvest in 2000. Of that, the Mille Lacs band has 35,000 lbs. and the other seven bands signatory to the 1837 Treaty each have a quota of 5,000 lbs.

The harvestable surplus level for walleye in Mille Lacs Lake in 2000 was determined to be 370,000 lbs. of walleye, so the state angling quota is 300,000. Joe Dan Rose, inland fisheries section leader, Great Lakes Indian Fish and Wildlife Commission (GLIFWC), says the state is regulating angler harvest this year with a 14 to 18 inch harvest slot and a daily bag limit of six with a one over 28" trophy rule.

Mille Lacs Commissioner of Natural Resources Don Wedll feels the spring treaty season ran as anticipated. "It was good season. Everything went well," he says.

Rose characterizes the season as "tricky" for the fishermen due to the weather conditions.

High winds frequently forced fishermen to set nets on the lee side of the lake, eliminating other options, and definitely created conditions unfavorable for spearing on many nights of the season. On the few quiet nights when spearing did occur, spearers were fairly successful, he says.

Most fishermen set nets in the evening and lift in the morning. Shifting winds sometimes made rough conditions in the morning for the lifts. Fortunately, the new enforcement boat, a 18 foot Alumacraft, was available to assist fishermen using small boats not built for the formidable Mille Lacs Lake waves. Tribal fishermen with larger boats also helped out those who were having difficulty in the rough weather.

"Weather played a very prominent role in how the season progressed," Rose says. "There was a lot of cold weather and wind and no sharp, well-defined peak in the spawning activity or harvest. The fish came in gradually over a longer period of time and seemed

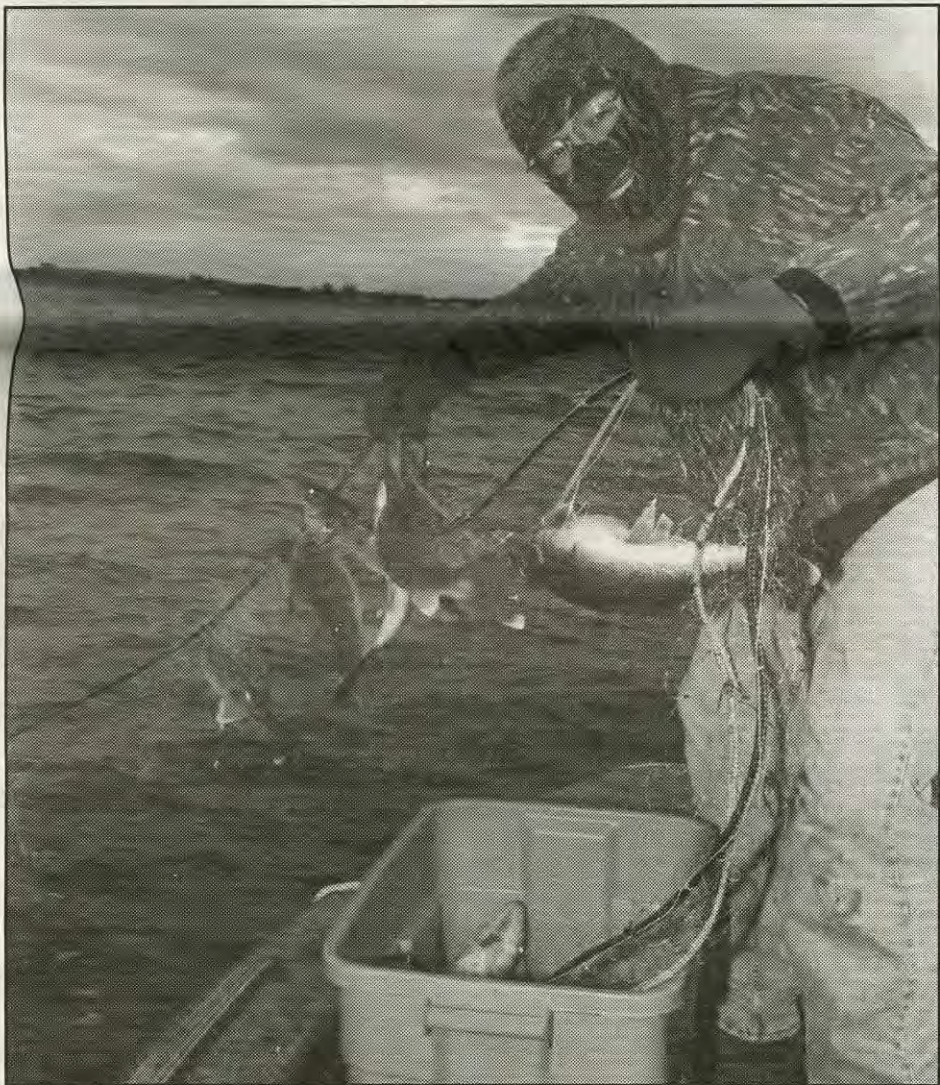
to follow the ups and downs of the weather patterns." Despite the inclement conditions, participation in the season remained steady with weekends bringing in larger numbers of fishermen.

On weekends staff frequently worked nearly round the clock in order to monitor the season. If nets were lifted in the evening or if spearers went out, staff had to be available into the small hours of the morning and also available around 6:00 a.m. to monitor the morning net lifts.

Other species harvested during the spring 2000 season from Mille Lacs included:

- northern pike—6,570 lbs.
- yellow perch—530 lbs.
- tullibee or cisco—22.8 lbs.
- burbot—1,061 lbs.
- white sucker—528 lbs.

Other lakes within the Minnesota 1837 Treaty ceded territory which were harvested this spring include Green and Goose Lakes in Chisago County and Razor Lake in Pine County. No fish were taken from Razor Lake.



Dressed for the cold blasts over Mille Lacs Lake this spring, Mike Wiggins, Bad River, looks pleased with his catch.



One happy fisherman, George Bigboy, Bad River, extracts walleye from his net.



Dave Boyd and Corwin Graikowski, Mille Lacs, set a net off of Cedar Creek landing.

Tribal harvest of walleye in Mille Lacs Lake—Spring 2000	
Mille Lacs band	17,895 lbs.
Fond du Lac band	4,992 lbs.
Bad River band	5,063 lbs.
Lac Courte Oreilles band	4,138 lbs.
Lac du Flambeau band	4,531 lbs.
Mole Lake band	2,396 lbs.
Red Cliff band	1,735 lbs.
St. Croix band	4,552 lbs.

Photos by Sue Erickson

Monitoring the Mille Lacs treaty harvest

And other duties not assigned

Onamia, Minn.—Monitoring the treaty harvest in Lake Mille Lacs and other Minnesota lakes open during the spring spearing and netting season requires comprehensive coverage of all landings open each night by both biological and enforcement staff.

In addition to regular duties pertaining to monitoring the catch and fishing activities, staff remained available to help out as folks arrived at the landings, launched boats, set and lifted nets, and brought in catches. Windy, raw conditions made rough going many nights, but staff were there to lend a hand if needed.

Personnel from the Great Lakes Indian Fish and Wildlife Commission (GLIFWC), the Mille Lacs band, and the Fond du Lac band all participated in monitoring the treaty season. All staff should be commended for the additional effort expended during this intense season, sometimes requiring round-the-clock duty, to make it a well-managed, fun and successful season.

In order to provide optimal opportunity for tribal members, tribes typically named multiple landings each night. On most nights, three landings, including Cedar Creek, South Garrison and North Garrison, were open. Each landing was staffed with at least one warden/creel team.

Permits are issued at the landing, so as tribal fishermen arrive they must first obtain their permit. The number of permits available per tribe depends on the remaining quota.

Catch statistics are reported to GLIFWC's main office each morning, so adjusted quotas for each of the eight bands are available daily. This process requires that the main office is staffed seven days a week throughout the season to receive the daily harvest reports and adjust quotas for spring harvest in all three states.

Staff remains at the landing until all tribal members are off the lake with their catch. Creel clerks count and weigh all harvested fish. For netting, at least 50 walleye per mesh size per landing per day are also measured and sexed. For spearing, the first one hundred walleye taken each night and the last catch to come in are also measured and sexed. Some spine samples are also taken for aging data.

Once a band's quota is reached, the lake is closed to harvest by that band's members, unless another band agrees to share part of its quota.

All in all, the season went very well, according to GLIFWC Chief Warden Gerry White. Fewer citations were written this season probably because tribal members are now more accustomed to the regulations. As far as other incidents during the season, only minor disturbances were reported.

One tribal member's net was lost or stolen. GLIFWC's enforcement and biological staff searched comprehensively for the net, but were unable to find it. The net has since been recovered. Staff suspects the net may have been stolen or tampered with.



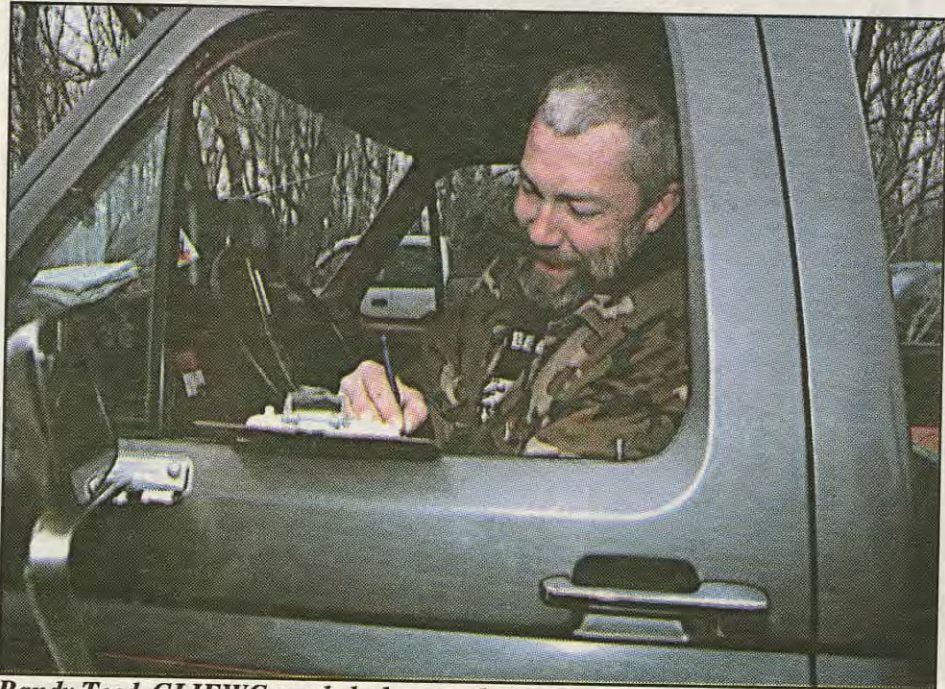
Enjoying a few moments of quiet off the lake, GLIFWC Warden Jim Mattson spent many hours both assisting fishermen set and lift nets and monitoring the harvest. (Thanks, Jim, for helping Public Information get on the lake as well!)



Keith Reeves, Minnesota Department of Natural Resources, and Joe Dan Rose, GLIFWC inland fisheries section leader, share harvest data at the Mille Lacs Lake South Garrison landing.



Mead McCoy, GLIFWC inland fisheries biologist stationed at Mille Lacs, prepares to creel a catch at the South Garrison landing.



Randy Teed, GLIFWC creel clerk, records data on the catch as fish are weighed and measured.

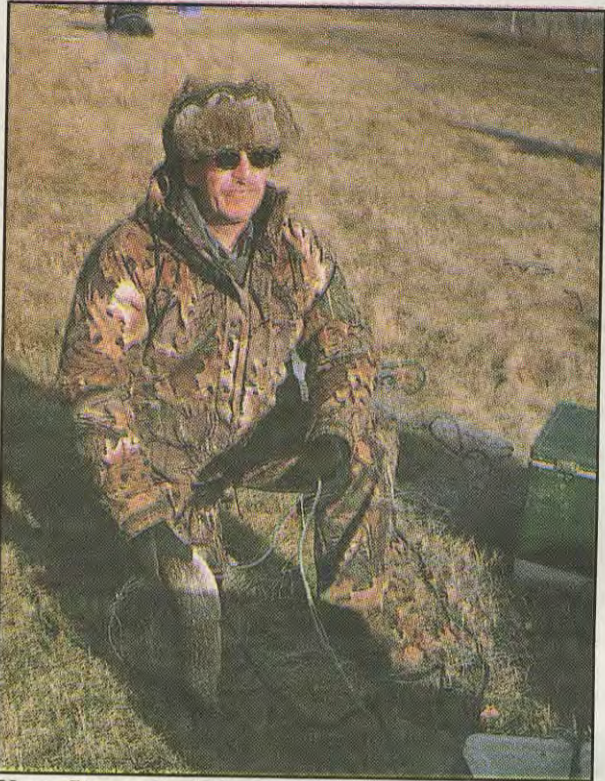


GLIFWC Biologist Joe Dan Rose snips a spine sample from a walleye as Jon Shubat, GLIFWC creel clerk, measures and weighs the catch.

