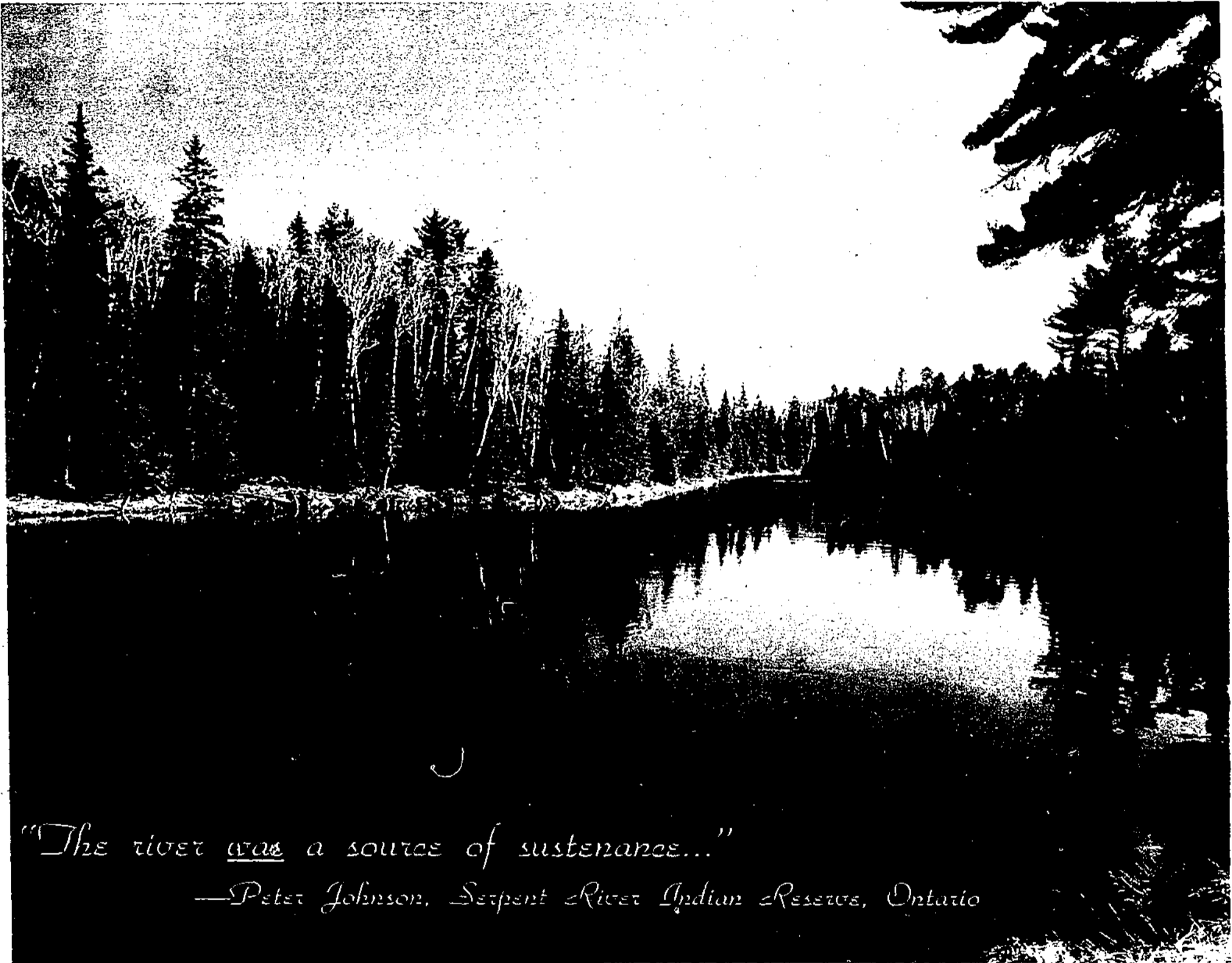


MASINAIGAN

MASINAIGAN (MUZ IN I AY GIN) A publication of the Great Lakes Indian Fish & Wildlife Commission

Summer 1994



"The river was a source of sustenance..."

—Peter Johnson, Serpent River Indian Reserve, Ontario

The stories told by people from the Serpent River Indian Reserve, Ontario, Canada relate to the dilemma which Crandon Mine's proposal now presents in northern Wisconsin. The product at the Rio Algom's Elliot Lake mines is uranium. Only one mine remains open now, and the price of a fleeting prosperity brought by the mining industry cannot be counted in dollars (See page 7 for The Serpent River Story: The aftermath of mining.)

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Conservation Congress favors resource protection over mining de-regulation

By Sue Erickson
Staff Writer

Stevens Point, Wis.—The Wisconsin Conservation Congress voted favorably on several proposed rule changes aimed at protecting the state's water resources during its annual meeting on May 13-16th at Stevens Point. The action was encouraging to many Wisconsin tribes currently concerned about the impact of mining on the resources.

Of specific interest to the tribes were three advisory questions which had been voted on during the annual spring hearings held in each of the 72 counties. The questions related to: tax loopholes currently available for mining in regard to tax deductions; the elimination of variances to environmental regulations for mining; and maintaining the classification criteria for outstanding waters. (see side box)

The unanimous vote by the Congress on May 14th favoring protection of the resources followed a presentation by Lewis Hawpetoss, representing Menomonee County. Hawpetoss, also the Menomonee representative to NiWin, an inter-tribal organization in opposition to mining in Wisconsin, urged the Congress to vote in favor of regulations that will preserve the resources.

GLIFWC's Voigt Inter-Tribal Task Force had expressed concern at a spring meeting that the advisory questions receive sufficient support from those favoring strict water quality regulations, and representatives from several tribes attended their respective county Conservation Congress meetings on April 11th.

Al Phelan, administrative assistant to the Bureau of Legal Services and liaison to the Conservation Congress, reported the

results of the voting from the county meetings as follows:

Question #69: regarding eliminating deductions for mining companies in the state—69 counties voted in favor; none voted against; and 3 counties did not vote. The popular vote was 2,716 in favor and 40 against. Write-in votes showed 24 were in favor and 0 were against.

Question #70: regarding the elimination of variances granted to mining companies: 64 counties voted in favor; 4 opposed, and 3 did not vote. The popular vote was 2,467 in favor and 157 against. Write-in votes showed 19 in favor and 4 opposed;

Question #71: regarding retaining the criteria for outstanding waterways: 65 counties voted in favor; 4 counties opposed, and 3 did not vote. Write in votes tallied 23 in favor and 0 opposing.

What next?

According to Phelan, the next step with these questions will be determined by the Wisconsin Department of Natural Resources (WDNR) Board. The results of the Congress' votes will be provided to the Board, he states, and the Board could direct the WDNR to propose rules in compliance with the vote, or the Board could decide not to pursue any further action. It is also possible the WDNR may formulate rules regarding these issues and present them to the Board for action.

In some counties resolutions opposing mining in the state were also introduced and passed according to Phelan. One such resolution addressed the banning of sulfide mining in the state and another was directed at the Exxon mining proposal near Crandon.

These resolutions, Phelan said, will be brought to the Congress's Environmen-

Questions of concern

Net proceeds tax—The Wisconsin Legislature recognized that mining development could result in social and economic changes to local communities. They established a mining tax called the Net Proceeds Tax that would compensate the State and municipalities for costs past, present and future, incurred or to be incurred as a result of the loss of valuable irreplaceable metallic mineral resource. This Net Proceeds Tax (NPT) is based on the gross profits of a mine after subtracting the costs of mining from the gross mining income.

An amended NPT allows for an increase in the number of deductions that can be subtracted from the gross mining income which could be used to calculate a zero tax thus eliminating for the State and its affected municipalities any compensation for the loss of a valuable resource.

Many other States and even third world countries have established a Depletion Allowance that is based on the assay value of the mined resource thus guaranteeing them a return for the loss of a valuable non-replaceable metallic mineral resource.

Do you support the elimination of the net proceeds tax and replacing it with a depletion allowance that is based on the assay value of the mined resource thus guaranteeing the state of Wisconsin a return for the loss of a valuable non-replaceable metallic mineral resource?

Elimination of variances to environmental regulations—The State of Wisconsin has developed regulations to prevent the pollution of our ground waters, surface waters, land and air resources. These regulations must apply to the metallic mineral mining in the state but the State Legislature, thru State Statutes has authorized the DNR to allow exemptions, modifications and/or variances to the regulations developed to protect our environment.

Do you support eliminating the authorization that allows exemptions, modifications and/or variances to the existing environmental regulations for mining?

NR 102 waters classification—In 1985 the Federal Government ordered the State of Wisconsin to upgrade its water regulations to comply with the requirements of the Federal Clean Water Act to assure adequate protection for our remaining clean rivers, lakes and streams. To comply with that order, Chap. NR 103 Wisconsin Administrative Code was adopted, classifying surface waters of the state into three categories with the first, Outstanding Resource Waters (ORW), receiving the greatest protection and followed by two, Exceptional Resource Waters (ERW) and three, Fish and Aquatic Waters (FAW).

There was a concern that the category classification selection process for the approximately 15,000 lakes and 11,000 streams and river segments be done in a consistent manner. To address this concern, the DNR Board adopted a sixteen (16) criteria evaluation process and directed Fisheries and Wildlife personnel to make the evaluations based on data on file, field observations and tests. To date, 201 rivers and streams and 101 lakes have been categorized as either ORW or ERW. There are also others that are being considered for protection.

There is at present an attempt by a coalition of polluting businesses and industry to undo the present selection process so that rivers and streams that are classified can be removed from the protection categories thus allowing discharge into them.

Do you feel that the DNR and the DNR Board should take appropriate actions that would defend and protect the 16 criteria selection process for lakes, rivers and streams for ORW and ERW protection and prohibit the withdrawal or lessening of the classification of any and all waters selected for protection and enhancement?

tal Practices Committee for consideration. The Committee's actions will determine the fate of these resolutions. They could be

killed in committee or they could be reworded into advisory questions for voting on the 1995 questionnaire.

The Environmental committee is appointed by the Congress, so new members will be appointed in June, Phelan states. It is likely the committee will convene in late fall and consider the anti-mining resolutions at that time, he said.

Hawpetoss says that he has been asked by Conservation Congress Chairman Francis "Bill" Murphy to serve on the Environmental Practices Committee. Hawpetoss was pleased at the appointment and feels it will provide an excellent opportunity to include a tribal perspective into the process.

Meeting cordial towards tribes

By invitation of Murphy, GLIFWC provided a booth featuring tribal hatcheries. The stocking effort of tribes is not well-known, Murphy told GLIFWC, when encouraging the tribes to provide information on the tribal stocking effort.

GLIFWC Biological Services Director Neil Kmiecik reported that the booth was well-received at the Congress meeting on Saturday, May 14th. Hawpetoss also (See Conservation Congress, page 25)



Conservation Congress meetings were held in each county throughout Wisconsin this spring in order to get public input on questions being considered by the Congress. Among those questions were several related to the mining issue in Wisconsin. Above, the Conservation Congress meets at the Crandon High School in Forest County. Following the completion of the questionnaire items, Mole Lak: participants introduced a resolution in opposition to mining which was passed. (Photo by Amoose)

Successful assessment season marred by harassment

By Sue Erickson, Staff Writer

Odanah, Wis.—GLIFWC's new electrofishing boat splashed into the cold water of northern Wisconsin for the first time this year, bringing the assessment fleet up to three boats. Biological services staff worked on construction of the boat over the winter months, so were anxious to give it a trial run by the time ice broke up on the lakes.

GLIFWC Inland Fisheries Biologist Glenn Miller and his electrofishing crews spent nearly a month this spring performing assessments on lakes in northern Wisconsin and Michigan. Typically, their season began at the southern reaches of the ceded territories around the St. Croix reservation, where the ice is first to go.

GLIFWC's three electroshocking boats were busy almost nightly from April 15th through May 12th. The season was very productive, according to Miller, as the crews were able to floy tag a substantial number of fish. On some lakes fyke netting was also employed to catch and tag walleye for the annual population studies.

Two electroshocking boats from the Ashland U.S. Fish and Wildlife Service (USFWS), one from the Winona USFWS, and one from the St. Croix band worked cooperatively with GLIFWC crews in completing the spring surveys.

The almost simultaneous opening of many lakes targeted for surveys presented some problems in scheduling, Miller relates. However, surveys on 22 out of 27 planned lakes were completed.

An otherwise peaceful spring season was interrupted when Miller and his crew encountered harassment when working on Lake Superior's Huron Bay in Michigan on April 26th.

During the day an individual had approached GLIFWC Fisheries Technician Ed White regarding the assessment fyke nets set in the bay. White explained the assessment procedure; however, the individual responded with derogatory remarks toward Ed and Native Americans. White proceeded to work, but also jotted down the license plate number.

That evening, according to Miller, the same individual appeared at the Silver River boat landing, Baraga Co., Michigan, used by electrofishing crews and attempted to block Miller from leaving the launching ramp with his vehicle.



Shane Cramb helps ease one of the electroshocking boats into Huron Bay, Michigan as a night of work begins. (Photo by Amoose)

Miller asked to him to move, but met with refusal. The individual continued to make remarks threatening bodily harm and damage to vehicles on the landing if the crew went out on the lakes. Miller dealt with the incident by contacting local and GLIFWC authorities. Several other "protesters" accompanied the person in question, plus the landing was crowded with smelters, Miller stated.

The individuals reappeared the next two nights, Miller says, but on April 28th, they were taken out electrofishing by the crew in order to explain the process. This seemed to abate the fears of some of the men, Miller states.

The spokesperson for the group, Don Baril, appeared before Baraga County Prosecutor Richard White and is on notice for the ethnic intimidation law in Michigan and notified of a first warning on the Michigan stalking law.

Another incident in Eagle River, Vilas County involved a threatening phone call received by the electrofishing crew this spring, according to Miller.



One of the protesters at Huron Bay, Michigan this spring. Authorities were called after threatening comments were made. (Photo by Amoose)



Watching for stunned walleye aboard an electroshocking boat. The walleye are netted and taken aboard to tag and obtain data and are then released. Pictured above are Mark Soulier and Dave Parisien, seasonal electrofishing crews. (Photo by Amoose)

VITTF disappointed in curtailment of walleye exploitation study

By Sue Erickson
Staff Writer

Odanah, Wis.—The Voigt Inter-Tribal Task Force (VITTF), representing six Wisconsin Chippewa bands, expressed concern and disappointment in the Wisconsin Department of Natural Resources' (WDNR) withdrawal of full support for a long-term walleye exploitation study.

The need for more definite data on the walleye fishery became apparent when the Chippewa began exercising their off-reservation treaty rights, according to Thomas Maulson, VITTF chairman.

"All the burden of assuring that there is a fishing opportunity for state-licensed anglers has been put on the Indian people," he says, "and yet fishery managers are uncertain of what their statistical formulas actually mean to the fishery."

"It is time that all user groups sit down on a level playing field and figure out what is impacting the fishery, whether it be hundreds of thousands of anglers, a few hundred spearfishermen, or pollution, and from that develop a better formula for quotas and bag limits based on sound, current information," according to Maulson.

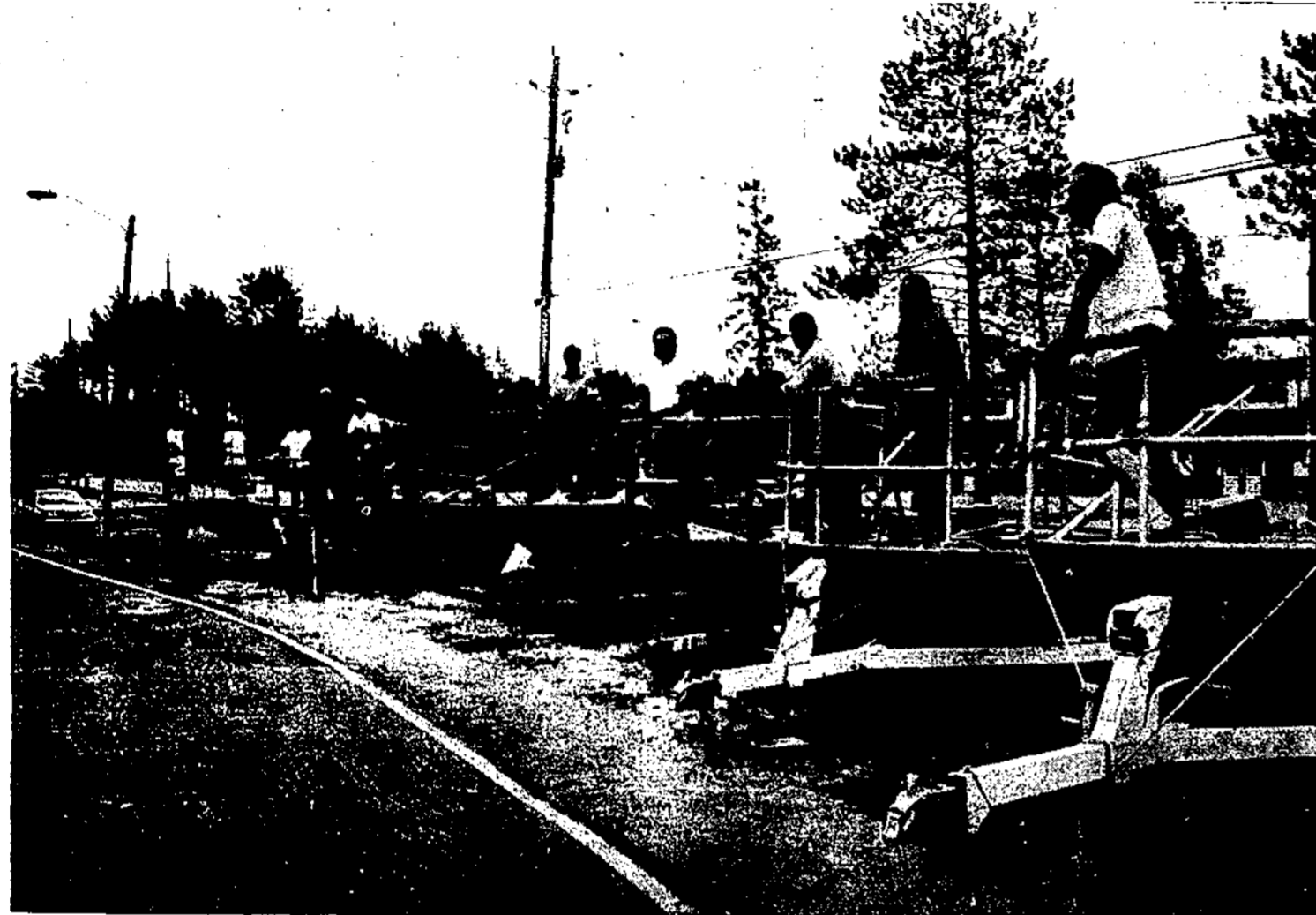
Several agencies, including the WDNR, the Great Lakes Indian Fish and Wildlife Commission (GLIFWC), the U.S. Forest Service (USFS), and the U.S. Fish and Wildlife Service (USFWS) had cooperatively planned an exploitation study involving twelve lakes over a ten year period, according to GLIFWC biologist Andrew Goyke.

However, the WDNR recently announced an administrative decision to limit its involvement. Goyke says that a scaled-down version of the study is now being considered as an alternative route, but the dollar amount being suggested as the ceiling is insufficient to perform the creel survey portion of the study beyond a few lakes. Essentially, this limits the options for the planning committee to consider in developing the study, he said.

The exploitation study was originally designed to provide fishery managers with more accurate information regarding the impact of different exploitation rates. Goyke says that in regard to the treaty fishery, the tribes and the state agreed upon a 35% exploitation rate on walleye; however, there has been no joint analysis done to support it as being the optimum, sustainable level.

The proposed study was designed to look at varying exploitation rates, 0%, 22%, 35%, and 50%, on three lakes at each level. This would provide scientists with the ability to determine how walleye react to the different rates of exploitation in a variety of lakes exposed to a mixed fishery, he said.

Kmieciak noted that there are three elements to the study: First, estimating the



Spring electrofishing assessments are performed jointly with boats and crews from GLIFWC, the U.S. Fish and Wildlife Service, and the St. Croix band, participating. Above, they are pictured in the parking lot of the White Eagle Motel, Eagle River, Wisconsin. (Photo by Amoose)

"It is time that all user groups sit down on a level playing field and figure out what is impacting the fishery, whether it be hundreds of thousands of anglers, a few hundred spearfishermen, or pollution, and from that develop a better formula for quotas and bag limits based on sound, current information."

—Thomas Maulson, VITTF chairman

number of walleye per lake; second, accounting for tribal harvest; and third, accounting for angling harvest. The first two can be done. In fact, population estimates are currently being done on fifty to sixty lakes per year, and these, for the most part, are very precise numbers.

As far as tribal harvest, which is primarily spring spearing, GLIFWC and the tribes account for 100% of the harvest, so tribal exploitation is known with certainty.

The problem is the third element, the angling harvest, both in terms of expense and accuracy. "Even when we spend \$17,000 on a creel survey we've got a number that still has a lot of variability in it," Kmieciak noted. "We need to think this

through and find a method that is cost efficient and has an acceptable level of precision."

Besides financial constraints, the Department of Natural Resources has cited concern over political/social issues related to the study regarding the selection of the lakes. Lakes on the extreme ends of the spectrum could produce controversy, Goyke noted, due either to increased regulation or greater risk to the walleye population.

The WDNR has suggested consideration of a "scaled back" version of the study, for instance, using only a few lakes entirely surrounded by private property plus Escanaba Lake, a research lake where access is controlled.

The joint, long-term study would have provided fishery managers with an opportunity to begin modeling in earnest and developing better techniques to forecast the number of walleye available for harvest.

We need to develop an understanding of how the resource can be split 50-50 and a mixed fishery TAC is the way for this to occur," Kmieciak says.

Leo LaFermier, Red Cliff VITTF representative, feels that the administrative decision to pull-out of the study is another example of the WDNR "not living up to its obligations to manage the fishery" and an attempt to "sweep the issue under the rug" since the pressure of the protest to meet hard-line questions has diminished.

LaFermier noted that three years ago Red Cliff agreed to accommodate a three bag limit for state-licensed angling, but Red Cliff did this with a request that more definitive studies on the exploitation rate be done. "The WDNR didn't even respond to us," LaFermier noted.

At the very least, LaFermier feels that failure to provide the information from the study is also a failure to live up to the expectations of all user groups by providing the comprehensive data base required to best manage the fishery.

1994 spring spearfishing season comes close to the 1988 record

By Sue Erickson, Staff Writer

Odanah, Wis.—Falling about fifty odd fish short of the 1988 record harvest figure of 25,968 walleye, Chippewa spearfishers took a total of 25,921 walleye during the off-reservation spring spearing season in 1994.

This was somewhat surprising to Andrew Goyke, GLIFWC inland fisheries section leader and spring spearing coordinator, because the spring was so unusual.

Ice-out came rapidly, he said, and the water temperatures also seemed to rise quickly once the thaw started. However, this did not seem to impair the success of the season.

The St. Croix and Bad River bands opened the season on April 13 and the last night of spearing took place on May 13 with members of Lac du Flambeau and Bad River finishing up. Bad River declared lakes open on May 14, but no spearing took place, Goyke said.

The Safe Level of Harvest for the 227 declared lakes was determined to be 98,191 walleye for 1994. The tribal quota was set at 44,939 walleye, so the actual harvest fell well below the allowable quota.

In addition, 288 muskellunge were taken during the season. This compares to the 1993 harvest of 188 muskellunge. The Safe Level of Harvest for muskellunge on the declared lakes was 2,375, and the tribal quota for 1994 was set at 1,326 fish.

As in other years, each landing is monitored on a nightly basis by GLIFWC enforcement and biological staff. Creel clerks record data, such as length and sex of fish taken by spearfishermen, before they leave the landings.



Hock Ngu, GLIFWC's data analyst.

The data is called in to the main GLIFWC office in Odanah on a daily basis and Hock Ngu, data analyst, enters the information into the computer. Consequently, precise information on the tribal harvest is readily available including size and exact numbers of fish taken by each participating Chippewa band.

Wardens are likewise on site each night. Any violations of the spring spearing code are cited at the landings and prosecuted in tribal court.

For the most part, the season was very quiet and went peacefully, according to GLIFWC Chief Warden Charles Bresette. Approximately 43 citations were issued during the season, with the majority being size limit violations.

Voices of the "peeper" frogs at night instead of protesters as in previous years make the night sounds friendly, and spearfishers have been able to slip silently through the shallows undisturbed.

While the hours remain grueling for GLIFWC enforcement and biological crews who do duty nightly through the month-long season, they have been relatively unhampered by harassment.

Small fires lit on the beach to warm the hands and feet of staff waiting until spearfishers return from the lake have replaced the glare of spotlights used in crowd control.

While a few minor incidents, occurred during the year, Chief Bresette, notes that the scene is dramatically different from those experienced in 1987-1991.