Article and photos by Sue Erickson, Staff Writer



Eight Ojibwe bands participate in Mille Lacs treaty harvest



Vern Stone, Bad River, extracts a northern from his net at a Mille Lacs Lake landing.



Jessica Miller, Mille Lacs, and Linda and Becky Lonetto, Bad River, take home an 18" northern.



Looks like a good lift! Dan North, Bad River, pulls in a catch of walleye.



GLIFWC Warden Jayson Churchill stands by as fishermen, Ken Pardun, Mille Lacs, and Leonard Butler, St. Croix, bring a boat and fish off Mille Lacs Lake.



Straightening a net after a lift are Mille Lacs members Jamie, Ken, and Shelly Pardun, Mille Lacs and Leonard "Babe" Butler, St. Croix elder.



Spearfishermen, Brad Bearheart, St. Croix, and George Morrison, Bad River, wait patiently for dark to begin spearfishing.



A tub of fish waiting for creel work. The permit identifies fisherman and quota.



Mole Lakers, Rick McGeshick, Don Burnett, and Eugene (Ten Bears) Van Zile, set a net off of Cedar Creek landing.



Tending to business, George (Bobo) Bigboy and Clarence Crowe, Bad River, concentrate on extracting their catch from the net.

Assessing the fishery

Onamia, Minn.—On the heels of the 2000 spring harvest, GLIFWC electrofishing boats began an assessment of the 78-mile Mille Lacs Lake shoreline. Three assessment crews spent three nights performing a post-spawning juvenile walleye survey.

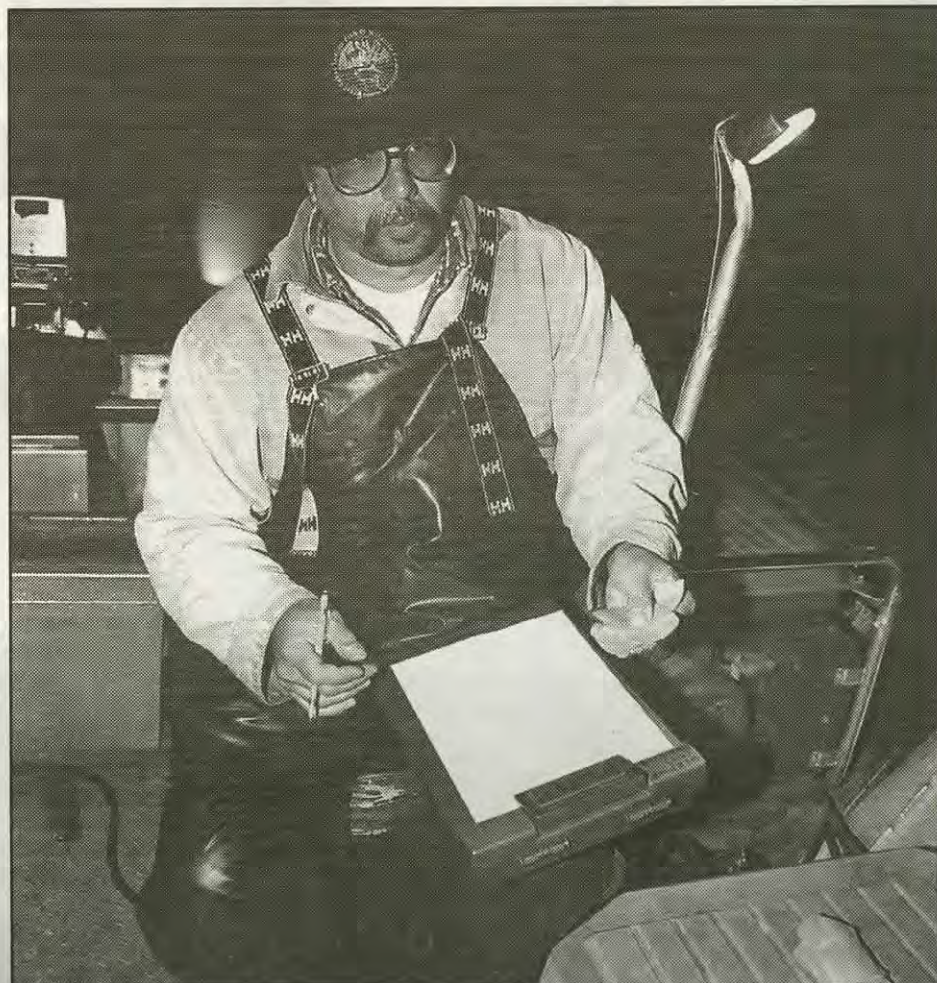
About 1000 juvenile walleye were captured and released during the study. GLIFWC Inland Fisheries Section Leader Joe Dan Rose felt the number could have been greater if the weather had been more cooperative the last night of the survey.

The objective of the survey, Rose says, is to strengthen the data describing the juvenile component of the Mille Lacs Lake walleye population. All data collected on the fish will be shared with tribal biologists and the Minnesota Department of Natural Resources.

Further assessments during the summer may include some experimental netting for yellow perch and experimental trawling for juvenile walleye in August, Rose says.

In the fall, electrofishing crews will again be on the lake to look at year class strength in young-of-the year and age one, walleye.

As with all assessment results, harvest figures are shared with state and tribal resource managers who work together through the Minnesota 1837 Ceded Territory Fisheries Technical Committee on issues related to the management of a shared fishery.



Collecting data on walleye after an electrofishing run is Butch Mieloszyk, GLIFWC inland fisheries technician. Mieloszyk and his crew spent three nights assessing Mille Lacs Lake following the completion of spring assessment work in Wisconsin.



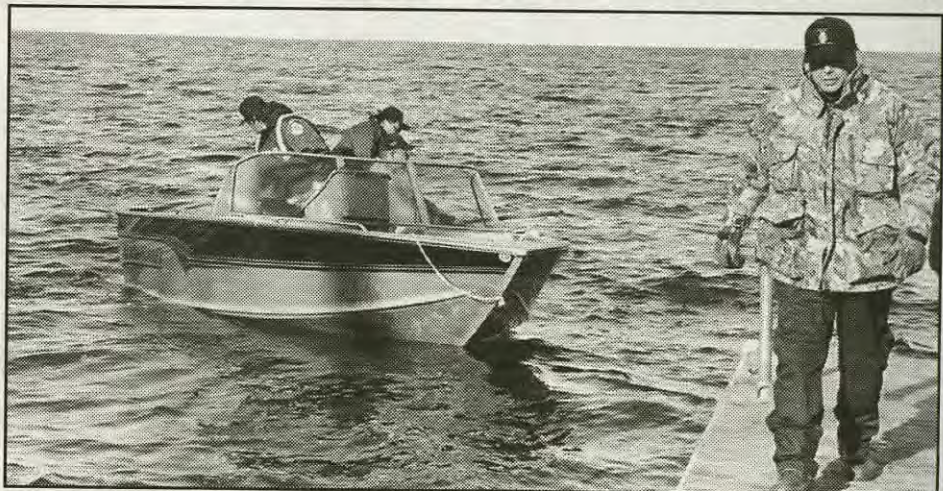
Corwin Graikowski, Mille Lacs registration clerk, provides a permit to Joyce Drumbeater, Mille Lacs band member, for netting in Mille Lacs Lake. The on-reservation registration station was open daily during the season. Tribal members from other bands could get permits from staff on the landings.



Dressed for the cold, Alyssa and John Henry Bearl watch as GLIFWC fisheries staff count and weigh their catch at the Mille Lacs Lake Cedar Creek landing.



Mead McCoy, GLIFWC inland fisheries biologist stationed at Mille Lacs, records data as Eli Retka, creel clerk, calls off the measurements of walleye brought in at the Mille Lacs Lake South Garrison landing.



GLIFWC enforcement staff was kept busy throughout the season at Mille Lacs Lake, both monitoring and assisting tribal fishermen. Above, GLIFWC Chief Warden Gerry White prepares to help dock the boat as Jim Mattson, Mille Lacs area warden, brings in two fishermen who have set nets.

Article and photos by Sue Erickson, staff writer

Intertribal workgroup plans Sandy Lake commemoration

150th "Death March" anniversary this fall

By Charlie Otto Rasmussen, Writer/Photographer

McGregor, Minn.—To commemorate the 150th anniversary of the Wisconsin Death March and Sandy Lake tragedy, a workgroup made up of Ojibwe representatives and Great Lakes Indian Fish & Wildlife Commission (GLIFWC) staff are planning ceremonies for December 2000. In consultation with elders, tribal leaders, and the Voigt Intertribal Task Force, the workgroup has endorsed placing a memorial at Sandy Lake this fall along with a spiritual run from Sandy Lake, Minnesota to Madeline Island.

The events are designed to honor the lives of the 400 Ojibwe who died and thousands more that suffered from disease and famine at Sandy Lake in 1850.

In an effort to entice Ojibwe Indians living in Wisconsin and Upper Michigan to Minnesota, federal officials directed tribal members to travel to Sandy Lake in October 1850 to receive annuity payments. These annual payments of cash, food, and provisions to the bands were made in compensation for Ojibwe land cessions to the United States in 1837 and 1842.

Traditionally, Ojibwe bands received annuities in northern Wisconsin near their villages. By moving the distribution site several hundred miles west, government officials from the Office of Indian Affairs planned to trap the Ojibwe over the coming winter and compel them to take up residence in Minnesota. While tribal members from Michigan and some eastern reaches of Wisconsin refused to travel with winter fast approaching, four thousand Ojibwe canoed to Sandy Lake that autumn.

They arrived on the payment date, fatigued and hungry, only to find no one there to distribute the supplies. Wild game was scarce, fishing was poor, and high water wiped out the wild rice crop. Ill equipped and confined to a water-logged area, disease, exposure, and starvation ravaged the Ojibwe, killing three to eight people each day.

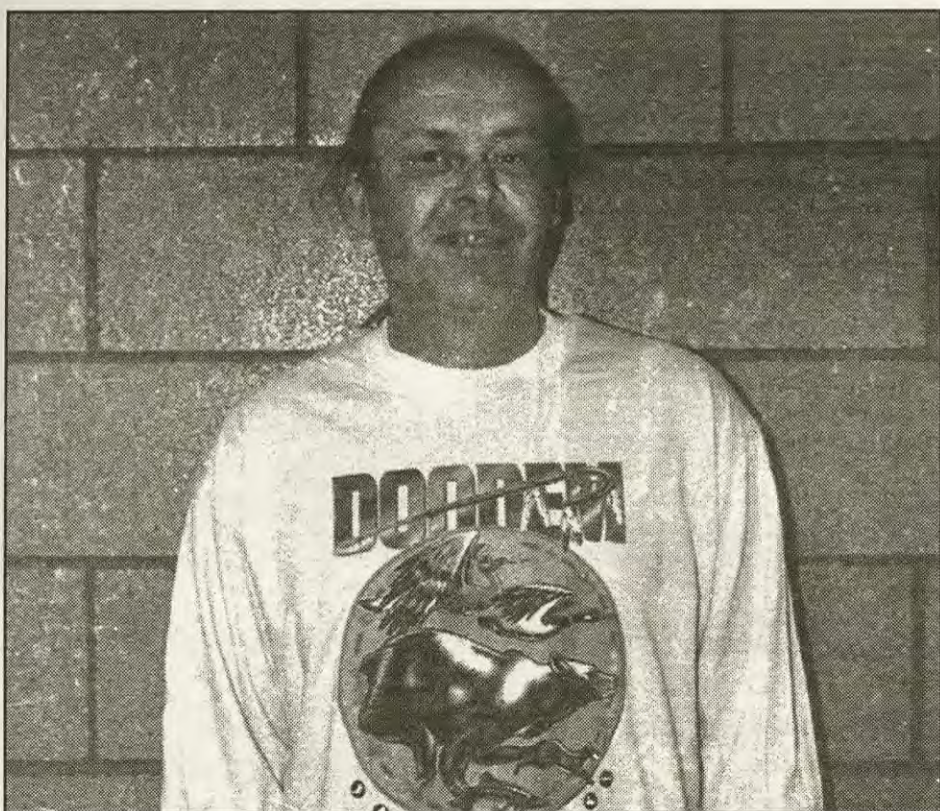
In early December, with over a foot of snow on ground and the waterways frozen over, the Wisconsin Ojibwe finally received their annuities. With 170 people already dead, they started on the bitter trail back through Wisconsin. Another 230 people died on that frigid journey, later called the Wisconsin Death March.