1994 Chippewa off-reservation spring spearfishing totals

Tribe	Walleye	Muskellunge
Bad River	2,877	10
Lac Courte Oreilles	2,535	43
Lac du Flambeau	14,201	204
Mole Lake	2,716	10
Red Cliff	1,735	5
St. Croix	1,857	16
Totals	25,921	288



GLIFWC wardens and creel clerks team up to take data on each spearfisherman's catch. Seasonal wardens and creel clerks are hired and trained each spring so that each open landing is monitored on a nightly basis. Above Linette McGeshick, Mole Lake creel clerk and Tracy Mayer, Mole Lake warden, record data. (Photo by Amoose)

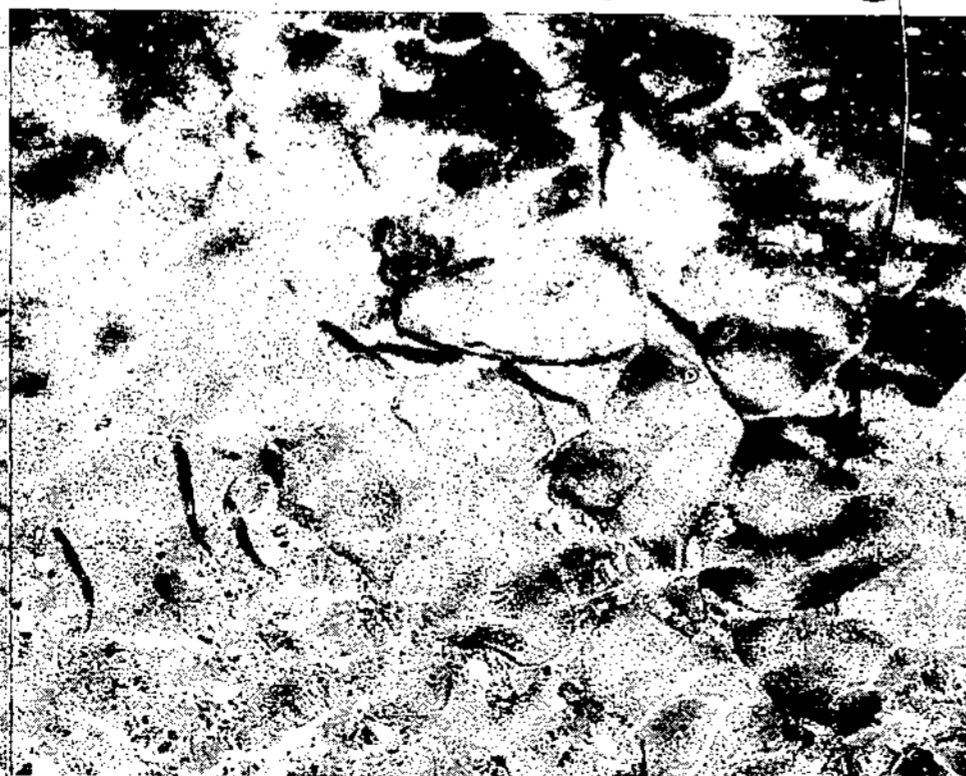


Lac du Flambeau's Scott Smith (left) and Brooks Big John check the water for walleye. (Photo by Amoose)



For GLIFWC staff at spearfishing landings much of the job becomes waiting through cool evenings. Standing in front of the fire lit for warmth at the Butternut Lake, Forest County, landing is Andrew Goyke, GLIFWC inland fisheries section leader, who coordinates the creel counts during spearing. He is joined by a spearfisherman, GLIFWC creel clerk Linette McGeshick and seasonal warden Tracy Mayer. (Photo by Amoose)

Keweenaw Bay stocks lake trout fingerlings



Above, 44,000 yearling lake trout were recently stocked into the Keweenaw Bay in Michigan by the Keweenaw Bay Tribal Hatchery. The yearlings were raised to 6"-7" before stocking in order to improve survival rates. Another 150,000 fry are currently being reared in the hatchery and will be stocked as yearlings, according to Keweenaw Bay Tribal Biologist Mike Donofrio. Donofrio is assisted by Evelyn Smith in the tribal hatchery.

On the left, children from the Arvon School, Arvon, Michigan, were given a tour of the new hatchery facility recently. Inside the hatchery they observed fingerling trout in one of the rearing tanks. (Photos by Amoose)

The Serpent River Story

Mining: the aftermath

By Dick Brooks
Freelance Writer

Murphy Rickard is dying. And so is his killer.

Rickard lives with his wife, Sandra, and two children on the Serpent River First Nation Reserve, on the north shore of Lake Huron. His house is a model of neatness and material well being. A gleaming hardwood floor reflects new furniture and draperies. A new IBM multimedia PC sits on a neat desk. Everything in perfect place. A new stereo is still in its box on the floor. A new Chevy pick-up adorns the driveway, next to a satellite dish.

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and worked his way through most positions on the production crew. The pay was good, very good. He never considered there was any risk involved. "I was very fortunate," Rickard says, "to get such a good paying job."

In 1990, after 40 years of operation, the mines and mills were closing one by one. Murphy was laid off. He went back to school and got a high school diploma. He wanted to go to ambulance school next, but he began to have severe pain in his hands, and then his legs. Later, his throat and windpipe began to bother him.

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Murphy, a Cree from Moose Factory, Ontario, moved to Serpent River in 1979. He married Sandra and got a job at the mill where his father-in-law worked. . . in the Elliot Lake uranium mines, about 20 miles north on the Serpent river.

Rickard spent eleven years in Rio Algom's Quirk One uranium mill. It became his life, and it took his life. He still speaks with obvious pride in his work. He began with only a ninth grade education,

Two years ago his father-in law, who worked in the same mill for 20 years, died of lung cancer.

"I never thought it would hurt me. I just never thought about it," Rickard says. "It affected the environment, my family, my wife, kids. . . my son cries at night and says 'Dad I don't want you to go.' I was blinded by the money, the good pay. But, no matter how careful you are, it's going to affect you."



Cans of uranium shelved at the Stanleigh Mine, Elliot Lake, Ontario. The Stanleigh Mine is the only remaining mine site open and is also scheduled to be closed down—signaling the end of the mining "boom" for the community. (Photo by Amoose)



The Serpent River Indian Reserve, Ontario, Canada looks at the impact of Rio Algom's mining pursuits at Elliot Lake with sadness and concern. While the boom of mining brought a certain prosperity to tribal members, the cost has been great in human health, environmental degradation and the ongoing threat posed by millions of tons of tailings now stored forever not far from the reserve. (Photo by Amoose)

Murphy Rickard and his father-in-law were two of less than a dozen Serpent River Ojibway who worked for the Rio Algom mining operations at Elliot Lake. Most of the others remain healthy, at least physically. But most are a little sick at heart. The mine and mill brought prosperity at a terrible cost. The health of their Nation has been decimated.

Rio Algom is "decommissioning" the mines; removing buildings and landscaping the scars. But they can't remove or cover up the hundreds of millions of tons of uranium tailings left behind. Huge dams, up to seventy feet high, encircle hundreds of acres of toxic mine waste. These dams must contain the waste forever.

"I'm rather pessimistic," says Peter Johnson. He's the Serpent River Band Manager. "At some point the dams and controls will fail. When they do we will be the recipients. Our future generations will suffer. It's going to happen; it's not an impossibility in spite of all the mining

company's data. It doesn't matter when it happens—500 years, a thousand years—we are still going to be here, so we are concerned, rightly so."

"My God, if one of those dams ever goes at Rio Algom," says Peter Johnson, "it is going to be just devastating." Johnson worked in the mines through the sixties and seventies. His mine paycheck provided a high standard of living for his family. He has seen the mine's effect on the river and on his community. Now, as an official of the tribe, he is deeply concerned.

"My father's job provided us a very good life style," says Johnson's daughter, Cheryl Grant. "We had a family of 13. I have ten sisters, but I always had money in my pocket."

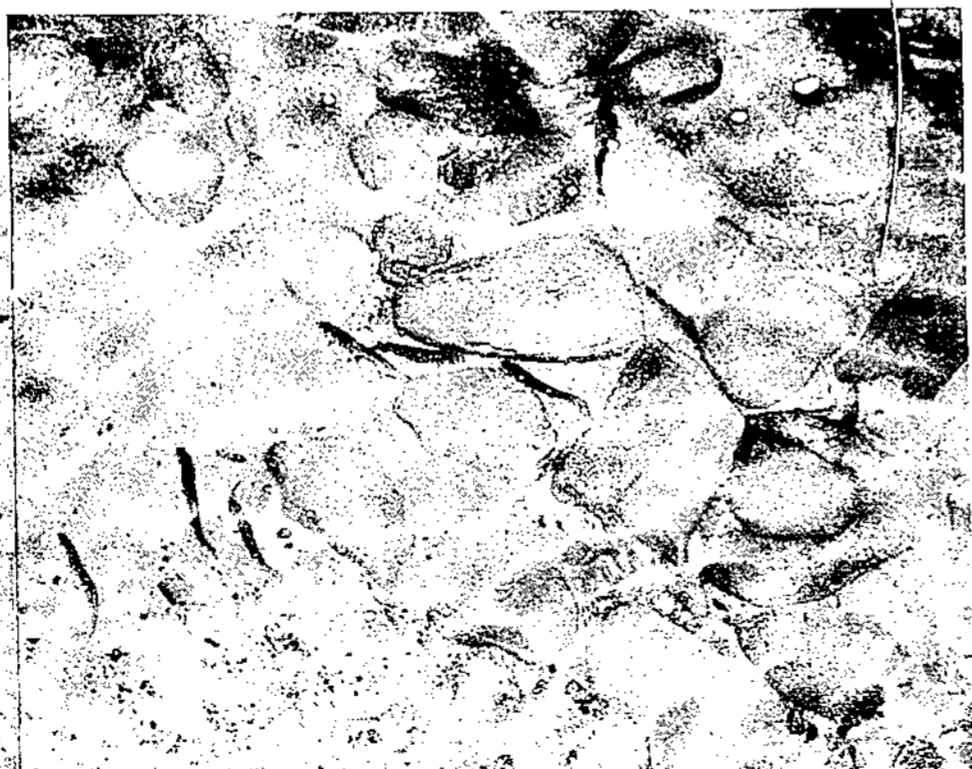
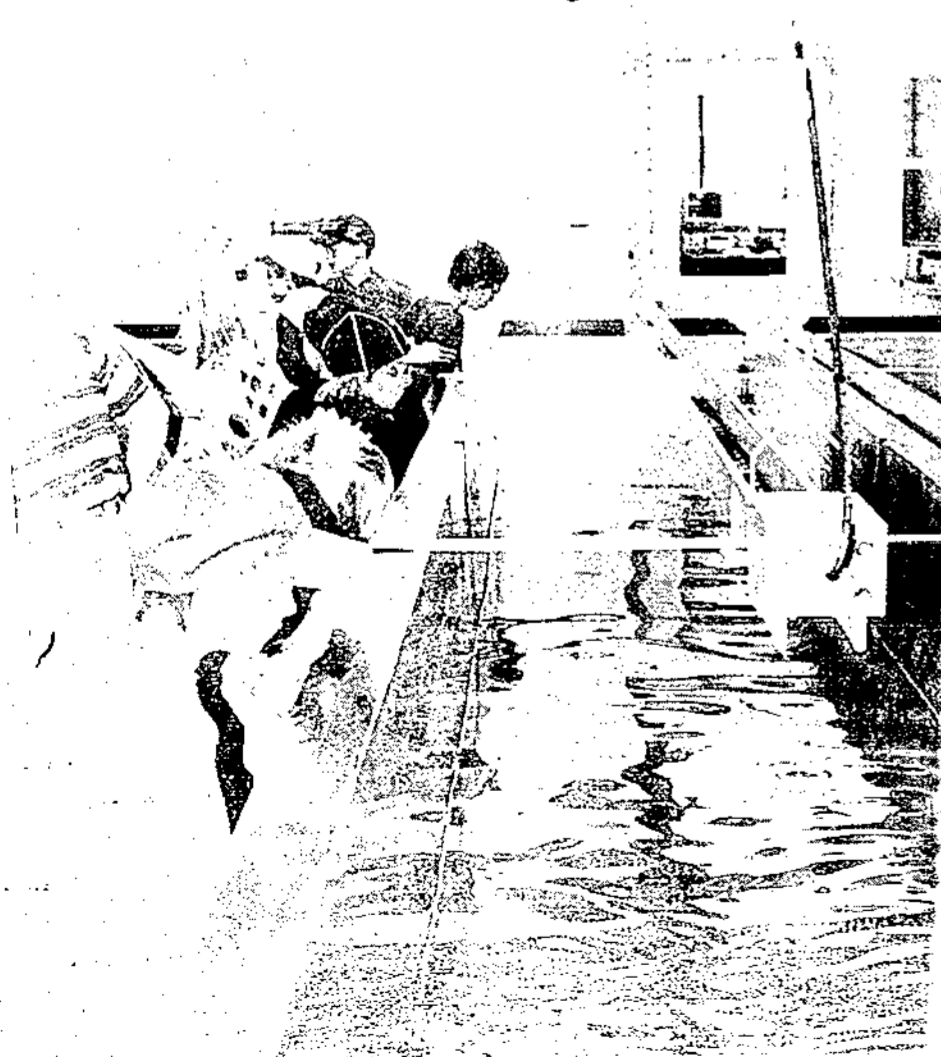
Today, Grant is an elected Tribal Council member and teaches school in Elliot Lake. "I teach in the same school I attended as a child," she says. "During high school I was able to work in the mine (See Mining, page 8)

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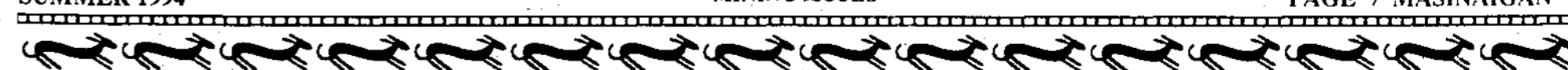
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On the left, children from the Keweenaw Tribal School, Keweenaw, Mich., stand on a dock at the tribal hatchery facility in Keweenaw, Mich., as they observe fingerling trout in one of the rearing tanks. (Photo by Amoose)



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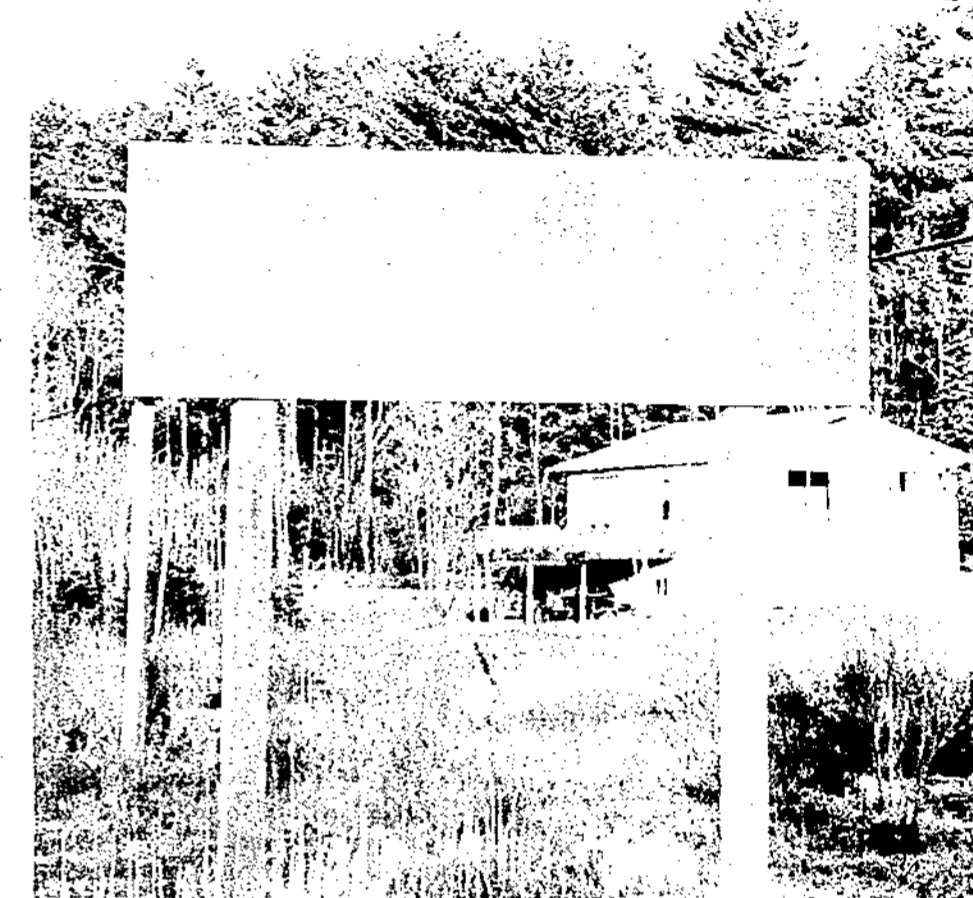
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Cans of uranium shelved at the Stanleigh Mine, Elliot Lake, Ontario. The Stanleigh Mine is the only remaining mine site open and is also scheduled to be closed down—signaling the end of the mining "boom" for the community. (Photo by Amoose)



The Serpent River Indian Reserve, Ontario, Canada looks at the impact of Rio Algom's mining pursuits at Elliot Lake with sadness and concern. While the boom of mining brought a certain prosperity to tribal members, the cost has been great in human health, environmental degradation and the ongoing threat posed by millions of tons of tailings now stored forever not far from the reserve. (Photo by Amoose)

Murphy Rickard and his father-in-law were two of less than a dozen Serpent River Ojibway who worked for the Rio Algom mining operations at Elliot Lake. Most of the others remain healthy, at least physically. But most are a little sick at heart. The mine and mill brought prosperity at a terrible cost. The health of their Nation has been decimated.

Rio Algom is "decommissioning" the mines; removing buildings and landscaping the scars. But they can't remove or cover up the hundreds of millions of tons of uranium tailings left behind. Huge dams, up to seventy feet high, encircle hundreds of acres of toxic mine waste. These dams must contain the waste forever.

"I'm rather pessimistic," says Peter Johnson. He's the Serpent River Band Manager. "At some point the dams and controls will fail. When they do we will be the recipients. Our future generations will suffer. It's going to happen; it's not an impossibility in spite of all the mining

company's data. It doesn't matter when it happens—500 years, a thousand years—we are still going to be here, so we are concerned, rightly so."

"My God, if one of those dams ever goes at Rio Algom," says Peter Johnson, "it is going to be just devastating." Johnson worked in the mines through the sixties and seventies. His mine paycheck provided a high standard of living for his family. He has seen the mine's effect on the river and on his community. Now, as an official of the tribe, he is deeply concerned.

"My father's job provided us a very good life style," says Johnson's daughter, Cheryl Grant. "We had a family of 13. I have ten sisters, but I always had money in my pocket."

Today, Grant is an elected Tribal Council member and teaches school in Elliot Lake. "I teach in the same school I attended as a child," she says. "During high school I was able to work in the mine (See Mining, page 8)

"At some point the dams and controls will fail. When they do we will be the recipients. Our future generations will suffer. It's going to happen; it's not an impossibility in spite of all the mining company's data. It doesn't matter when it happens—500 years, a thousand years—we are still going to be here, so we are concerned, rightly so."
—Peter Johnson

Mining: The aftermath

(Continued from page 7)

because my dad and uncle worked there. It was the only place a student could make big bucks without doing much.

But Grant says it wasn't worth it. "Even when I was in school I was wondering about the tradeoff between the income and the harm it was doing." Her father was elected to the Tribal Council while working for the mine. Grants says her father began to look more critically at the mine activities and how they would impact the Serpent River First Nation.

"I remember being in school, when my dad came to talk to our class. He told them our Nation was opposed to expansion of mining and wanted a cleanup. Dad said the tribe would shut down the mines if it could. One of my best friends pulled me aside and said, 'Your dad won't really try to close the mine, will he?'" Grant says from that time forward she began to see the tradeoff between the good jobs and the environment.

"My dad used to take me fishing below the falls on the river. We would catch walleye. I can't take my kids there anymore, the walleye are gone. All we catch now are suckers or catfish. When I look at it and realize what we gave up: my uncle's life, my cousin's health, the river's health and fish... it wasn't worth it." Cheryl Grant says she can't trust Rio Algom. "The company had to know this work was dangerous. But they said don't worry. If they say they are going to come into a community and there will be no impact... well, I honestly can't imagine things have changed so much that they can make any guarantees."

The mines are closing at Elliot Lake because higher grade ore, and cheaper wages elsewhere make these mines uneconomical. Some of the miners are looking to Rio Algom's newest project, Crandon, Wisconsin, for future jobs.

In April, Rio Algom's partnership with Exxon the Crandon Mining Company faced it's first Department of Natural Resources hearing on its Notice of Intent to start a large copper/zinc sulfide mine next to the Mole Lake Sokaogon Reservation.

George Farkouh is Mayor of Elliot Lake, Ontario. He drove 500 miles to attend the DNR meeting at Crandon. He spent the day telling anyone that would listen that Rio



The Serpent River... efforts have been made to cleanup the Serpent River after the mining waste polluted its waters. Progress has been made, but Serpent River tribal members doubt if the damage caused to the fishery will ever be repaired. It has changed a way of life for people once reliant on the river. (Photo by Amoose)

Algom has been a good neighbor. Mayor Farkouh says his community has been served well by Rio Algom. At one time Elliot Lake was the "Uranium Capital of the World" with 14 mines operating. Now there is only one, the Stanleigh Mine, and it will close within two years. Every mining community faces the same problem—eventually the mines close and the community is left to find new industry.

More than 2,500 Rio Algom miners have been laid off. According to Farkouh, "Rio Algom has continued to pay taxes on all their holdings, and has turned over more than \$60 million dollars in assets to the city. That includes more than 1,100 single and multiple family housing units."

From Sault Ste Marie to Sudbury, billboards along the Trans-Canada highway shout: AFFORDABLE RETIREMENT LIVING. Houses in Elliot Lake can be had for as little as \$19,900. Elliot Lake is becoming a retirement community.

"It's the dead inviting the dying to move in," says Serpent River Band member Gilbert Oskaboos. He's a journalist and an uncle to Murphy Rickard. Oskaboos has been actively trying to draw attention to the problems at Serpent River for years.

As far as he's concerned, government and mining interests work hand in hand. "I have a feeling that even with all this damage, if they wanted to do the same thing over again, nobody would stop them."

"Our old people say that when the Whites first came they took the animals, the mink, beaver and moose," (photo by Amoose) says Oskaboos. "We were left with just the bush, the trees, and the rocks. Then they came back and cut all the big timber, leaving us with just the rocks. In the 50's when Rio Algom discovered uranium our old people said 'now the bastards are back for the rocks.'"

Mayor Farkouh admits serious environmental damage was done to the Serpent River system in the 50's and 60's. But he says the fishery and water quality has been restored. "Historically speaking the Serpent River First Nation has a case," Farkouh said. "But the improvement that has taken place over the last 15 years is tremendous."

(See Mining, page 9)



Elliot Lake Mayor George Farkouh did some PR work for mining at the Nashville hearings on Crandon Mine's Notice of Intent. Farkouh traveled 500 miles from his home to let people know how positive mining has been for Elliot Lake. Above, Dick Brooks, freelance reporter, interviews Farkouh at the hearings. (Photo by Amoose)



After the boom Elliot Lake has been left with empty houses for sale. Now it is being promoted as a retirement community, offering homes at a very low cost. (photo by Amoose)

Mining: "Not a good experience"

(Continued from page 8)

"We cannot place our future in the hands of experts. We are as much experts as anyone, and that is where we have to place our faith, in our own ideas and values. We need people who can dream and have visions, that comes from our youth and elders."

—Peter Johnson

John Nightingale is President of Rio Algom's Elliot Lake Division. "We can have development and protect the environment at the same time," he said. Nightingale says mining today is very concerned about environmental impacts, that the industry has changed over the past 20-30 years.

Nightingale thinks there is room for Native people and mining companies to come to an agreement. "Economic development can work," he said. "I know Aboriginal people are very interested in protecting and making sure the land and water are clean. I respect that."

"Aboriginal people are leading the way in expressing the obligation of mankind to make as little impact as you can. But, the economic development mining offers is not insignificant... and if development can be done, insuring environmental protection and little impact, then I think Native people and corporations can work together."