When the public learned about the Sandy Lake debacle, newspapers, missionary groups, local citizens, and state legislators voiced support for the Indians and lobbied to keep them in Wisconsin.

Chief Buffalo of La Pointe championed Ojibwe efforts against removal and in his early nineties traveled by canoe and train to Washington, D.C. to push for establishment of tribal land in Wisconsin. Through an 1854 treaty with the United States, permanent reservations were created for many of the Ojibwe bands whose members suffered the Sandy Lake ordeal. The 1854 Treaty marked the end of federal efforts to remove the Ojibwe from Wisconsin and Michigan.



People gathered at Sandy Lake, Minnesota on March 31, 1999 to participate in a ceremony of closure for the Ojibwe who died and suffered in 1850-1851. With cooperation from the Army Corps of Engineers, tribal and GLIFWC planners are designing a memorial to be erected on this glacial mound overlooking Sandy Lake. (Photo by Charlie Otto Rasmussen)



Doodem (clan) tee-shirts, available through GLIFWC, feature the design used on GLIFWC's 1999 annual poster by Steve Premo, Mille Lacs artist. The design is done in browns, yellows, and reds and is imprinted on a natural, long-sleeved, 100% pre-shrunk cotton tee. Sizes M-3X are available at \$15.00 each. Contact GLIFWC at (715) 682-6619; write: P.O. Box 9, Odanah, WI 54861; or e-mail rwilmer@glifwc.org

Above GLIFWC Biological Services Director Neil Kmiecik models the Doodem tee. The design depicts clan symbols running east and is dedicated to the Waabanong Run, which carried the Treaty Staff to Washington, D.C. in the fall of 1998 for the U.S. Supreme Court's hearing of the Mille Lacs case. Kmiecik was one of the Run's core team members. (Photo by Charlie Otto Rasmussen)

Fish in the Lakes, Wild Rice, and Game in Abundance

Testimony on Behalf of Mille Lacs Ojibwe Hunting and Fishing Rights

James McClurken, compiler

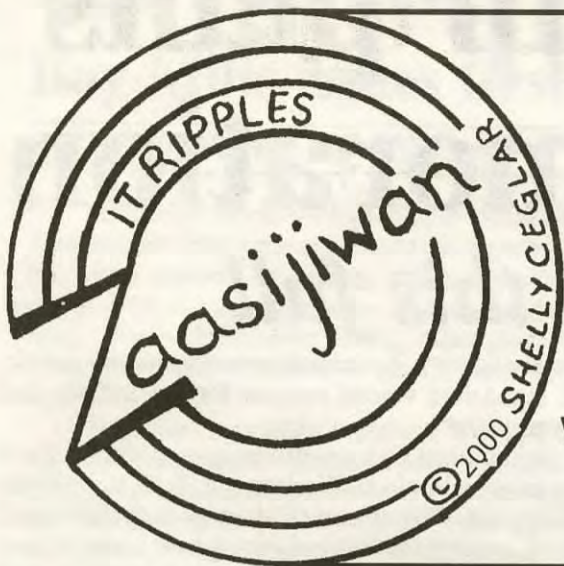
On August 13, 1990 members of the Mille Lacs Band of Ojibwe filed a lawsuit against the State of Minnesota for interfering with the hunting, fishing, and gathering rights that had been guaranteed to them in an 1837 treaty with the United States.

In order to interpret the treaty the courts had to consider historical circumstances, the intentions of the parties, and the treaty's implementation. The Mille Lacs Band faced a mammoth challenge. How does one argue the Native side of the case when all historical documentation was written by non-Natives?

The Mille Lacs selected six scholars to testify for them. Published here for the first time, Charles Cleland, James McClurken, Helen Tanner, John Nichols, Thomas Lund, and Bruce White discuss the circumstances under which the treaty was written, the personalities involved in the negotiations and the legal rhetoric of the times, as well as analyze related legal conflicts between Natives and non-Natives.

James McClurken is an ethnohistorian specializing in Great Lakes Native Americans in the nineteenth and twentieth centuries.

Notes, bibliography, index, 300 pages, 6" x 9" cloth, ISBN 0-87013-492-2, \$34.95, March 1999



Niibin — It is Summer

Niibin. Gidizhaamin zaaga'iganing. Giwii-kiigooyikemin gaye. Gizhaateg, niwii-pagizomin. Niwii-pimosemin miikanaang imaa ziibing. Giwii-niimiwin niimi'idiwining. Niwii-nagamomin. Giwii-anokiimin. Giwii-paabaamaadizimin. Mino-Bimaadiziwin.

(It is summer. We are all going to the lake. We all will go fishing also. When it is a hot day, we will swim around. We will walk on the trail there by the river. We all will dance at the dance. We will sing. We all will work. We all will travel about. The Good Life.)

Bezhiq—1

OJIBWEMOWIN (Ojibwe Language)

Double vowel system of writing Ojibwemowin.

—Long vowels: AA, E, II, OO

Baapi — as in father

Apane — as in jay

Giizhik — as in seen

Giigooyike — as in moon

—Short vowels: A, I, O

Idash — as in about

Bimose — as in tin

Eko-nising — 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.

VAI-He/She verbs

Verbs, Animate, Intransitive

Add a personal prefix and/or suffix.

Review conjugations for I, You and They.

Now learn "We"

Bimose.—S/he is walking, walks.

Nimbimose.—I walk.

Gibimose.—You walk.

Bimosewag.—They walk.

Nimbimosemin.—We walk. (exclusive)

Gibimosemin.—We all walk. (inclusive)

Baapi.—S/he is laughing, laughs.

Nimbaap.—I laugh.

Gibaap.—You laugh.

Baapiwag.—They laugh.

Nimbaapimin.—We laugh.

Gibaapimin.—We all laugh. (incl. you)

Niizh—2

A. Nitam, nindonishkaamin gigizheb.

B. Eko-niizhing, niwiisimin niibowa.

C. Eko-nising, nimbiizikonayemin nibaawigamigong.

D. Eko-niwing, apane ningiziyaabide'omin.

E. Eko-naaning, endaso-giizhik gaye nimbinaakwe'omin.

F. Iwidi oodenaang nindanokiimin.

G. Onaagoshing, nindanwebimin idash ninibaamin.

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

Niswi—3

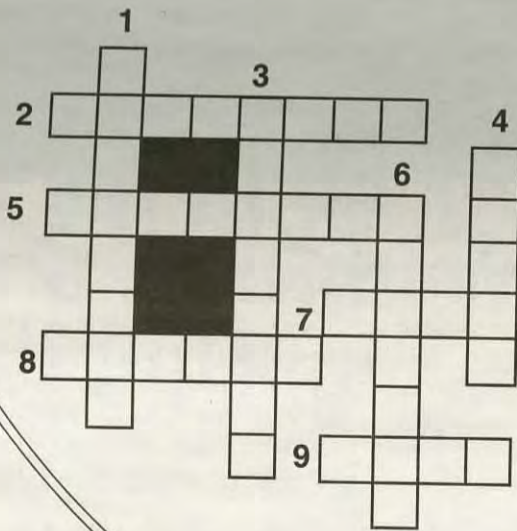
IKIDOWIN ODAMINOWIN (word play)

Down:

1. You eat.
3. By the river.
4. First.
6. I laugh.

Across:

2. In the morning.
5. I eat.
7. There.
8. It is summer.
9. Also.



Niiwin—4

VAI Conjugations

Root verb: Minwendam—S/he is happy.

Niminwendam.—I am happy.

Giminwendam.—You are happy.

Minwendamoog.—They are happy.

Niminwendaamin.—We are happy.

Giminwendaamin.—We all are happy.

Root verb: Wiisini—S/he eats.

Niwiisin.—I eat.

Giwiisin.—You eat.

Wiisiniwag.—They eat.

Niwiisinimin.—We eat.

Giwiisinimin.—We all eat.

Goojitoon! Try it!
Translation below.

1. Baapi ____ apane, ingiw ikwezensag.

2. Niibing, ____ minwendam.

3. Mino-giizhigak, ____ nimwenda ____.

4. Wiisiniwigamigong ____ wiisini ____ onzaam.

5. ____ bimose na? zaaga'iganing gigizheb?

Nin
Gi
-wag
Ni...min
Gi...min

Translations:

Niizh—2 A. First, we get up in the morning. B. Second, we eat plenty. C. Third, we get dressed in the bedroom. D. Fourth, always we brush our teeth. E. Fifth, every day also we comb our hair. F. Over there in town we work. G. When it is evening, we rest and we sleep.

Niswi—3 Down: 1. Giwiisin. 3. Ziibing. 4. Nitam. 6. Nimbaap. Across: 2. Gigizheb. 5. Niwiisin. 7. Imaa. 8. Niibin. 9. Gaye.

Niiwin—4 1. They laugh always, those girls. 2. When it is summer, I am happy. 3. When it is a good day, we all (inclusive—includes you) are happy. 4. At the restaurant we (exclusive—excludes you) eat too much. 5. You walk, do you? to the lake in the morning.

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

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Mine, water, power projects targeted at Madison rally

Madison, Wis.—Between 700 and 800 opponents of proposed corporate projects throughout Wisconsin rallied on April 29 at the State Capitol in Madison in support of “people power against corporate power.” The student-led rally was organized by the Wolf Watershed Educational Project (WWEP), founded by the Midwest Treaty Network in 1995.

The rally united high school and college students with Native Americans, sportfishers, farmers, environmentalists, unionists, and others from various regions of the state, in opposition to new mine, water, and power projects, and in support of “environmental justice” and a “Seventh Generation Amendment.” WWEP organizers promoted the rally as a Wisconsin version of the Seattle and D.C. anti-corporate protests.

The Students/Youth Rally brought together different ages and races to stop four proposed corporate projects: the Crandon metallic sulfide mine in northeastern Wisconsin, a high-voltage transmission line in northwestern Wisconsin, a Perrier bottling operation in central Wisconsin, and the RockGen power plant in south-central Wisconsin.

Speakers also questioned the role of Republican Governor Tommy Thompson—and the state government agencies Department of Natural Resources (DNR) and Public Service Commission (PSC)—in facilitating the projects against the wishes of rural citizens and their township, county, and tribal governments. They demanded the restoration of the Public Intervenor and an independent DNR chief not appointed by the Governor.

Rally organizer and University of Wisconsin-Stevens Point student leader Dana Churness declared that “the power of profit is taking over the citizens’ voice.” UW-Stevens Point student Lora Clem put the Wisconsin rally in the context of growing links between people around the world protesting corporate “globalization.” Echoing the international protests, UW-Madison students carried huge colorful puppets depicting corporate figures, and mock fish and dragonflies symbolizing company threats to the environment.



The Student/Youth rally brought together different ages and races to stop four proposed corporate projects. (Photo by Adam Dewitz.)

Churness introduced speakers as part of a “Journey Around Wisconsin,” representing the communities near proposed projects. From northeastern Wisconsin, speakers opposed the Crandon metallic sulfide shaft mine, planned by Toronto-based Rio Algom Ltd. to operate next to the Mole Lake Chippewa Reservation (famed for its wild rice beds), and upstream from the Wolf River and the Menominee Reserva-

tion. Native nations and sportfishing groups—former adversaries in treaty rights conflicts—have joined together to protect the fishery from a “threat” of acidic contamination that would for last thousands of years.

The Mole Lake Drum opened the rally, honoring elders who have fought the Forest County mine proposal for 25 years. Menominee Treaty Rights and Mining Impacts Office Director Kenneth Fish said, “Earlier I noticed there was an eagle flying in the sky.... northern Wisconsin is going to be a nesting ground for corporations to take our natural resources. When they are all gone, we’re going to be looking at Superfund sites. We’re going to leave a legacy to our future generations of not being able to swim in this water.”