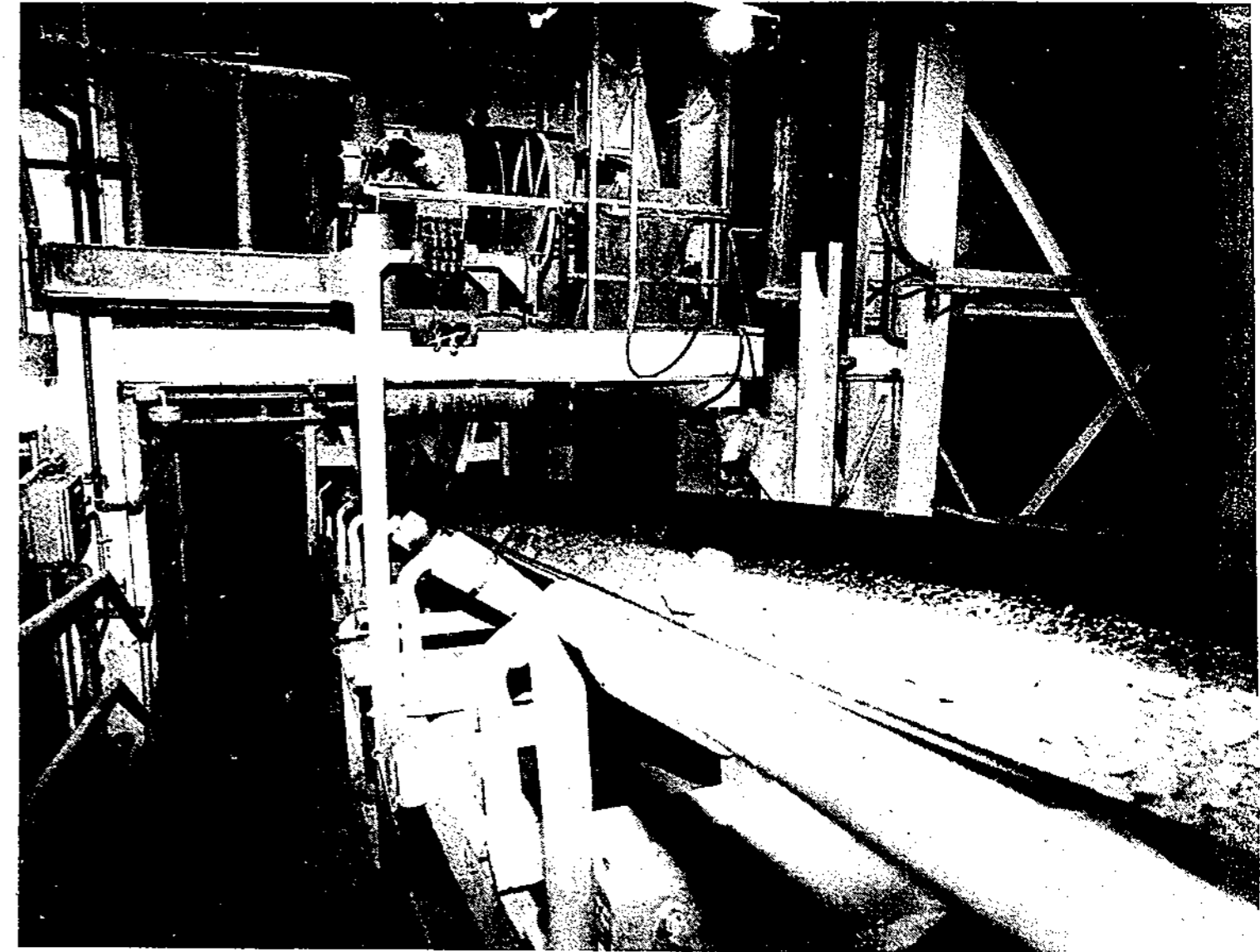
"We wouldn't have the life we have today without mining," Nightingale added. Nobody at Serpent River Reserve disagrees with him.

Pete Johnson, Serpent River's Band Manager, insists Rio Algom's plans for decommissioning the mines are inadequate. "We will never be satisfied with their plans," he said. "Their plans can never provide solutions to the problems the Serpent River people see. All they will do is obey the law." Johnson says the laws of Canada "will never stand the test of meeting the needs of indigenous people."

Johnson says scientific experts aren't capable of understanding the needs of Native people, or of protecting their welfare. "They don't understand us, and they don't place their emphasis of study on what is important to us," says Johnson. "We have to rely on our God given ability to see beyond science. Truth to us is very different than to the scientists."

When questioned about the process of environmental impact studies, of standards by which to judge the safety of proposals like that at the Mole Lake Crandon project, Johnson becomes philosophical. "Our scientists are our youth and our elders. Somewhere between those two levels truth will emerge."

Johnson warns, "We cannot place our future in the hands of experts. We are as much experts as anyone, and that is where we have to place our faith, in our own ideas and values. We need people who can dream and have visions, that comes from our youth and elders. These are the points of



Ore moves along a conveyor belt in the Stanleigh Uranium Mine, Elliot Lake, Ontario. (Photo by Amoose)

view we must consider, and that is where the non-Indian world is not in tune."

Years ago Peter Johnson could take his children fishing on the Serpent River. He saw it die, and he's seen it improve somewhat. He characterizes 40 years of mining as "real tragedy."

"It contributed to the destruction of our culture. The river was a source of sustenance, trapping, hunting and recreation. Mining contamination made our people afraid to use the resources for many years. The skills were not passed on, and today we have forgotten how to hunt and fish. I can only say it wasn't a good experience."

Native communities, such as Serpent River, or Mole Lake, based on resources and traditional land bases are fragile. The economic changes, and potential environmental hazards that huge industrial projects like mining represent, hold special significance to these communities that cannot be captured in a technical report or socioeconomic forecast.

Peter Johnson, Murphy Rickard, Cheryl Grant and others at Serpent River all have the same advice to the people at Mole Lake: Be careful, don't expect government and science to look out for the people's interests.

"Tell 'em NO!" said Murphy Rickard sadly, "No amount of money is worth it."

Eliminating environmental racism: Clinton takes a step towards justice

By Sue Erickson, Staff Writer

Odanah, Wis.—President Clinton took a step towards addressing environmental racism by signing the Environmental Justice Executive Order last February. As a result all federal agencies are required to develop an agency-wide environmental justice strategy.

GLIFWC Policy Analyst Jim Zorn views the Order as a welcome policy statement and directive, but notes that it does not "create enforceable claims or rights." The intent of the Order is to identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

According to Zorn several sections of the order are of particular interest to tribes. He cites a section relating to fish and wildlife consumption as one.

The section requires federal agencies "whenever practicable and appropriate" to research the consumption patterns of populations relying upon fish and/or wildlife for subsistence. From that research, the agencies must communicate the risks of such consumption patterns and publish health guides regarding risk involved with consuming polluted fish or wildlife, Zorn states.

Another section addresses Native American programs and provides that the responsibility under the Order will apply equally to Native American Programs. The Department of Interior, in consultation with tribal leaders, will coordinate the steps which need to be taken.

The Environmental Protection Agency (EPA) will lead an interagency effort to carry out the executive order. According to EPA Administrator Carol Browner, "For too long, low-income and minority communities have borne a disproportionate burden of modern industrial life. The Executive Order seeks to bring justice to these communities."

Public wants guarantees of environmental safety: Finds Crandon Mine's Scope of Study inadequate

By Sue Erickson
Staff Writer

Nashville, Wis.—“How many of you drink water?” asked Megazi Mokwa during a WDNR public hearing on the Crandon Mine Company's Notice of Intent (NOI). “We have to think about what our children need. . . If it isn't good enough for our children, don't do it.”

April 23rd at the Nashville, Wisconsin public hearing, spokesperson after spokesperson pointed to the enormous risks involved with the proposed mine—particularly to the ground and surface water.

Major, long-term environmental issues loom heavy on the minds of Wisconsinites as they look at the potential of the giant mining venture posed at the head of the Wolf River watershed.

Many issues emerged as needing a much more comprehensive study to provide adequate protection of the environment and the public's interest. But top of the list was waste disposal, particularly the long-term disposal of ton upon ton of tailings in a facility that needs to last forever. The question arose many times—“Where are the guarantees?”

Crandon Mine Company's proposed Scope of Study for its Environmental Impact Statement (EIS) satisfied few present at the hearing.

Many testified that the study was not comprehensive enough to provide guarantees needed for continuing public or environmental safety.

GLIFWC calls for suspension of NOI process

Speaking on behalf of GLIFWC at the hearing, Neil Kmiecik, Biological Services Director, noted that the proposed mine is within the territory ceded by the Treaty of 1842, where Chippewa have retained hunting, fishing and gathering rights.

For GLIFWC, contamination of the environment from bioaccumulative, persistent toxins cannot be allowed, nor should the need for economic development outweigh the well-being of the environment, Kmiecik stated.

“The Chippewa believe that actions that impact our natural resources must be judged on how well they will protect the seventh generation,” he said.

GLIFWC called for “detailed ramifications” of the proposed mine and that studies would reveal all the consequences



Joining together in a talking circle prior to going to the Nashville hearings, people concerned about the impact of mining on the resources seek strength in unity as they confront the powerful corporate giants Exxon and Rio Algom, the partners behind the Crandon Mining Company. (Photo by Amoose)

of extracting 55 million tons of ore from the ground.

GLIFWC cited two primary deficiencies in the NOI. One was that the modeling boundaries were not inclusive enough to adequately consider the effects of groundwater perturbation on lakes and streams of concern, such as Swamp Creek and Mole Lake.

But most importantly, Kmiecik stated, is the failure of the NOI to disclose what alternatives are being considered by the company and how those alternatives would be evaluated.

“Some of the most important aspects of the mine's operation, the tailings management area and the treated mine wastewater disposal sections are some of the shortest in the entire document,” Kmiecik stated.

Failing knowledge of the full extent of the operation, judgment cannot be passed on the studies. The lack of complete information, he said, is in direct opposition to the goals of the NOI process—which is to allow for adequate review and assessment of the proposal and the sufficiency of the proposed studies.

“The NOI process should be suspended until the company comes forth with more complex information,” Kmiecik stated.

Citing the discharge of treated wastewater as an example, Kmiecik said that the NOI merely “states that proposed discharge locations will be evaluated as part of the engineering report.”

The stored waste will last forever

Groundwater and waste management were also on the mind of Laura Sutherland, Wisconsin Public Intervenor, who provided comments during the hearing.

Ground water modeling was one of the first concerns she mentioned. The proposed (See Long term, page 11)



Leading the march at the State Capitol in Madison, Wisconsin Fran Van Zile, Mole Lake, holds an Eagle Staff. The march registered protest and concern about the impact of mining on the environment. The message was taken to legislators at the Capitol, the WDNR building, and to industrial lobbyists for industry. (Photo by Amoose)

Long term environmental safety questionable

(Continued from page 10)

posed mine, she stated, will pierce the ground water table and require continuous pumping to allow mining.

This will cause the ground water level to fall and create a conic depression, causing some lakes and streams to lose volume. Sutherland said that more information is needed on how much draw down will take place and the degree to which surface waters will be negatively impacted.

To provide accurate figures models must be carefully constructed, she said. “Biased models, create biased results.” Sutherland also noted that the company proposes to pump 3,000 gallons of water per minute into Swamp Creek and that the water will be contaminated with heavy metals and sulfides which can harm aquatic life.

Since Swamp Creek flows into the Wolf River which is listed as an Outstanding Resource Water in the state, so no degradation will be allowed, Sutherland feels it is “questionable” whether the disposed water can be treated sufficiently to guarantee no contamination.

Accurate testing and explanations of proposed alternative methods must be provided by Crandon Mining, she said, and “scrutinized very carefully.”

Decreased groundwater levels may also cause decreased levels of flow in lakes and streams. The Wisconsin Constitution protects public rights in state waters. The Wisconsin statutes strictly forbid the WDNR from permitting any mine which would result in “any unreasonable detriment to public rights in state waters,” Sutherland commented.

The mining company has proposed a mitigation plan that would provide a compensatory addition of water. However, Sutherland warns that any mitigation plan needs careful assessment.

The last area of concern presented by the Public Intervenor regarded groundwater contamination and the proposed tailings pond. The mining company proposes to store toxic waste in large containers. “If this waste escapes it would contaminate the groundwater,” Sutherland states.

While the company proposes a modeling process to measure possible contamination, she is concerned about the possible biases of the model.



What might Fred Ackley's comments be about the proposed Crandon mine adjacent to the Mole Lake reservation? Ackley attended the WDNR's public open house and hearings at Nashville regarding the mining company's Notice of Intent. (Photo by Amoose)

The toxic waste to be stored will last forever. However, we cannot assume that the containment devices proposed by the company will endure and maintain its effectiveness over thousands of years, she said.

The burden of clean-up will be born by Wisconsin tax-payers both in terms of finances and health risks, she said.

“Storage of large volumes of mine waste in a humid environment in a humid environment without some form of environmental contamination has never been accomplished,” she stated.

Sutherland also cited problems with the WDNR's handling of the 1986 final EIS. The WDNR failed to pay attention to:

- prevention of oxidation within and during the operation of the tailings pond
- monitoring of leaching itself
- lack of a contingency plan if acid formation exceeds levels
- reliance on geomembrane durability

Once completed, the tailings pond would be the largest solid waste disposal facility in the state of Wisconsin, she stated. The potential for environmental contamination demands intensive review of design technologies.

Track record of mining companies questioned

Zolton Grossman, Madison, pointed to the poor track records of both Exxon and Rio Algom as a serious source of concern. Grossman commented that in 1989 Exxon had the worst mine safety record out of 20 U.S. mining companies and a history of dropping huge projects, leaving hundreds without employment.

Exploitation of native populations in South America and Canada and are also part of the mining legacy of the mining partners that created Crandon Mining Inc., Grossman pointed out.

In Ontario at the Elliot Lake Project, the Ontario Ministry of Health has documented a high rate of lung cancer among the miners. Environmentally, Rio Algom claims to have cleaned-up the contaminated Serpent River, but government reports that fisheries are still not fully recovered and radiation has been detected in Lake Huron.

Using an analogy to driving, Grossman noted that if a driver has poor driving record in Wisconsin, his license is taken away. Similarly, a poor record regarding human and environmental rights should revoke the mining privileges being requested by Crandon Mining.

Promises of prosperity

Roscoe Churchill, Ladysmith, took a look at Kennecott in the Ladysmith, WI area and found some promises for the community's prosperity weren't coming through.

Rusk County signed a local agreement with Kennecott providing for a promised \$500,000 annually to the County while the mine was in operation. The mine, Churchill stated, has been in operation for over a year and the payment has not been forthcoming.

Meanwhile tons of highgrade gold ore have been shipped out of the mine site and the company has been looking a speeding up the process to last only four years instead of five. (See Promises of prosperity, page 22)



WDNR Secretary George Meyer was present during the Nashville hearings to answer questions from the general public. (Photo by Amoose)

Proposed giant mine raises fears

By Don Behm
Journal environment reporter

Milwaukee, Wis.—A proposed zinc and copper mine in Forest County would be one of the largest underground mines ever dug in North America, and operating it would require the largest waste disposal facility ever built in Wisconsin, says one state environmental protection official.

The project's mammoth size is the main reason it poses threats to the environment, from contamination of pristine streams and ground water to the loss of water in nearby lakes, wells and wetlands, according to Laura Sutherland, an assistant attorney general and public intervenor in the state Department of Justice.

"It appears the proposed mine's most significant environmental impacts would be on surface and ground water resources," Sutherland said in written comments submitted to the Department of Natural Resources.

One possible impact: pollution of the Wolf River with metals and other contaminants.

The Public Intervenor's office is responsible for protecting public access to natural resources and ensuring those resources are not degraded.

Sutherland's comments were filed in the wake of a five-hour public hearing on Saturday, April 23rd on the mine project that attracted more than 300 people to the Town of Nashville hall.

Crandon Mining Company, a Wisconsin partnership formed by two international mining firms—Exxon Coal and Minerals Co. of Houston and Rio Algom Limited of Toronto—is seeking state, federal and local permits to remove 55 million tons of metal ore from a site five miles south of Crandon.

The primary shaft would be dug to a depth of 2,000 feet and would intersect rock saturated with ground water. To prevent flooding of the mine, up to 2,000 gallons of water per minute would have to be pumped out, Sutherland said.

"Water levels in the general area of the mine will fall as a result," Sutherland said. "Some lakes and streams could lose volume and suffer decreased water levels. Some wetlands and wells may dry up altogether."

Lengthy permit process

"We and the DNR need to know these concerns," said J. Wiley Bragg, communications director for the Crandon Mining Co. "The public intervenor has provided us with a list of questions that need to be addressed in our impact studies."

Exxon discovered the ore body in 1975 and sought mining permits in the early 1980s. The state released its environmental impact statement in November 1986 and scheduled a final hearing before issuing permits. One month later, however, Exxon halted the process, citing low prices on global markets.

In February 1994, the new partnership filed a formal notice of intent to study the underground mine's potential environmental effects. The lengthy permit process must be repeated.

May 6 was the deadline for submitting written comments on the company's notice to the Department of Natural Resources. Within 45 days after that, the department must release a comprehensive list of environmental issues to be studied.

The zinc and copper ore body is a 100-foot-wide by one-mile-long slab of volcanic bedrock located one mile south of Swamp Creek, a tributary of the Wolf River, and east of the Mole Lake Chippewa Reservation.

The company has not decided where to discharge its treated waste water. Up to 3,000 gallons per minute could be released to Swamp Creek and carried downstream to the Wolf, according to Sutherland.

Or the company could build special basins, allowing treated water to gradually seep into soil and groundwater.

But David Webb, an environmental toxicologist with the DNR's bureau of water resources in Madison, said such basins could not hold the expected volumes of water. "Swamp Creek is the most likely discharge location," he said.

Water pollution worries

Residents in Forest and Langlade Counties fear that discharges to the creek would harm the fish in Wolf River.

Sutherland said the Wolf is one of the state's Outstanding Resource Waters, a formal DNR designation that prohibits degrading its water quality. Swamp Creek is a cold water trout stream and also merits stringent protection, she said.

Sutherland also suggested that waste storage ponds, known as tailings management areas, may cause water pollution 30 years or more after the mine is closed. These areas would be much larger than any tailings ponds or solid waste landfills ever built in the state.

(Reprinted with permission from the Milwaukee Journal.)



4th grade textbook says mining is safe & Exxon will mine Forest Co. in the 1990s

By Sue Erickson, Staff Writer

Ashland, Wis.—Ashland parents Bill and Emily Koenen question a textbook, The Wisconsin Story, used in a 4th grade social studies class which promotes the idea that mining is a safe business.

Besides relating that mining is safe, which the Koenens feel is "brainwashing," the text, copyrighted in 1987, 1990, and 1992, relates that Exxon will mine in Forest County in the 1990s. The Koenens feel that, since the permitting process has just begun, it might be, or at least should be premature to make that statement.

The passage from the text is a subsection entitled "METAL MINING TODAY." It reads as follows:

"In 1976, Exxon found a large rich ore deposit in Forest County. Exxon believes that tons of zinc, copper, lead, gold, and silver exist in the region. Mines will begin operating in the 1990's. They have been delayed because of low prices for copper. Also, before mining begins, much must be done to protect the environment.

Laws have been passed to solve problems that may arise. These laws protect mineral rights and water sources. They assure people that waste products will be handled safely."

—The Wisconsin Story, by Billie Joan English & Sharon Cooper Calhoun, Apple Corps Publishing, Oklahoma City, OK

The Koenens, however, do not feel that current laws either protect water resources or guarantee waste will be handled safely. "As environmentally concerned parents we doubt those claims. We are outraged that the State of Wisconsin, through our schools, would allow this kind of influence over our children by the corporate giant Exxon," states Bill.

Koenens plan to take action on the issue, which to them is the extent of corporate influence over the education system and the degree of "brainwashing" which may exist.

First, they will discuss the problem with the Ashland School Board on June 20th. They will also alert the Wisconsin Department of Public Instruction and the Wisconsin Education Association Council.

In a more sweeping, grassroots effort, they are asking concerned parents and educators to review the text, and if they feel similarly, to help institute an investigation of corporate influence in the school systems.

The topic will also be brought to the attention of the upcoming mining and environmental conference at the Mole Lake reservation this June in order to promote national and international action on the issue.



Our rivers are like the circulatory system of the Earth. When the water of the rivers becomes polluted, the effect is spread throughout the entire system. (Photo by Amoose)

A legacy of pollution and neglect Mining Michigan

By Christopher M. West
Mineral Policy Center

Scattered across a map of Michigan's Upper Peninsula, the names Copper Harbor, Iron Mountain, Copper City, and Iron River testify to the importance of mining in the region's history and development.

More tangible, and far more dangerous, remnants of the past are some 470 abandoned mine sites and the environmental and safety hazards they pose.

Michigan's northern mineral deposits provided the raw materials that made the southern part of the state the nation's industrial heartland. The state continues to be a leading mineral producer, responsible for more than 20 percent of the country's output of iron ore.

Michigan ranks sixth among all states in the production value of its non fuel minerals, far ahead of such "mining states" as Colorado, Idaho and Montana.

Michigan also leads in a far less exemplary way. The state has no comprehensive mining law.

"Out of sight, out of mind," seems to summarize the approach of government officials in Michigan to mining," said Gayle Coyer of the Lake Superior Project of the National Wildlife Federation (NWF).

"Mines and the visible pollution they cause are hundreds of miles away from the major population centers in Michigan. And state government is unwilling to support anything that could be seen to threaten business in the U.P. (Upper Peninsula)."

Coyer cited the case of the Copper Range smelter. A state politician prohibited state agencies from conducting smelter emissions tests from 1981 to 1990, fearing the tests would confirm suspected violations and lead to the facility's closure. During the same period the state also repeatedly failed to correct suspected violations of environmental regulations at the facility.

Several accidental deaths at abandoned mine sites in the region prompted citizen calls for a survey of the sites as the first step in a mitigation and reclamation effort. Michigan Governor John Engler, dismissing the proposal as "Upper Peninsula Pork," vetoed the survey.

Michigan has a tradition of treading lightly on mining interests while ignoring the public's interest. No permit is needed to open a mine. There is no enforcement of the state's very weak "voluntary" reclamation law. No financial bond is required to ensure that a mine site will be properly closed and reclaimed if the operator de-

clares bankruptcy or abandons the project. The only permits a mine needs are local zoning permits and the standard Federal water discharge permit, required of every industrial operation.

A legacy of environmental abuse

Mining brought great short-term wealth to Michigan early in this century. It also imposed enormous long-term costs, including those for the cleanup of mining waste piles that poison the land and water.

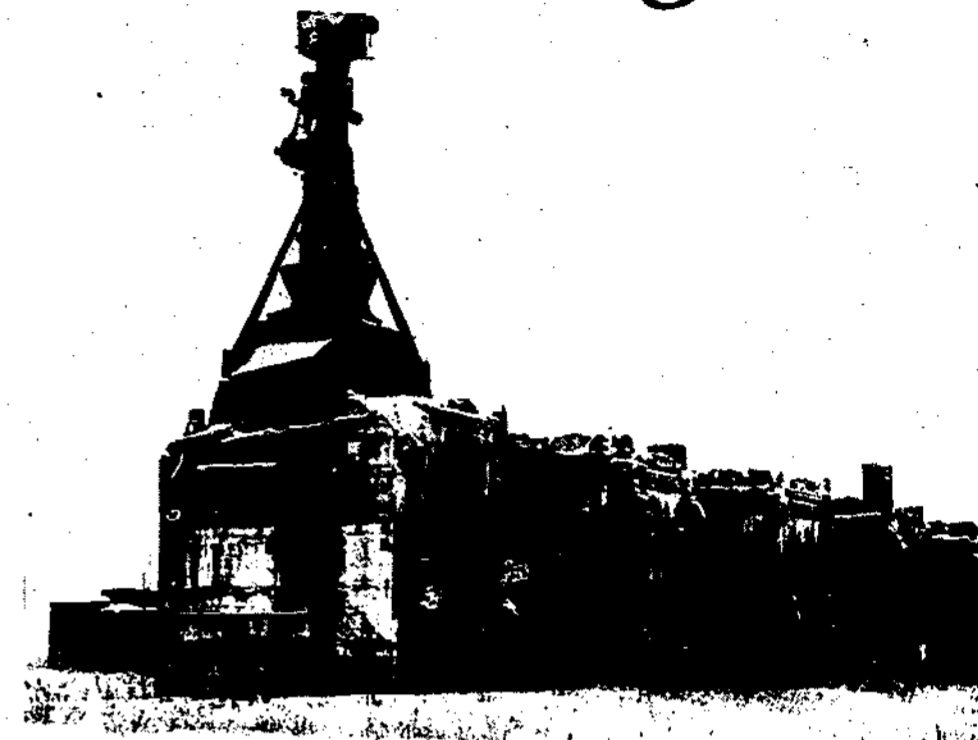
Native Americans were the region's first miners, using easily accessible copper deposits found in the area to fashion tools, weapons, and jewelry. By the 1840s European settlers were developing the copper and iron deposits of the Upper Peninsula. Towns such as Calumet and Ishpeming became America's first mining boom towns. Iron production centered around Marquette and other towns near Michigan's border with Wisconsin.