College of the Menominee Nation student government representative Elizabeth Warrington said, “The youth are the building blocks of our nation... We need to support each other in every effort if we are going to bring this state back to the people.”

Chairman Chuck Sleeter of Nashville Township, which includes Mole Lake and half of the Crandon mine site, described his efforts to overturn the previous town board’s “Local Agreement” with the mining company. “The company came to Nashville and took democracy away from the people,” he said. “These are some of the bravest people you have ever met; they have been under siege....” Sleeter also praised the diversity of the rally, which he said, “doesn’t happen that often.”

Langlade County resort owner and Trout Unlimited chair Herb Buettner said, “For decades we have been fighting to keep the Wolf River clean, and it is still one of the last watersheds of pristine groundwater... People power is the final power of democracy. We don’t have democracy now; we have government of the special interests.”

Other speakers criticized the DNR’s “undermining” of the state’s 1998 Mining Moratorium Law, by opening loopholes that allow the company to present examples of “safe” metallic sulfide mines that cannot prove the safety of its Crandon operation. Speakers also noted that the mine would be the largest toxic waste dump in state history, and use 18-20 tons of cyanide per month in ore processing.

Milwaukee student artists carried huge banners backing a ban on cyanide in mines, much as Montana voters have enacted. They also erected “headstones” representing rivers around the world that have been “killed” by cyanide spills from mines. Milwaukee Steelworker Gerry Gunderson, of the Committee of Labor Against Sulfide Pollution (CLASP) and Mining Impact Coalition, also read union local and federation resolutions opposing the Crandon mine.

In northwestern Wisconsin, farmers and others along the proposed Duluth-to-Wausau route of a 345-kilovolt-transmission line have formed the new grassroots group Save Our Unique Lands (SOUL). Rural residents fear the health effects of stray voltage on cattle and human beings, and defends the property rights of landowners who do not wish to sell land to utility corporations. SOUL President Tom Krueger said “It’s about time Wisconsin went back to the people. Let’s use the alternatives we know exist, but the PSC and utilities think we’re too stupid to know.”

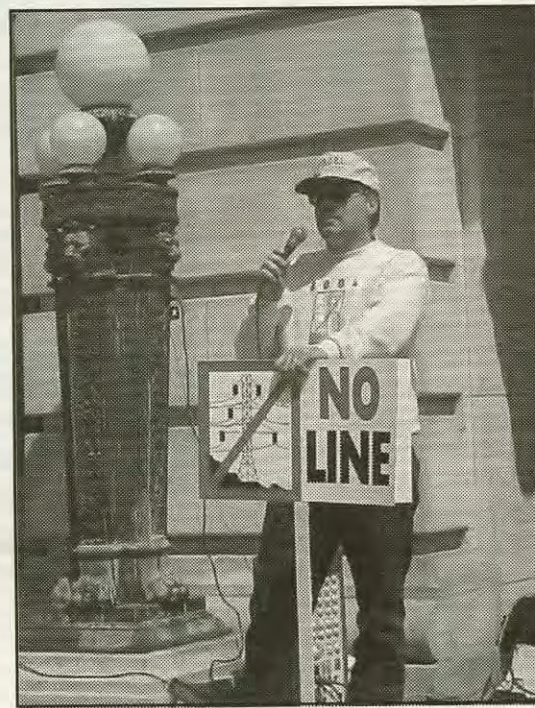
Ann Stewart, U.S. representative of Pimicikamak Cree Nation in Cross Lake, Manitoba, described how hydroelectric dams—a source of electricity for the proposed line—have damaged rivers in the northern region, causing Indigenous cultural destruction and a high suicide rate.

Nashville Chairman Sleeter noted that a 115-kilovolt “feeder line” is proposed from the main transmission line to power the Crandon mine. He observed, “On one end of the line in Manitoba, a tribe has been devastated. They want to connect the line to another tribe and devastate it as well. That is unacceptable.” Some of the 120 SOUL members at the rally carried signs reading “No Line, No Mine.”

U.W.-Madison graduate student Zoltan Grossman, a co-founder of the Midwest Treaty Network, observed that companies often accuse rural activists of having a Not In My Back Yard (NIMBY) philosophy. He replied that the grassroots groups at the rally instead held a Not In Anyone’s Back Yard (NIABY) philosophy, which questioned the underpinning rationales for corporate projects and overall state policies.

Grossman added: “Whether our issues are mining, transmission lines, Perrier, agribusiness, genetic engineering, union-busting job discrimination, welfare reform, or new prisons, we all have a common denominator. We are all defending our local democracies, economies, and cultures against corporate plans being shoved down our throats with the collusion of government officials. Just as corporations and politicians work together, we should begin to act together as a single Wisconsin anti-corporate movement. Only together can we win.”

(Reprinted from Midwest Treaty Network.)



Tom Kreager, SOUL president, speaking at the Madison rally. (Photo by Adam Dewitz.)

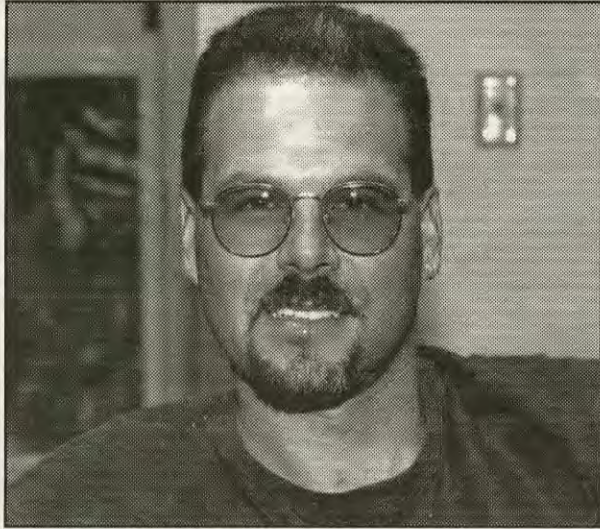
Results from spring 2000 Conservation Congress meetings (attendance—29,938)

Note: Out of 70 questions, the following would relate most to off-reservation treaty seasons.

Question	Yes	No
01 Do you support establishing a mourning dove season in Wisconsin?	21,067	6,036
05 Do you favor reducing the area closed to coyote hunting during the gun deer season?	13,280	5,342
07 Do you favor changing the closing time for small game, bow deer and bear from 15 minutes after sunset to 20 minutes after sunset?	19,624	1,595
08 Do you favor changing the closing time for the firearm gun deer season (including the muzzleloader season) from sunset to 20 minutes after sunset?	18,559	2,751
11 Do you favor requiring registration of bobcat, fisher, and otter within 5 days after the month of harvest?	10,447	3,164
19 To better facilitate the transportation of deer and bear prior to registration, do you favor eliminating the requirement of having to transport deer and bear in an exposed manner prior to registration?	13,088	3,969
26 Do you favor closing the yellow perch hook and line season from April 1 to May 22 in Lake Superior?	4,329	561
30 Do you favor establishing a fish refuge from July 15 to October 31 on the Bayfield hatchery outflow ditch downstream to the confluence with pike’s creek, Bayfield, County?	2,600	382

New wildlife tech, Dan North, jumps right into spring survey work

Odanah, Wis.—As of April 10 Dan North, Bad River band, came on board as the new wildlife technician with the Great Lakes Indian Fish and Wildlife Commission's (GLIFWC) Wildlife Section and headed right to the field with little time to get situated in the office.



Dan North, GLIFWC wildlife technician.

While new to the wildlife section, he is not new to GLIFWC. North has worked for three years as a seasonal employee with the Great Lakes Fisheries Section, primarily working in the field doing siscowet trout contamination studies, juvenile sturgeon assessment, and lamprey control.

North, who is completing a Bachelor of Science in biology at Northland College, arrived just in time to be immersed in the busy spring field season.

To date he's worked on both sharp-tailed grouse surveys and surveys of breeding waterfowl, checking water levels and the emergence of the rice. Later in the year, he anticipates working mourning dove surveys done in cooperation with the Wisconsin Department of Natural Resources.

In addition to field work, which is the bulk of his position, North handles ordering of tags and permits necessary for upcoming deer, bear, and furbearer seasons.

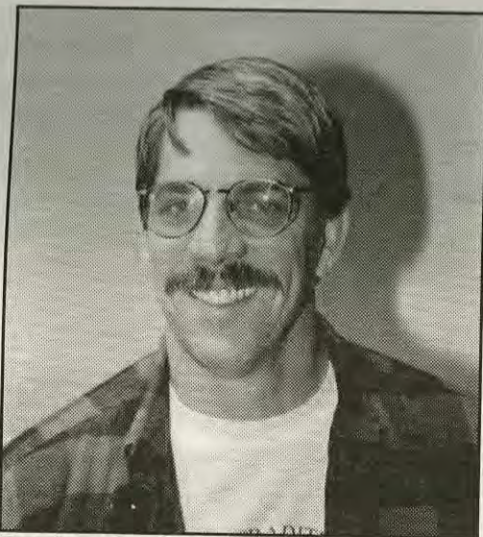
In the fall he will also be returning to school full-time while maintaining his position with GLIFWC. He plans to graduate in spring 2001.

North and his wife, Lenore, moved to the area in 1989 from Ft. Meyers, Florida. They have two sons, Troy and Justin. His passion for hunting was a major incentive for the move. Hunting, both locally and in the western states for elk, is a primary pastime.

Congratulations to Doctor Jon!

Jonathan Gilbert, GLIFWC wildlife section leader, received his doctorate in wildlife ecology from the University of Wisconsin-Madison's Department of Wildlife Ecology on May 19, successfully concluding eight years of study. Gilbert's doctoral dissertation, entitled *Impacts of Reestablished Fishers on Bobcat Populations in Wisconsin*, is based on data acquired through field studies using radio-telemetry to track tagged fisher and bobcat.

The results of the dissertation will be published in the future. The initial publication will be in the proceedings of a bobcat symposium held in Nashville, Tennessee in September.



Dr. Jonathan Gilbert



Helping hands arrived to assist Public Information staff transport a Masinaigan shipment last March. Lucas Deford and Dan Soulier lent time and muscle to getting the load from ground floor to the second floor Public Information Office. Their help was much appreciated. (Photo by Charlie Otto Rasmussen.)

New voice on the radio

Jon Shubat, GLIFWC's part-time dispatcher

Odanah, Wis.—Jon Shubat, Ashland, joined the Great Lakes Indian Fish and Wildlife Commission's (GLIFWC) Enforcement Division as a permanent part-time dispatcher on June 5. Prior to this, he worked in dispatch on a temporary basis for several weeks and as a seasonal creel clerk with Biological Services for eleven years.

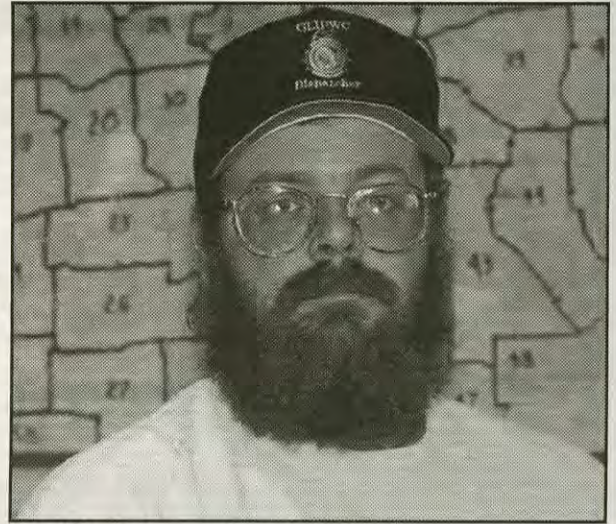
Because of his prior experience with GLIFWC, Shubat is already familiar with most of the warden staff and knowledgeable of radio procedures. Adjusting to life in the office rather than outdoors and learning some of the office equipment will be the biggest changes.

Shubat has an associate degree from Northland College in the Natural Resources Technician Program and is interested in further educational opportunities, particularly relating to computer technology.

Besides seasonal employment with GLIFWC, Shubat has his own carpentry business, White River Construction. He especially enjoys building furniture.