A thin slice of northwest Michigan's Keweenaw Peninsula was the center of copper mining and North America's first great mining district. Over 140 mines and 40 mills operated there with peak production occurring between 1900 and 1920. Before the last mine closed in 1968, more than 10.5 billion pounds of copper had been taken from the land. Left behind were hundreds of millions of tons of mill tailings. Vegetation has yet to grow on some of the 100-year old tailings piles that were abandoned.

During the region's early boom days, mine operators simply dumped their mine waste into and alongside the region's lakes including Lake Superior and Portage Lake. One historic dump site, Torch Lake, holds 220 million tons of mill tailings laced with copper and arsenic. It is now on the National Priorities List of Superfund sites.

Copper levels in the waters of "Copper Country" and sediments in the nearby lakes remain high decades after the mining boom. Evidence is mounting that plumes of mining waste with high levels of metals are spreading throughout Lake Superior from the Keweenaw district and mines in Minnesota and Ontario. These wastes may have detrimental effects on the wildlife of Superior, the largest and most pristine of the Great Lakes, according to studies done by Dr. Charles Kerfoot at Michigan Technical University.

The abandoned Buck and Dober iron mines, near the town of Iron River, produce acid drainage from flooded underground workings and abandoned waste rock



One of the many abandoned mine buildings in the Upper Peninsula. (Photo by Amoose)

piles. Some reports find alarming levels of iron and iron precipitates in water from the Buck and Dober mines, even after the state reclaimed the sites by building settling and dilution ponds.

Contaminant levels as much as twenty times greater than the target levels set by the Environmental Protection Agency have been recorded near the mines.

Michigan mining, present and future

Mining activities continue to cause environmental hazards for the people of Michigan. The Copper Range mine and smelter in White Pine near Lake Superior, pumps over 1,400 pounds of mercury, 55,000 tons of sulfur dioxide, and dangerous levels of lead and cadmium into the air every year. It also discharges high levels of chloride into its tailings ponds.

Copper Range Company is the owner of this antiquated facility. The smelter was first opened in 1952 and is still using some of its original environmental controls. Following a recent emissions test, the National Wildlife Federation (NWF) filed suit against Copper Range's owners to bring them in compliance with the Clean Air Act. NWF was later joined by the States of Michigan and Wisconsin and the EPA.

A new mining boom may be starting in the Upper Peninsula. Corporate mining giants Phelps Dodge, Noranda, and Crystal Exploration recently have been exploring for metal ore and industrial diamond deposits in Northern Wisconsin and the Upper Peninsula.

Great Lakes Minerals has identified five deposits of copper-bearing ore on the Keweenaw Peninsula. The richest and most accessible is near Gratiot Lake. It could be opened in the very near future with its ore most likely shipped to the troubled Copper Range smelter for processing.

Citizens of the U.P. have formed AWAKE, The Association Working Against Keweenaw Exploitation, to stop the opening of this mine. AWAKE believes the Gratiot Lake mine could pollute the stream system into which it will discharge and ultimately add to the pollution of Lake Superior.

"There is only enough copper for the mine to operate for seven years, at the most," said AWAKE's president Janet Avery. "We must ask ourselves, 'Is the short-term gain from this project worth the possible long-term environmental damage?'"

Great Lakes Minerals (GLM) reportedly has won the support of both local and state government officials despite these concerns. Only a low market price for copper is keeping the mine on hold.

Three leaders of AWAKE have been hit with what they believe to be a SLAPP (Strategic Lawsuit Against Public Participation) law suit by GLM in retaliation for their opposition to the project.

Now, rather than fighting to stop a mine in their area, AWAKE is fighting GLM in court over the wording of GLM's relationship to Noranda in a flyer distributed by the activists.

The U.P.'s activists remain determined to achieve their agenda. "We need a comprehensive approach to mining in Michigan," AWAKE's secretary, John Manty, said at the recent Great Lakes Mining Impacts Conference. "We need a plan for dealing with mines at every stage of their operations from exploration and planning through closure. The state needs to find a way to guarantee that any mining that occurs on the Upper Peninsula protects the world's largest freshwater resource."

(Christopher M. West is a Program Associate with Mineral Policy Center. Reprinted with permission from Clementine, published by the Mineral Policy Center.)

"Is the short-term economic gain . . . worth the possible long-term environmental damage?"

—Janet Avery, AWAKE

Motions to dismiss Mille Lacs treaty case denied Trial set for this month

By Sue Erickson, Staff Writer

Odanah, Wis.—A court date of June 13, 1994 has been set for the case filed by the Mille Lacs Band of Chippewa against the State of Minnesota. While the date had previously been set for May 15th, following the State Legislature's failure to approve a proposed settlement, a delay was caused as the court considered a number of pre-trial motions. Many of the motions were designed to bar the Band from court or get the case dismissed, according to GLIFWC Policy Analyst Jim Zorn.

Since the time the Band first filed suit in 1990, the number of parties in the action have increased. The United States' motion to intervene as plaintiff to support the

continued existence of the right was granted. Also, as defendants, six landowners and nine counties joined the case with the State of Minnesota and state officials.

Federal Judge Diana Murphy issued a Memorandum Opinion and Order in response to motions raised by the parties on May 13, 1994. According to Zorn, Judge Murphy dealt specifically with a number of pre-trial motions.

For one Murphy denied the motion by the State, counties and landowners that the tribe was using a "delay-based" defense which violates the statute of limitations and is essentially unfair, Zorn stated.

A statute of limitations, he explains, sets a time period in which action can be taken, such as two, four or six years, to avoid issues being raised after a lengthy time period.

Similarly, a "lache" refers to waiting to bring an action to the prejudice of the defendant, or waiting until a situation worsens and damages are higher than if the action would have been at an earlier date.

In this case, Murphy found that the statute of limitations does not apply and "would be inconsistent with the Congressional intent that no statute of limitations would govern a suit by Indians for property rights."

She also ruled that the State's two year statute of limitations for personal injury cases does not apply because of the continuing nature of the violation. On the issue of state immunity, Murphy ruled that the state does not enjoy immunity against the United States, Zorn states.

Another motion filed by the State claimed that the other signatories to the 1837 treaties were indispensable parties to the case.

Murphy, however, ruled that the other tribes are not indispensable because the Mille Lacs Band is not specifically seeking an allocation, according to Zorn.

Any allocation, Murphy noted, would be between Indians and non Indians generally, not among the specific Indian bands.

The State's motion that the 1837 treaty rights were extinguished by the 1850 Removal Order or the 1855 Treaty were also denied by Murphy, who says that those are issues remaining in dispute.

Finally, the claim that previous actions by the Indian Claims Commission or Court of Claims would extinguish the 1837 treaty rights was denied. Murphy said that issue of the 1837 treaty rights was not specifically before the Indian Claims Commission under the Indian Claims Commission Act of 1946 or the Court of Claims under the Wisconsin Chippewa Jurisdiction Act of 1935, therefore could not be the basis to extinguish the right.

The June 13 trial is scheduled to begin at 9:15 a.m. in the United States Federal Courthouse in Minneapolis before Judge Murphy.



Facts about Mille Lacs Lake—Twelve of the 519 lakes in the 1837 Ceded Territory are greater than 1,000 acres. The largest of them, the walleye "capital" of east central Minnesota and the second largest lake entirely within state boundaries is Mille Lacs Lake.

Lake area is 132,516 acres; maximum depth is approximately 40 ft. Mille Lacs Lake is famous for its walleye fishery, but is also inhabited by fishes such as tullibee (cisco), northern pike, carp, white suckers, burbot, smallmouth bass, black crappies, and yellow perch. The only fish presently stocked in Mille Lacs is muskellunge.

Mille Lacs is the only "Large Lake" in the 1837 Ceded Territory, accounting for roughly two-thirds of the surface area of all 519 lakes, and it is managed differently. As a "Large Lake," Mille Lacs is assessed and creel surveyed annually.

Assessment includes ice-out trap netting for northern pike, early spring trap netting for muskellunge, summer shoreline seining to gauge yellow perch and walleye recruitment and growth, late summer/early fall trawling to collect juvenile walleyes and associated species, fall gill netting to examine age, growth, and relative abundance of adult walleyes and other fishes, and fall shoreline electrofishing in recent years to estimate walleye recruitment (Bruesewitz 1992a).

Annual creel surveys on Mille Lacs are conducted to coincide with the walleye sport angling season, including open-water and ice-cover periods.

Fishery assessments of Mille Lacs Lake have shown that walleye recruitment fluctuates, and creel surveys have shown that anglers increase fishing effort when strong year classes reach harvestable lengths. For example, during the 1992 open-water season, sport anglers caught an estimated one million pounds of walleye during 2.3 million hours of fishing. Over 70% of the walleyes harvested were likely from the 1988 year class (age IV). The estimated average catch and effort for six years prior to 1992 were about 0.4 million pounds 1.6 million hours, respectively (Bruesewitz 1993b).

From another perspective, the total number of walleyes speared by six bands of Ojibwe Indians in northern Wisconsin during 1992 was equivalent to only 3.5% of the open-water harvest in Mille Lacs (Ngu 1994). The bottom line is that Mille Lacs Lake receives heavy fishing pressure from sport anglers, not only because of its reputation for producing walleyes, but also because it is located only 100 miles north of the Minneapolis-St. Paul metropolitan area.

(Mille Lacs Lake facts & photo were contributed by Gary Regal, GLIFWC fisheries biologist stationed at Mille Lacs.)



GLIFWC through the decade Highpoints in GLIFWC history

(GLIFWC's history from 1984-1989 was printed in the Spring 1994 edition of MASINAIGAN. Copies are still available through the Public Information Office of GLIFWC.)

1990

1990 witnessed significant steps towards cooperation and social healing. While the battles on the landings and lakes during spearfishing still raged, leaders such as Senator Daniel Inouye, Chairman of the Senate Committee on Indian Affairs and State Representative Frank Boyle took firm public stands and political action.

Inouye personally visited Wisconsin in order to discuss issues with all concerned parties. Recognizing a need for more definitive information on the Wisconsin fishery, his efforts resulted in a \$300,000 federal appropriation for a joint assessment of the fishery to be performed by tribal, state and federal biologists.

On another front, Wisconsin enacted a law introduced by Representative Boyle mandating curriculum at certain grade levels on Indian treaties, tradition and tribal governments.

The 1989 Indian Education Curriculum Act is designed to assure that the upcoming public will be more informed about the status of Indian nations. GLIFWC staff worked with both the above efforts during the year.

The Wisconsin legislature also appropriated funds for the establishment of the Environmental Health Laboratory, a joint venture between GLIFWC and the UW-Superior's Lake Superior Research Institute.

In court, the regulatory phase of Voigt proceeded toward a conclusion with rulings and stipulations resolving issues associated with the hunting of deer, bear, small game, and migratory birds; gathering of wild rice, and wild plants; fishing for all species other than walleye and muskellunge; and trapping of small game and furbearers. These resulted in final rules processes that provided a more routine regulatory system. The remaining regulatory issue of timber remained pending before the court during the year.

In Minnesota, the Mille Lacs Band filed suit against the State of Minnesota in order to exercise its off-reservation treaty rights in the 1837 treaty areas.

In other areas of resource management progress was also being made:
 • GLIFWC greatly expanded the wild rice enhancement program by seeding 2,600 pounds of wild rice in 14 waters of Wisconsin.

• The Wisconsin legislature appropriated \$50,000 for five cooperative wildlife management projects. These included a predator interaction study; sharp-tailed grouse restoration; wild rice re-seeding and management; Amsterdam Slough Wildlife Area runoff ponds; and natural areas management and improvement.



In the summer of 1990 Joe Dan Rose, Bad River Department of Natural Resources, with members of Cable Area Fish for the Future prepares to release walleye fry during one of the first restocking efforts that resulted from a cooperative effort between tribal hatcheries and local organizations. (Photo by Sue Erickson)

Wildlife biologist Jon Gilbert initiated the predator study on bobcat, coyote, fish and pine martin in cooperation with the WDNR, Nicolet National Forest, UW Stevens Point, UW-Madison and others.

• GLIFWC intensified mark-recapture estimates of walleye populations performing surveys on 11 lakes and one lake chain in the spring.

• GLIFWC assisted the Lac Courte Oreilles tribe in its challenge to the issuance of a mine permit at the Flambeau Mine site near Ladysmith. Wisconsin GLIFWC contracted with the UW-Superior for a baseline water quality study on the Flambeau River and staff reviewed the EIS on the mine, provided testimony at the public hearing and assisted in contacting experts on heavy metal toxicity.

• Great Lakes biologists worked with a committee of biologists from Red Cliff, Bad River, WDNR and USFWS to determine the Total Allowable Catch for lake trout in the Wisconsin waters of Lake Superior for 1991-1995.