Shubat also enjoys hunting, fishing, and outdoor life, stating that he will miss being on the landings each spring for the spearfishing season.

He has two daughters, Chelsea and Alice, both Bad River tribal members.



Jon Shubat, part-time dispatcher

Good summer reading

Two popular books from the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) Press were recently reprinted. **Plants Used by the Great Lakes Ojibwe** (1993) and **Where the River is Wide: Pahquahwong and the Chippewa Flowage** (1998) underwent a respective third and second printings last winter.

Plants provides detailed information on 384 species of plants used by Anishinaabe people in the Great Lakes area. Covering plants, shrubs, and trees, the book includes line drawings of each species and ceded territory distribution maps showing portions of Minnesota, Wisconsin, and Upper Michigan. In addition, **Plants** provides English, Ojibwa, and Latin names for most species.

Where the River is Wide examines how the creation of the Chippewa Flowage affected the people of the Lac Courte Oreilles reservation in northwest Wisconsin. From early Ojibwe life to the rise of the resort industry, the book describes the human and environmental impact that occurred upon the flooding of the Indian village, Pahquahwong. Includes rare black and white photos along with detailed maps.

Plants sells for \$20.00 and **Where the River is Wide** sells for \$12.00. Both books are available from GLIFWC. Call or write GLIFWC, P.O. Box 9, Odanah, WI 54861 or phone (715) 682-6619.

Free camping while exercising treaty rights

(continued from page 10)

ber of years. The provision was not resolved at the time when the MOU was signed in December 1998. It will now be incorporated into the MOU.

GLIFWC member tribes signatory to the MOU include: the Mille Lacs band in Minnesota; the Lac Vieux Desert, Keweenaw Bay, and Bay Mills bands in Michigan; and the Bad River, Lac Courte Oreilles, Lac du Flambeau, Mole Lake, Red Cliff, and St. Croix bands in Wisconsin.

National forests within the treaty ceded territories include the Chequamegon-Nicolet National Forest in Wisconsin, and the Ottawa, Hiawatha, and Huron-Manistee National Forests in Michigan.

In order to camp free in a national forest campground, tribal members must obtain a permit from their tribe.

When arriving at the campground, tribal members must follow the campground's registration procedures and complete required campground paperwork.

However, rather than paying a fee, a tribal member will provide the permit to the campground staff, or in some instances, place it in the campsite fee envelope instead of the fee.

Once in the campground, tribal members will be expected to adhere to rules of the campground such as negligent use of fire, disorderly conduct, property damage and so on.

The Forest Service may also impose some additional campground-specific restrictions at particular campgrounds. Those restrictions will be posted at the campground or the tribes will be notified in advance. Tribal members will be expected to comply with these additional rules. A temporary fire ban is an example of such a restriction.

Camping at national forest campgrounds while exercising treaty rights will be under tribal regulation; therefore violations will be cited into tribal courts. For further information on fee exempt camping provisions, contact either your tribe or GLIFWC at (715) 682-6619.

House appropriations bill falls short of need in Indian Country

By Debbie Koch, HONOR Advocacy Office

Fiscal Year 2001 appropriations

On May 17 the House Interior Appropriations Subcommittee reviewed the budget proposal for Fiscal Year 2001 (FY01) for the Department of the Interior, which Indian programs fall under. This bill includes appropriations for the Indian Health Service (IHS) and for the Bureau of Indian Affairs (BIA), including the administration of many Indian programs, BIA Indian Education programs, and the BIA Office of Special Trustee.

Both the House and the Senate will meet to determine spending levels, then work out the differences in a conference committee. The House Subcommittee's version of the Appropriations Bill falls far short of both the President's request and the level of need in Indian Country.

Partly this is because the subcommittee received \$386 (2.6%) million less than the amount needed to maintain the current funding for all programs under its jurisdiction (which includes, in addition to the BIA and IHS, the National Park Service, the Bureau of Land Management, the Fish and Wildlife Service and other agencies). The Subcommittee's bill would provide only a \$30 million increase (1.3%) for the IHS, \$200 million below the Administration's request, and less than is needed to keep up with inflation. The House bill also fails to provide sufficient funds for BIA programs to even keep pace with inflation.

This House bill is another step in the appropriations process that will continue until early fall.

Special trustee nominated to reform trust funds

In 1994 the American Indian Trust Reform Act established the position of a Special Trustee to oversee and direct all aspects of trust fund management reform with the BIA, the Bureau of Land Management, and the Minerals Management Service.

The job includes the coordinating policies, practices, developing systems, technical assistance, training and recruitment of Indians in the management of trust funds, and regular reporting to tribal and individual Indian account holders.

The 1994 Act specifically requires appointing a Special Trustee who possesses the ability and experience in the general management of large entities along with knowledge of trust fund management, management of financial institutions, and the investment of large sums of money.

On March 22 the Senate Committee on Indian Affairs (SCIA) held a hearing on the pending nomination of Thomas Slonaker for this position as Special Trustee for American Indians. Mr. Slonaker earned his MBA from Harvard University in

Sen. Inouye, ogichidaa, receives a Medal of Honor

GLIFWC thankful for his courage on behalf of Indian nations

By Sue Erickson
Staff Writer

Odanah, Wis.—News that Senator Daniel Inouye, D-Hawaii, is to receive the military's highest honor, the Medal of Honor, for bravery and leadership in WWII, was received by the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) with deep appreciation for the Senator as an ogichidaa (warrior).

Senator Inouye has proven himself on both military and political battlefields. To the benefit of Indian tribes, he has exercised leadership and courage by recognizing and protecting the sovereignty of Indian nations within the United States during times of great controversy.

Expressing appreciation for his leadership on behalf of Indian nations, GLIFWC's Board of Commissioners passed a resolution during the May 22 board meeting at the Sokaogon/Mole Lake reservation.

"Senator Inouye exhibits the same valor, courage and heroism in carrying out his duties as a Member of Congress, particularly as to the sovereign relationship between the United States and Indian Nations, and the solemn obligations of the United States toward those Nations," the resolution reads.

It continues to acknowledge the important role Sen. Inouye has played in "ensuring that treaty guarantees to



Sen. Daniel Inouye

the Great Lakes Indian Fish and Wildlife Commission's member Nations have been honored."

Inouye, along with 19 other Asian-American WWII heroes, will receive the Medal of Honor during a White House ceremony on June 21.

Inouye led a platoon of the Japanese-American 442nd Regimental Combat Team, successfully breaking through German defenses in 1945 and aiding to end the Italian campaign.

During the battle, Inouye continued to lead his men despite being severely injured. The battle cost him one arm and nearly his life. Besides enduring physical injury from the enemy, Inouye and other Japanese-American warriors were victims of anti-Japanese, racist sentiments that were prevalent in America at the time. (See story by Michael Hull.)

1960. He was the senior vice president of the Mellon Bank and Federated Investors. In 1993 Slonaker joined the First Interstate Bancorp (now Wells Fargo) and became an executive vice president and chief investment officer with investment responsibility for approximately \$27 billion of trust assets.

After giving the tribes an opportunity to meet with Mr. Slonaker and take his nomination under consideration, the SCIA confirmed Mr. Slonaker on April 5.

Bureau of Indian Affairs

In 1998 the Assistant Secretary for Indian Affairs and the Assistant Secretary for Policy, Management and Budget of the Department of the Interior (DOI) discussed commissioning a study to establish a blueprint for improving the BIA's management and administrative systems. The result was a study done by the National Academy of Public Administration (NAPA).

On April 12 the SCIA held a hearing on the NAPA Report on BIA Management and Administration. NAPA found serious management and administrative deficiencies at BIA but also stated that the agency is showing hopeful signs of improvement. NAPA went on to say that the BIA does not have the capacity to effectively perform basic federal functions of accounting, property management, human resources management, procurement, and information resources management. Further complicating matters at BIA is the fact that staff do not receive adequate training.

Speaking for the DOI and the BIA, Assistant Secretary for Indian Affairs Kevin Gover stated his intention to implement the NAPA recommendations in order to significantly improve the BIA's efficiency and effectiveness, and to increase accountability throughout the organization.

(See House appropriations, page 23)

The Japanese-American 442nd Regimental Combat Team fought bravely in eight major campaigns

By Michael D. Hull

Army Lieutenant Daniel K. Inouye of Hawaii dreamed of becoming a doctor after World War II, but his hopes were shattered on an embattled ridge overlooking the Italian town of San Terenzo in April 1945.

Inouye was leading a platoon of the 2nd Battalion, 442nd Regimental Combat Team, when it came under fire from a bunker manned by die-hard Italian Fascists fighting for the Germans. There was no cover on the hill, so Inouye crawled up alone to reconnoiter.

As he was taking out a hand grenade, he was hit in the stomach by machine-gun fire. He was knocked down but managed to get up, pull the pin, run to within five yards of the nearest of three machine guns, and throw the grenade inside the position. As the gunners struggled to their feet, he raked them with his Tommy gun.

While his men were pinned down by enemy fire, Inouye, bleeding from the stomach, staggered farther up the hill and threw two more grenades into the second enemy position. He fell again. Dragging himself toward the third machine-gun position, he stood up and pulled the pin from another grenade. Just as he was about to throw it, an enemy rifle grenade smashed his right elbow.

His men ran to help him, but the young officer ordered them back. With his good left hand, he tossed the grenade and destroyed the position. With his right arm flapping at his side, he started finishing off the enemy survivors with his Tommy gun. Then he was hit in the right leg and fell down the hill.

When his men ran to him, Inouye yelled: "Get back up that hill! Nobody called off the war!" He refused to be evacuated until his men were deployed in defensive positions.

Twenty-five enemy troops were killed and eight captured in the action. Inouye's right arm had to be amputated, and his dream of becoming a doctor ended. But he was awarded the Distinguished Service Cross. And, many years later, Democratic Senator Daniel Inouye went to Washington to represent Hawaii, the first Japanese-American member of Congress.

His bravery, incredible though it was, was not unusual in the 442nd Regimental Combat Team (RCT), whose indomitable esprit de corps became a legend of the U.S. Army in World War II.

Made up of Nisei (Japanese-American citizens), it fought in eight major campaigns in Italy, Southern France, the Rhineland and Central Europe from September 1943 to May 1945 and won seven Presidential Unit Citations. Some high-ranking U.S. officers, initially opposed to the use of Nisei troops, came to regard them as the best assault troops in the Army. The 100th Infantry Battalion of the 442nd suffered so many wounds and deaths at Monte Cassino that it was nicknamed "the Purple Heart Battalion."

The 442nd "Go for Broke" RCT was the most decorated unit for its size and length of service in American military history, and *Honor By Fire* (Presidio Press, Novato, Calif., 1995, \$24.95) is the definitive book on the group. The author, Lyn Crost, covered the 100th Battalion for the *Honolulu Star-Bulletin*, and she has written a thorough, dramatic and compelling narrative.

Crost explains that the Nisei GIs' service was all the more heroic because, while they were fighting for their country and freedom, their own liberties were from time to time in question.

As President Harry S. Truman told the 100th Battalion when it returned from Italy in July 1946, "You fought not only the enemy, but you fought prejudice—and you have won."

The anti-Indian network: A profile

The anti-Indian movement began back in the 1500's and has taken many forms. The basis is land, the lust for Indian land. Hating those "in the way" to acquiring Indian lands made it easier to develop solutions to "the Indian problem." Actually, the term, "the Indian problem" was a well-recognized phrase for much of the 18, 19, and 20th centuries. Unfortunately, it is still being used—albeit with much more sophistication—in the 21st century.

The red flag (literally) for those who dislike, disrespect, disavow, and dispossess Indians is one word. Sovereignty. It inflames those who tout the patriotic slogan "equal rights for everyone." Neat slogan...who could argue? But, groups who use it don't really want equal rights under the law because the laws and the U.S. Constitution recognize Indian tribal sovereignty. The slogan itself misleads.

Various remedies have been tried to solve "the Indian problem." These include massacres, stolen children, forced marches, boarding schools, the Dawes Allotment Act, termination (of tribes), relocation, involuntary sterilization and medical experimentation, religious persecution, forced loss of Native languages, and disease. Alcohol was a favorite tool of land grabbers. All of these remedies had their advocates in high places.

The American public went along. After all, it did open up more land. Ranchers, miners, oil interests, real estate developers, timber companies, railroads, and churches all had their own stake in these remedies. No one argued about the terminology "the Indian problem." Most agreed that Indians would disappear, and the interim remedies were endorsed.

It almost worked, but American Indians are still here. Not so many now—the population went from (about) 12 million when Columbus arrived, to 2.1 million now.

This brings us up to the 1970's when "fishing wars" erupted in the Pacific Northwest. As tribes exercised fishing rights and had them affirmed in the courts, groups not unlike the Klan sprang up. Unlike the Klan, however, the target was Indians...and the group names were patriotic sounding. As sovereignty and treaty rights were exercised in Washington, then in Wisconsin, then in Montana, and Minnesota, and New York, and Canada, and South Dakota, and Arizona, protest groups formed.

At first the tactics were crude. Basically, they consisted of standing at boat landings and hurling rocks and insults at American Indians. Then a national umbrella group called Citizens for Equal Rights Alliance (CERA) was formed. It encompasses most of the other groups in Indian Country, has its own newspaper,

Sawyer County deletes 'squaw' names

By Terrell Boettcher
Sawyer County Record

Hayward, Wis.—An effort by the Lac Courte Oreilles Tribe and several local women to delete the name 'Squaw' from local roads and waters met with some success in recent weeks in Sawyer County.

The term is deemed derogatory to American Indian women.

The Town of Edgewater Board voted to change Squaw Creek, a tributary on the north end of Lake Chetac, to Heron Creek.

On May 10, the Town of Hunter Board voted unanimously to delete the name Squaw Lake Road from the roadway that runs south from Hwy. B about 11 miles east of Hayward. The board left it up to the 11 residents along the roadway to come up with a different name and recommend it to the board.

Hazel Jonjak, who has been a spokeswoman for the local effort to remove the word from public places, said the Town of Hayward Board will be asked at its June 13 meeting to change the name on the road now known as Squaw Bay off Highway NN.

There is also an ongoing effort at the Sawyer County Board level to delete 'Squaw' from bays and lakes, as a recommendation to the U.S. Geographical Survey and Wisconsin Commission on Place Names.

At the May 10 Town of Hunter meeting, LCO Tribal Governing Board

members gaiashkibos and Art Tainter spoke in favor of changing the name of Squaw Lake Road, as did Jonjak and tribal member Melody Fleming.

Several residents along the road, as well as town board supervisor Eugene Mittlestadt questioned why the name needs to be changed when it has been around for such a long time and no one came forward before to object. "I don't think people look at the dictionary to see what 'Squaw' means," he said.

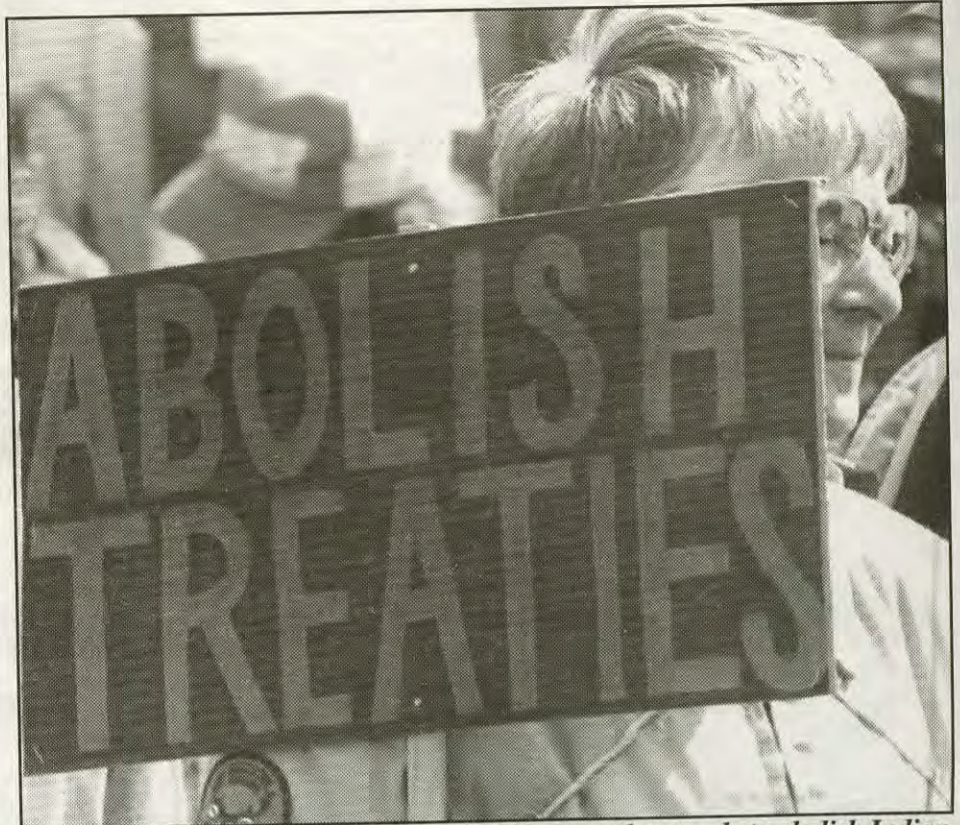
A long-time resident on Squaw Lake Road, Richard Knauel, added that the name "doesn't mean a thing to me. How far back in history are we going to go to try to appease all the groups?"

Town chairman LeRoy Wilmsen said that the term Squaw "is described as a derogatory word in many books. Anything that is derogatory to any class (of people) should go."

Town treasurer Mary Boer said that "all changes take time. We should consider changing (the name). It is offensive to me too."

Jonjak said that "I don't know of one Native American woman in this area who isn't hurt when they hear or see this word (squaw). It's too bad that as neighbors we don't know what hurts each other badly. One reason this (issue) is coming up now is that, at last, Native American people feel they may be heard when they say something has been painful. The history books are still pretty much written by Europeans."

(Reprinted from the Ashland Daily Press.)



Numerous groups throughout the United States seek not only to abolish Indian treaties but also to take away tribal sovereignty. (Photo by Sue Erickson)

website, email, and congressional spokespersons. Senator Slade Gorton (R-WA) is an unabashed mouthpiece for these groups.

The sophistication grew too. Connecting with other right wing groups into a coalition called the "Alliance for Freedom," the anti-Indian groups meet in Washington DC once or twice a year to converge on Congress. They urge that reservations and sovereignty be terminated, treaty rights be abolished, and legal precedents be overturned. CERA recently formed a non-profit charitable organization called Citizens for Equal Rights Foundation (CERF), so that people can get a tax deduction for contributing to the hate agenda and messages.

It's not just Congress that is a focus for these groups. They frequent the halls of state legislatures and actively field candidates for election at every level of government.

Preying on the ignorance of mainstream press and Americans in general, CERA and its cohorts are able to gain airing of false information. One example is the "all Indians are now rich from gaming" myth. This makes good press copy. The fact that tribes are using some of the gaming revenue to reacquire homelands is especially galling to the anti-Indian forces.

This growing animosity prompts HONOR to say "Stop!" We now name some of the groups under the CERA umbrella. As members, you have alerted us to some of these in your hometown. Keep doing that. In the meantime, here are some of the groups targeting the sovereignty, treaty rights, human rights, land interests, and survival of American Indian tribes:

In the US

- Citizens for Equal Rights Alliance (CERA)
- All Citizens Equal (ACE)
- Protect Americans' Rights And Resources (PARR)
- United Property Owners of Washington (UPOW)
- Upstate Citizens for Equality (UCE)
- Proper Economic Resource Management (PERM)
- The Hunting & Angling Club (THAAC)
- Arizona Coalition for Public Lands
- American Citizens Together
- Seneca Co. Liberation Org

In Canada

- Organization of Fisherman & Hunters (OFAH)

And on the other hand...

Nixit and the Point-No-Point Treaty Council in Washington were among the first to document and counter anti-Indian forces. HONOR is patterned after that coalition. Rudy Ryser from the Fourth World Indigenous Studies program in Washington tracked and wrote about these groups extensively. HONOR has monitored and reported on the movement (and the role of the Wisconsin Counties Association in organizing meetings) for 12 years now. Ojibway Sageen Nations in Canada also provides documentation. The Montana Human Rights Network just produced a report, "Drumming Up Resentment," to which HONOR contributed. Faith communities such as the Greater Seattle Council of Churches and tribal groups like the Affiliated Tribes of the Northwest, Great Lakes Inter-Tribal Council, and the National Congress of American Indians have passed resolutions opposing the activities of these groups.

No longer can Indian people, allies, and friends remain silent. As Edmund Burke said, "The only thing necessary for evil to prevail is for good people to do nothing."

Learn. Act. Persist.

(Reprinted from HONOR Digest, March/April 2000.)



Native fishers lose vessels to arson

By Jennifer Dale, Bay Mills News

Batchewana Bay, Ontario—Fred Mearow borrowed throughout the winter to feed his expecting wife and five children, counting on spring fishing revenue to see him back on his feet. What the uninsured Batchewana First Nation fisher didn't count on was an act of vandalism that completely destroyed his fishing vessel and equipment.

"This comes at the worst time of the year," said Fred, his littlest girl asleep in his lap. "I've spent all my money. Food for my kids is my biggest concern."

In the early hours of March 25, three Native fishing vessels docked at the Lake Superior Provincial Park boat launch (near the Algoma petroglyphs) were ruined by arson, the motors destroyed by rifle shots and the ensuing fire. The local Crimestoppers has offered \$5,000 for information leading to an arrest, according to local television ads.

There are no suspects in the case. "Canadian firearm laws are much more restrictive than in the U.S. It's a serious act," said Batchewana Fisheries Coordinator Doug Belanger. "There is no speculation at this time. There are threats from all sorts in regards to commercial fishing activity, so until we get some feeling, we are reluctant to start speculating."

"The threat in the background is that this person or persons could do it again," added Belanger.

Fred Mearow and his brother Darrell Mearow are members of the Batchewana Bay First Nation of Ont., Canada, based in Sault Ste. Marie, Ont. They fish in Lake Superior off Whitefish Harbour for whitefish and incidental lake trout. For the past six years, they used the Algoma boat launch, leaving their vessels and gear on site.

Fred feels "very odd" about the crime. "It's totally shocking. Everyone local knows us. We meet people from all over the world," he said. Reporters calling for a story tried to talk him into a racist slant. But he won't say that—he has no idea who might have destroyed his property.

"The locals, the cabin owners...we all know each other. There's been tension with anglers in general—but I've never been personally confronted." He's worked with commercial fishers who also get harassed, but no one ever followed up on their threats, he added.

Darrell says those who did the crime are cowards. "What did we do wrong to deserve this? They could have come and talked to us, man to man. They were like drive by shooters," he said.

Fred's boat burned so hot its 26-foot steel hull buckled and lead from the nets melted to a puddle underneath the boat. The brothers figure Fred's boat burned so hot because of the fishing nets he'd left inside. "There was 1,200 feet of net that got going and really burned," said Darrell.

All Fred's equipment was stowed on the boat. "I kept all my stuff up there—the parks don't mind as long as it's all tucked up and tidy," he said. "I thought we could trust everybody—we're not leaving our stuff up there again."

Fred's wife, Charlene, said that her husband's damages came to \$16,651, according to their tribal fisheries coordinator. "That was Fred's income last year, by coincidence," she said.



A bullet hole made by a rifle can be seen above in one of the fishers' motor. (Photo by Jennifer Dale)

"It took me all this time to get my nice boat," added Fred. "Now, it's all gone." He has five children, ages 7, 6, 5, 4, and 2, and one on the way. Fred and Charlene gave up a lot so that he could buy equipment. Charlene would almost feel better if the equipment had been stolen. "Such disrespect hurts," she said.

Although Darrell was able to salvage most of his vessel, the motor was destroyed by rifle shot. Another fisher, Allen Djornaa, also lost his motor to rifle shots. His aluminum hull buckled in the extreme heat of Fred's vessel burning up. Djornaa is now fishing with another vessel, in another location.

Belanger, who is coordinating with Ontario Provincial Police (OPP) out of Wawa, Ontario, and the local Crimestoppers unit, calls the crime premeditated. "The OPP's opinion is that the crime was a well-planned act of vandalism," said Belanger. "There is no suggestion that it was random. They used a rifle and brought their own gas."

A search of the scene turned up no shell casings, he confirmed. OPP Constable Eric Keenan said the act was severe but not an isolated incident. "It's a fairly isolated area and there has been vandalism and stolen parts reported in the area before," he told a local daily, The Sault Star on March 27.

"The OPP and Crimestoppers have identified that this has higher priority and urgency than some other issues," said Belanger. "The park should be concerned that someone is running around in the park with guns and gasoline."

Belanger, who finds the crime disturbing, said he's talked to some people who hate commercial fishing and nets, but find the act of arson even more distasteful. "It's a cowardly act," he said.

The fisheries coordinator added he is working with investigative agencies, without toe-stepping, to ensure they fulfill their obligation. He is also working closely with the fishermen to help them cope. "I'm keeping in touch with them so they know it's not being set aside—that agencies are jumping in with both feet."

Belanger has met with other users on the lake to share information. "We think it's random in that it was not a group action," he said. "It's a resource user conflict issue on individual level." He added that there is no difference between Native and non-Native commercial fishing gear, so he can't say the crime was racially motivated, either. But he can say it was "against commercial fishers, because of the nets."

None of the fishermen were insured, due to the fact that they are not licensed by the Ministry of Natural Resources. Instead they are exercising their treaty right to fish, and make a living at it. For the same reason, they are unable to obtain bank financing.

"Everybody is crying insurance scam, but I have no insurance," said Fred. "Native fishing is a day-to-day thing. We're not on welfare, and we're not doing it to get rich." He and his family live off the Batchewana reserve, near Carp River on Batchewana Bay outside of Sault, Ont. He drives 50 miles north to his fishing site.

Fred says a lot of people try fishing, but until they do, they just don't understand how hard it is. But he loves it. "Fishing is not a job, it's an adventure.

When that water kicks up, you can feel it," added Darrell. "You respect it, and it'll do the same for you."

Ninety percent of the fresh local fish in Sault Ste. Marie, Ont., is caught by Native fishers, they said.

"It's not too bad, we can start again," said Fred.

A Fisherman's Benefit dinner was held on April 20. The community pulled together to donate and cook the fish and contribute prizes, Belanger said.

"It's going to take the guys five or six years to recover from their loss," said Belanger. Even if the arsonists are caught, he estimates that the criminal case will take a year, and civil action will take 3 or 4 years.

Belanger said Fred was able to get an interest-free loan for a boat and motor. With the 15 nets Darrell gave him, he's been able to get back in the water. Be he has yet to replace his safety gear.

One of Darrell's customers loaned Darrell \$1,100 for a 30 Hp motor, "It's a small motor for a 22-foot," said Darrell. "But it will get the job done. Getting there is what counts."

(Reprinted with permission from Tribal Fishing, a newsletter of the Chippewa Ottawa Treaty Fishery Management Authority.)

Lake trout in MI-3 looking good

(Continued from page 1) a microscope, rings are visible on the tiny bone which indicate age. Similarly, scales indicate age by the number of rings.

Results from the assessment are presented to the Lake Superior Technical Committee of the Great Lakes Fish Commission for review and then entered into a population model which determines the Total Allowable Catch (TAC) figure for the management unit.

MIDNR, GLIFWC and tribal biologists from Keweenaw Bay, Red

Cliff and Bad River meet to jointly participate in the modeling and determination of the TAC in MI-3.

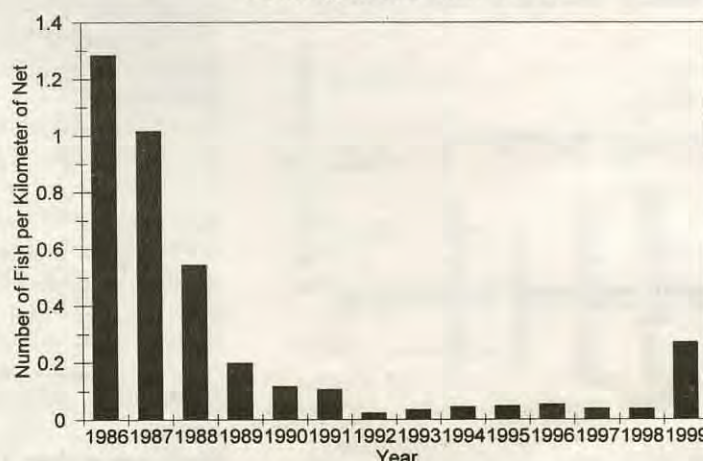
The TAC figure is the base for establishing lake trout quotas for tribal commercial harvests. The TAC for MI-3 is adjusted every five years.

Standardized assessments of lake trout populations in U.S. waters of Lake Superior began in 1959. A standard

protocol, which designates gear, seasons, duration and depth of set, governs the assessment process.

Lake trout assessments are conducted in all lake trout management units in the U.S. waters of Lake Superior and in some areas of Ontario. A specific number of lifts are made per management unit at a specific number of designated sites each year.

Relative abundance of lake trout Management unit MI-3





The best for both worlds

Sport and subsistence opportunities

(Continued from page 2)

"I speared a 49-inch muskie and by the time the rumors got around, it turned into a 65-pound fish," Bisonette said

* * * *

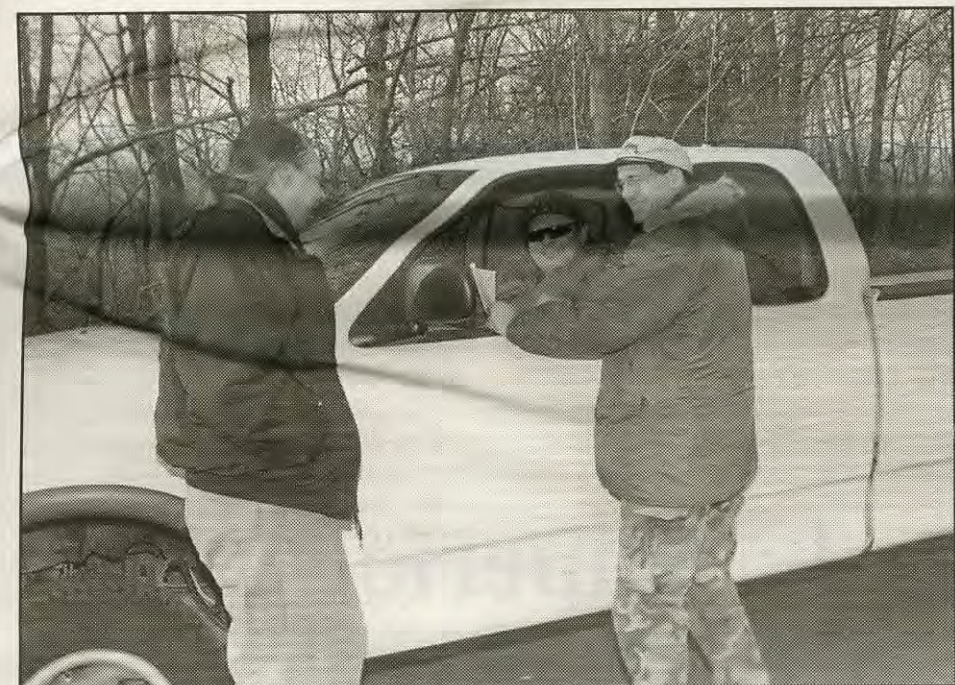
The news spread like a jack pine wild fire and the sportfishing community exploded. Outdoor columnists, WDNR spokesmen, and editorial writers across the state lashed out at Pardun and treaty fishing. The *Hudson Star Observer* decried the violation of a Chippewa Indian spearing "a fish that thousands of anglers would kill for." How dare he? Rage turned to sadness, as muskie worshippers slowly realized that the fish was truly gone. The *Milwaukee Journal* grieved for the loss of the big muskie, lamenting that "there is a sort of sadness in the land." The fish could have made some angler a hero, maybe a legend. That space above the cabin mantle never seemed emptier. The photo album would never be complete.

The 53-inch fish was the largest Pardun had seen in his 25 years. Before processing the meat, Pardun skinned the muskie and removed the head. He would later have it mounted and placed in his home—it's still there today.

Sliced thin and fried in a skillet, the muskie was served at the feast a few days later.

* * * *

We visit the recent past only to bring perspective to the present. Assuming primacy of this revered resource is the fundamental fallacy; a notion that permeates muskie fishing even today. Shaming those who eat muskie—Indian or white for that matter—benefits no one. What's left are bad feelings, stunted muskies, and a bunch of game fish looking for a place to hide.



A meeting of biological minds—Neil Kmiecik, GLIFWC biological services director; Joe Dan Rose, GLIFWC inland fisheries section leader; and Brian Borkholder, Fond du Lac fisheries biologist at Mille Lacs Lake this spring. (Photo by Sue Erickson.)

Fish managers, property owners to discuss Lake Namekagon fishery

By Charlie Otto Rasmussen
Writer/Photographer

Lac du Flambeau, Wis.—In response to a request made by the Lake Namekagon Area Improvement Association (NAIA), GLIFWC inland fisheries staff is scheduling a June meeting to examine the Lake Namekagon walleye population and discuss possible options for managing it.

The Wisconsin Department of Natural Resources will join tribal and NAIA representatives to consider how changes in bag limits, minimum size limits, and slot sizes for walleye and muskie could improve the overall fishery.

Representatives for NAIA appeared at the May 11 Voigt Intertribal Task Force (VITF) at Lac du Flambeau

to solicit involvement from GLIFWC member tribes.

Dick Sternberg, NAIA fisheries consultant, said local property owners were concerned that walleye under the current angler size limit of 15 inches had become overabundant, hampering overall growth rates. Harvesting mostly smaller walleye and increased angler bag limits could be beneficial to the population, he said.

Sternberg said that any adjustment in fisheries management was contingent on up-to-date walleye population assessments.

Bad River and Red Cliff bands generally harvest walleye from Lake Namekagon during the spring spearing season. Bad River has assisted Lake Namekagon property owners in the past with fish culture and restocking efforts.

There is a new spirit in the air, however, and muskie anglers and treaty speareers should realize they're setting foot back onto common ground. This time around, fishermen are working with a significantly larger muskie population. Thinning out some smaller muskies, enables more fish to achieve trophy status. Whether you want to eat 'em, mount 'em, or snap a photo, it's a pretty good set up.

The northern Wisconsin muskie fishery is thriving, managed by a blue-chip cast of tribal, state, and federal biologists, providing ample opportunity for all user groups. For some, spearing walleye will remain absolutely unconscionable. And the occasional trophy fish taken by spear will only fuel their misguided resentment. The rest of us can look forward to the dawning hey day of muskie fishing, be it with spear or hook.

Eat a muskie, save a walleye

Rising muskie numbers on ceded territory lakes affects the composition of the muskie population as well as other fish species. Aggressive stocking and voluntary catch and release fishing creates artificially high numbers of muskies at the expense of smaller forage fish.

A 31-year WDNR study of Bone Lake (Polk County) in northwest Wisconsin revealed that the creation of a high density muskie population significantly decreased the average weight of those fish. Over the same time period, large yellow perch, the principal prey species, declined.

While conducting an electrofishing survey of Crescent Lake (Oneida County) in northeast Wisconsin last spring, GLIFWC lake crews encountered "extremely high" numbers of walleye (5%) exhibiting scars and bite marks on their underbelly—indicative of attempted esox predation. Although some northern pike were shocked to the surface, the majority of the big predator fish that showed up were muskies.

Wisconsin spring spearing season sets new records

(Continued from page 1)

From an enforcement standpoint, White says the season went very well overall. No incidents in Wisconsin or Michigan were recorded. The number of citations were down this year. He believes many of the larger fish remained out in the deeper water. Therefore, fewer size violations were issued.

White was pleased with the participation in the season. "Despite bad weather, the people still fished. This shows a lot of interest in the fishing opportunities the treaty right offers," he says. "I also noticed some new faces out there spearing. It's nice to see that, especially parents bringing children."

For enforcement and biological staff assigned to monitoring all open landings on a nightly basis, the spring 2000 season may have set another record—the most grueling.

The spring spearing season is always intense, requiring enforcement

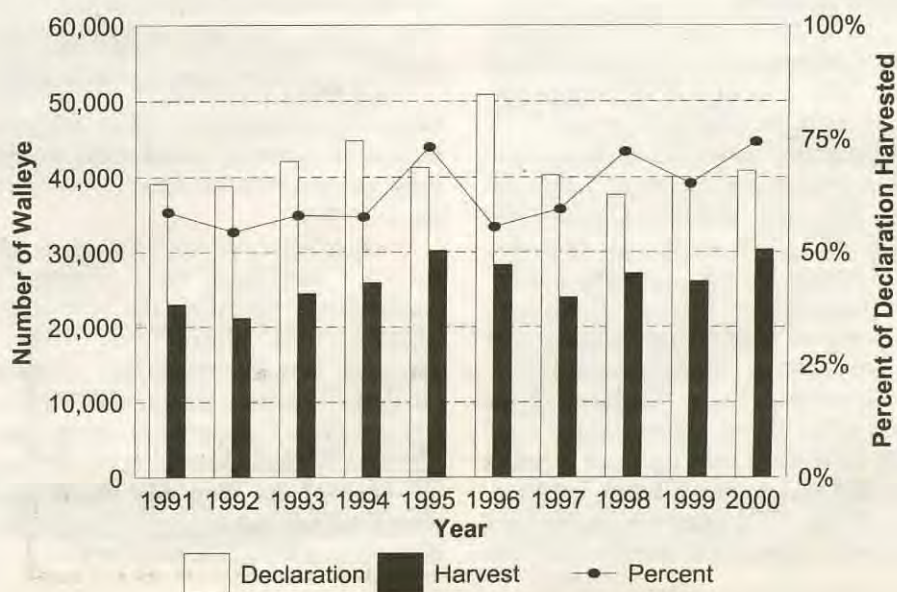
and creel staff to be on landings night after night during the season. The schedule requires endurance. This year's extended season and frequently unfavorable weather conditions made a tough year for an uncomplaining staff.

"There were some pretty miserable nights," says Sgt. Larry Mann, Lac du Flambeau, "but they got their fish." Mann says the season was nearly double in length from previous years.

Typically, warden/creel teams meet around 5:00 p.m. on each reservation to determine landing assignments. From there they disperse to the lakes where they check permits and gear, and wait until the fishermen return off the lake to count and measure the fish. The last boat can arrive around 2:00 to 3:00 a.m.

Nightly catch reports are filed with GLIFWC's main office, so daily bag limit adjustments on each lake can be made.

Tribal walleye declaration & harvest 1991-2000



Sewage troubles for Mille Lacs

By Tom Meersman
Star Tribune

Onamia, Minn.—Sewage that is leaking into Lake Mille Lacs—one of Minnesota's most popular and productive walleye-fishing spots—is threatening the lake, pollution authorities say. Bob Newport, a water quality specialist with the Environmental Protec-

tion Agency (EPA) in Chicago, said too much phosphorus, especially from sewage that leaks into the lake, could eventually transform Mille Lacs from a place of relatively clear water and a sandy bottom to a lake full of algae, aquatic plants and silt.

"We have started to see preliminary indications of degradation of the lake," he said. "If nutrient loads continue to build in the lake, it can change

to a system dominated by sunfish and bass instead of walleye."

State, federal and tribal officials have met with area residents to discuss a proposed \$23 million sewage treatment plant that would be built and operated by the Mille Lacs Band of Ojibwe, with sewer hookups to the city of Garrison and portions of Garrison and Kathio townships.

Untreated sewage is a problem because the communities along the western shore use individual septic systems, which have largely failed. A recent study for the city of Garrison concluded that more than 95 percent of its septic systems are "imminent health threats, failing or nonexistent."

Because the water table is high, even expensive mound systems don't effectively filter contaminants from septic systems before they enter the lake or ground water, said John Schley, the 18-year mayor of Garrison.

Schley said his city, which has about 200 residents, tried to build a sewage treatment plant in 1988 but didn't because it was too expensive.

The tribe also needs to upgrade its sewage treatment system, which consists of stabilizing ponds that can't keep up with the band's expanding need for housing.

Patricia Burke, environmental programs manager for the Mille Lacs band, said the tribe needs to add about 30 homes per year for the next 15 years but can't build them until a larger and better sewage treatment system is available.

Although both the tribe and its neighbors are concerned about the lake and its fishery, they also fear that failing septic systems will contaminate the ground water that they drink. "Everybody shares the aquifer," Burke said. "If anyone pollutes it, that affects all of us."

Building a sewage collection system and sending waste to the tribe for

treatment in a state-of-the-art plant is a perfect solution, Schley said. "The band said we should do a regional project, and we're more than glad to get in on it," he said.

Garrison and portions of Garrison and Kathio townships formed a sanitary district that includes about 1,000 households and businesses, all of which would be required to join a sewer system if it is built. The district has applied for state and federal grants to help finance its share of the project. Schley said it's premature to predict how much the hookups will cost individual homeowners.

Schley expects a "small fraction" of citizens to object to the proposal, primarily those with seasonal cabins who won't want to pay monthly sewer service charges. "When they leave their homes in the city for a few months, they don't stop paying their sewer bills in the city," Schley said. "It shouldn't be any different here."

The sewage plant would also serve about 700 tribal households and businesses, including its casino. The tribe will receive a \$6.7 million grant from the EPA that will finance about two-thirds of its share of the cost. After treating the sewage, the wastewater plant would discharge the byproduct to wetlands that eventually drain into Ogechie Lake and the Rum River.

The EPA's Newport said the wastewater plant would meet strict federal water quality standards. "There will not be adverse impacts to the wetlands," he said. "We don't want to solve one problem by creating another."

The tribe must receive water quality permits from the EPA, and the sanitary district needs to receive connecting permits from state pollution control authorities, Schley said. If approved, construction could begin in spring 2001.

(Reprinted from the Minneapolis Star Tribune.)

Lake Superior fish meet FDA restrictions for chemical contaminants

(Continued from page 9)

Benzene hexachloride, DDT, aldrin/dieldrin, mirex, and heptachlor/heptachlor epoxide findings

All Lake Superior fish samples (lake herring, lake whitefish, lake trout, or siscowet trout) were far below the U.S. FDA's action limit for these chemical contaminants. (See table 6)

Chemical	FDA Action Level (ppb)	Lake Herring (15-17 in.) n = 4 Mean (Range)	Lake Whitefish (22-24 in.) n = 4 Mean (Range)	Lake Trout (25-26 in.) n = 4 Mean (Range)	Lake Trout (27-28 in.) n = 8 Mean (Range)	Siscowet Trout (22-23 in.) n = 8 Mean (Range)	Siscowet Trout (24.5-25.5 in.) n = 6 Mean (Range)
Benzene hexachloride	300	0 (0-0)	1.5 (0-7.0)	6.2 (5.4-7.3)	5.8 (4.7-8.1)	4.4 (1.6-6.9)	12 (10-18)
DDT & metabolites	5000	3.8 (0-20)	4.8 (0-30)	130 (85-170)	230 (150-380)	630 (260-1300)	680 (470-1000)
Aldrin/Dieldrin	300	7.2 (0-9.6)	0 (0-0)	26 (23-32)	35 (28-48)	79 (32-130)	78 (60-120)
Heptachlor/Heptachlor epoxide	300	0 (0-0)	10 (3.4-15)	5.9 (5.4-6.3)	6.8 (5.7-8.6)	12 (2.3-26)	12 (8.5-20)
Mirex	100	2.5 (2.5-2.5)	0 (0-0)	0 (0-0)	0 (0-0)	7.8 (0-27)	17 (10-38)

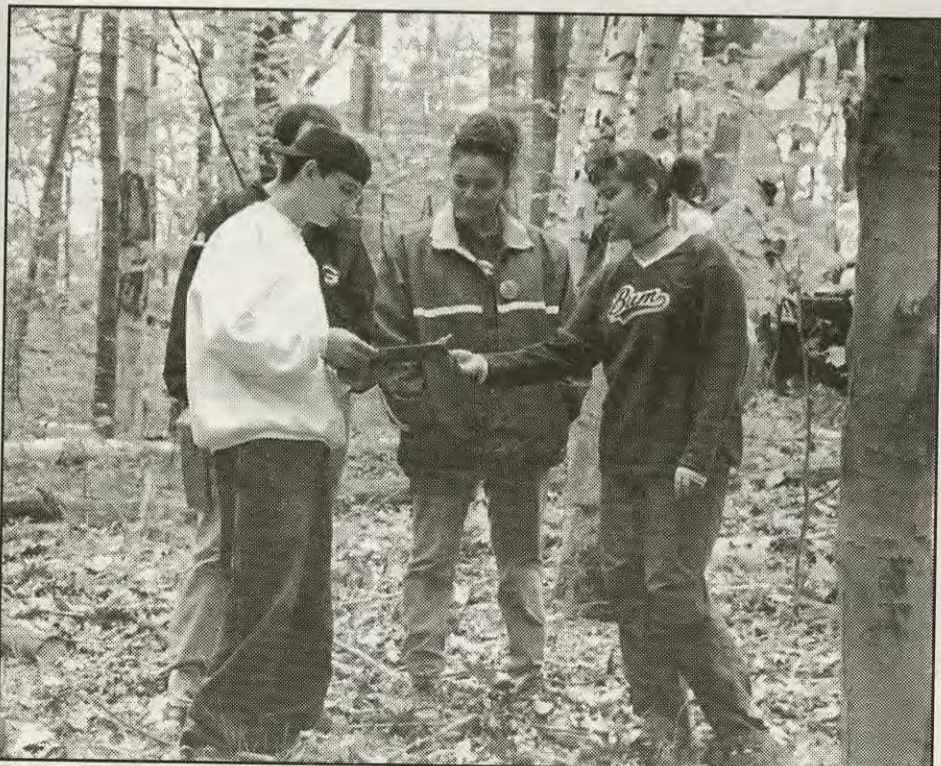
n = Number of composite samples each containing 7 to 13 fish

(Table 6.)

Acknowledgments

This project was funded by the Administration for Native Americans. The project would not have been possible without the participation and assistance from tribal commercial fishermen, tribal biologists and GLIFWC staff.

(Editor's note: The next issue of Masinaigan will provide additional information regarding Lake Superior fish contaminants and GLIFWC's Hazard Analysis Critical Control Point (HACCP) project.)



Preparing to compete in the 2001 Envirothon, student representatives and advisors from four Ojibwe bands attended the Canon Envirothon held May 10 at Amherst Junction, Wisconsin as observers. Representatives from St. Croix, Lac Courte Oreilles, Mole Lake, and Bad River watched the competition, which is focused on environmental knowledge, so they can develop teams for next year's Envirothon. Above Mole Lake representatives go through the "forestry competition," one division of the Envirothon. Pictured are David Thomas, Earl Thomas (behind David), Tina Van Zile, and Sheena Tuckwauk. (Photo by Jim St. Arnold.)

House appropriations bill

(Continued from page 19)

Health care

On May 10 the SCIA held the second of three hearings on draft legislation to reauthorize the Indian Health Care Improvement Act (IHCA) first passed in 1976. Authorization by the government means that programs will continue to exist, although they may not be funded.

The Act authorizes IHS programs, which provide comprehensive health care to qualifying American Indians and Alaska Natives who reside within IHS service delivery areas. Support from tribes is strong for this program because the legislation was developed by tribal consensus.

Although the legislation was introduced on May 9 by Senators Ben Nighthorse Campbell (R-CO) and Daniel Inouye (D-HI), little movement on this important reauthorization is expected to happen this year.

Leonard Peltier

On May 17 a briefing sponsored by the offices of Rep. John Porter (R-IL) was held in Washington, D.C. concerning the parole of Leonard Peltier. Speakers calling for the parole of Peltier included Nobel Peace Laureate Rigoberta Menchu of Guatemala, representatives from Amnesty International, Ernie Stevens with the National Congress of American Indians, and survivors of the Pine Ridge Reservation "Reign of Terror," which took place from 1973-1976.

Leonard Peltier is a Native American leader who has been incarcerated in the United States for 24 years, following his highly controversial conviction for the murder of two FBI agents.

Despite disturbing evidence of FBI misconduct in the case, including the coercion of witnesses, the intentional use of false evidence and the concealment of a key ballistics test reflecting his innocence, Peltier has been denied a new trial and is long overdue for parole. He has been recognized by numerous human rights organizations, religious leaders and Nobel laureates as one of the United States' few political prisoners.

Peltier is up for parole June 12, 2000, and this briefing was the first official airing of the issue in the Capitol.

For more information on these or other issues please contact the HONOR Advocacy Office at 202-546-8340 or email us at honor@dgsys.com.