• For GLIFWC wardens, steps towards obtaining authority to enforce state conservation laws began to materialize. A number of GLIFWC wardens participated in training activities in preparation for receiving state credentials.

• The WDNR's requested sensitivity training for WDNR staff in order to address cultural misunderstandings, and GLIFWC coordinated a training session on the Bad River reservation for about 50 WDNR staff.

• Grassroots cooperation also began to emerge in some areas, where citizens recognized that cooperative management would serve to enhance their local fisheries and continued hostility was detrimental to the fishery, tourism and local communities.

• The Long Lake Chamber of Commerce, Washburn County, Wisconsin approached the St. Croix tribe and plans were laid for joint assessments of Long Lake to be performed cooperatively by the citizens, the Great Lakes Indian Fish & Wildlife Commission, the St. Croix band and the U.S. Fish and Wildlife Service.

• In the Cable, Wisconsin area, Fish for the Future met with the Bad River tribe and initiated a joint stocking program. This involved taking eggs from speared fish, hatching them in the tribe's hatchery and restocking in the lakes from which they were taken.

This was the beginning of a long-term positive effort which also incorporated the Red Cliff tribal hatchery operation. (See Taking steps toward cooperation, on page 16)



A cooperative agreement which formed the basis for the UW-Superior Lake Superior Environmental Research Laboratory in Superior was signed by GLIFWC Executive Administrator James Schlender (far left) and Terry McTaggart, former chancellor of the UW-Superior and John Delinger, former executive director of the UW Environmental Health Laboratory and the Lake Superior Environmental Institute. The 1990 project was a cooperative effort on the part of tribes, GLIFWC, UW-Superior, Douglas County, the City of Superior and local businesses. (Photo by Amoose)

Taking steps toward cooperation

(Continued from page 15)

1991

The trend of turning from conflict to cooperation continued during 1991. In May, the Voigt litigation concluded with the tribes and the state deciding not to pursue any appeals to higher courts. The Federal District Court's Final Judgment of March 19, 1991, which recognizes tribal harvest and self-regulatory rights, thus remains the final word on this matter and concluded nearly 20 years of litigation.

In addition, public information efforts of GLIFWC and many treaty rights advocates had also begun to successfully demonstrate that tribal harvests were not damaging the resources. Events in many areas demonstrated the trend away from conflict:

- ✓ protest numbers and violent episodes were down as a result of a lawsuit supported by the Wisconsin Civil Liberties Union and filed by the Lac du Flambeau tribe, the Wa-Swa-Gon Treaty Association, and a number of tribal members against Stop Treaty Abuse-Wisconsin (STA) and its leader Dean Crist and 15 STA members. A federal court ruling prohibited STA defendants from many of the activities in which they had previously engaged.

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- ✓ the Indian Education Curriculum mandated through legislation passed in 1990 was initiated in Wisconsin school systems.

Recognizing the time of change, GLIFWC commenced a strategic planning process to consider goals for the next 5-10 years. The organization had essentially been on the forefront of the Voigt case battles in court and on the landings.



Rep. Frank Boyle prepares to enjoy traditional foods during a buffet in Madison where tribal leaders and legislators took the opportunity to discuss issues in 1991. Boyle as chairman of the Indian Studies Committee took the lead in implementing curriculum changes that introduced mandatory Indian studies in elementary and secondary education. (Photo by Sue Erickson)



In 1991 the results of a joint survey of the fisheries in the ceded territory were published in *Casting Light Upon the Waters*. Sen. Daniel Inouye, Chairman of the Senate Committee on Indian Affairs, joined tribal leaders and representatives of the WDNR and USFWS in announcing the report during a press conference in Wausau, Wis. Pictured above are: (front row) Sen. Inouye; former Red Cliff Chairperson Patricia DePerry. Back row, former St. Croix Chairman Eugene Taylor; former Bad River Chairman Don Moore; Lac Courte Oreilles Chairman gaiashkibos; former Mole Lake Chairman Raymond McGeshick; and former Lac du Flambeau Chairman Mike Allen. (Photo by Amoose)

Now a new era was emerging. GLIFWC member tribes seek to affirm their rights in Minnesota and Michigan. In addition, tribes view GLIFWC as an important partner in environmental protection efforts.

The year drew to a close with a successful strategic planning conference held at the Keweenaw Bay Reservation in November with staff, board and committee members as well as tribal council members looking together towards long-term goals which were later formulated into a Strategic Management Plan for GLIFWC. The plan, titled *Strategic Directions for GLIFWC in Off-Reservation Treaty Resource Management* sets GLIFWC's course for the future.

(See GLIFWC establishes long-term plan, page 17)

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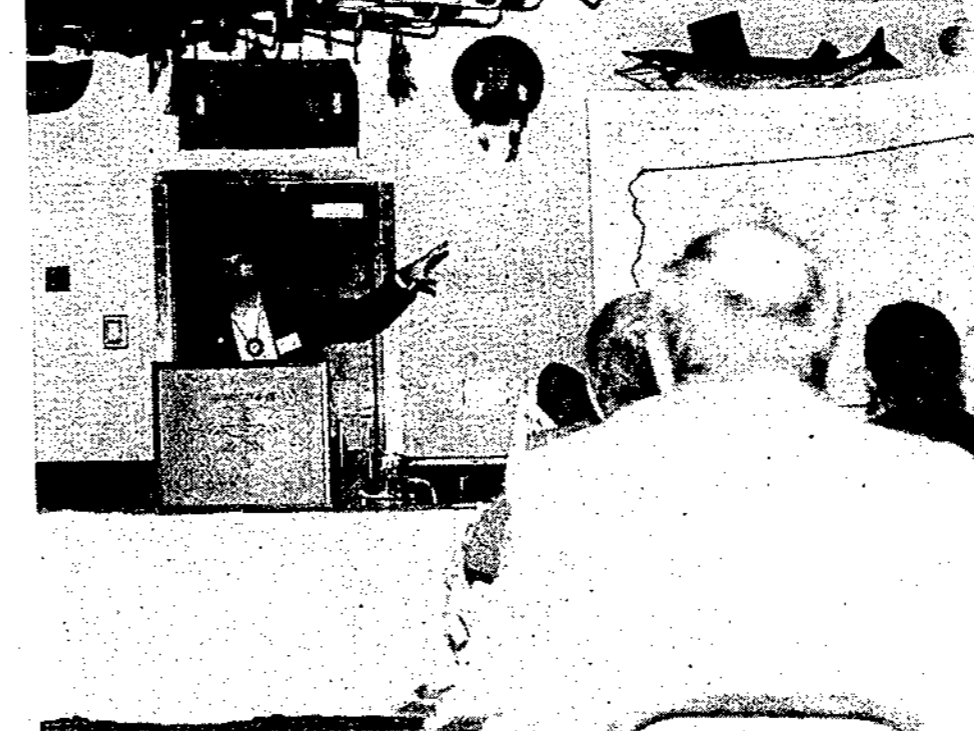
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A total of eight major goals were established, five relating to the direction of GLIFWC's programs and three supportive goals relating to organization, structure, and funding. The goals include:

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A training session provided by the Environmental Protection Agency on hazardous waste site investigations. The course focused on identification of hazardous waste when officers are out in the field. This was achieved through a grant obtained by GLIFWC's Planning and Development Division.

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Through the ANA program a booklet on cooperative management projects was published entitled *"Bishigendan Akiil—Respect the Earth,"* as well as *"Chippewa Treaties—Understanding and Impact,"* a booklet designed for young readers. Over 60 public presentations to organizations and schools were also made.

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Policy analysts as well as biologists were occupied with comments on a number of environmental issues. Some of these were: the Flambeau Mine Supplemental Environmental Impact Statement, Noranda Mineral Notice of Intent to mine in Lincoln Co., WDNR's Environmental Assessment of proposed exploratory oil drilling in Bayfield County; Superior Oil Company's proposed changes in effluent discharges in Lake Superior. Comments were also prepared for the WDNR Board on proposed additions to Wisconsin's list of Outstanding Resource Waters because point source pollution of waters where tribal members fish remains a high priority for GLIFWC's member tribes.

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the drafting of federal legislation that would affirm the trust responsibility in the area of tribal natural resources for comprehensive, federal fish and wildlife legislation.

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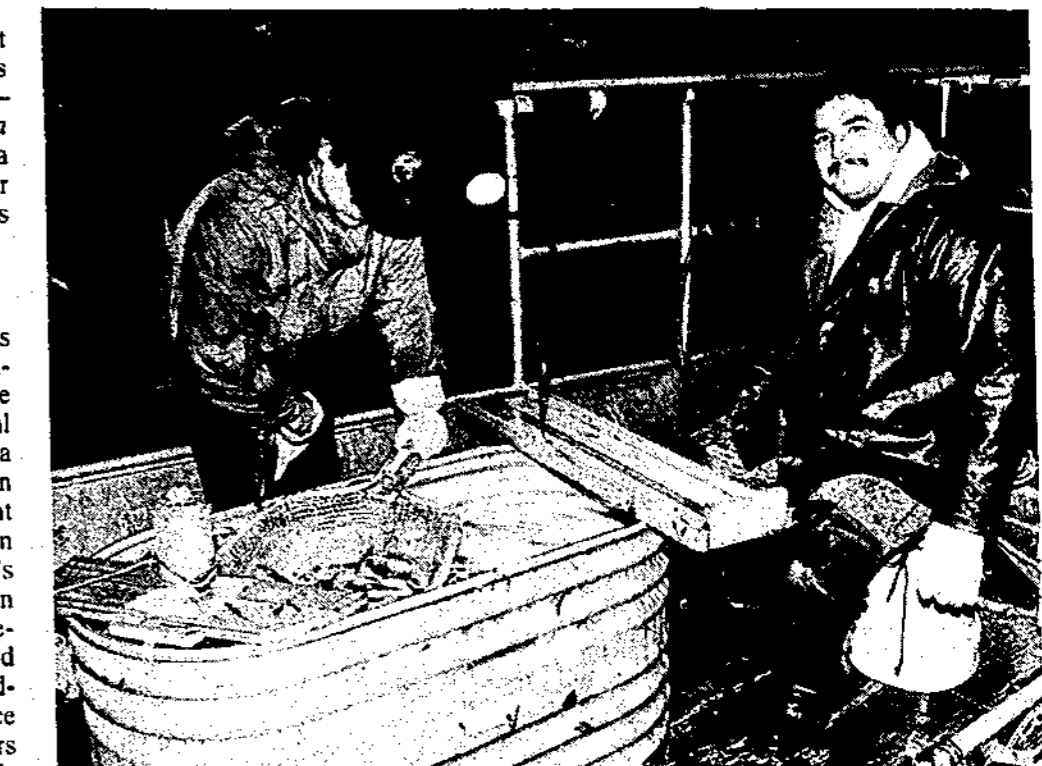
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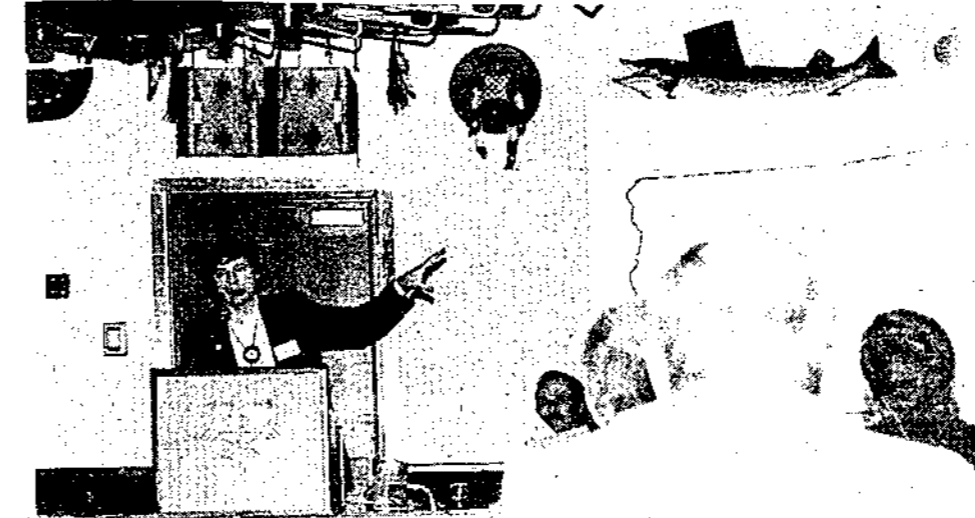
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Services to Michigan and Minnesota increase

(Continued from page 17)
1993

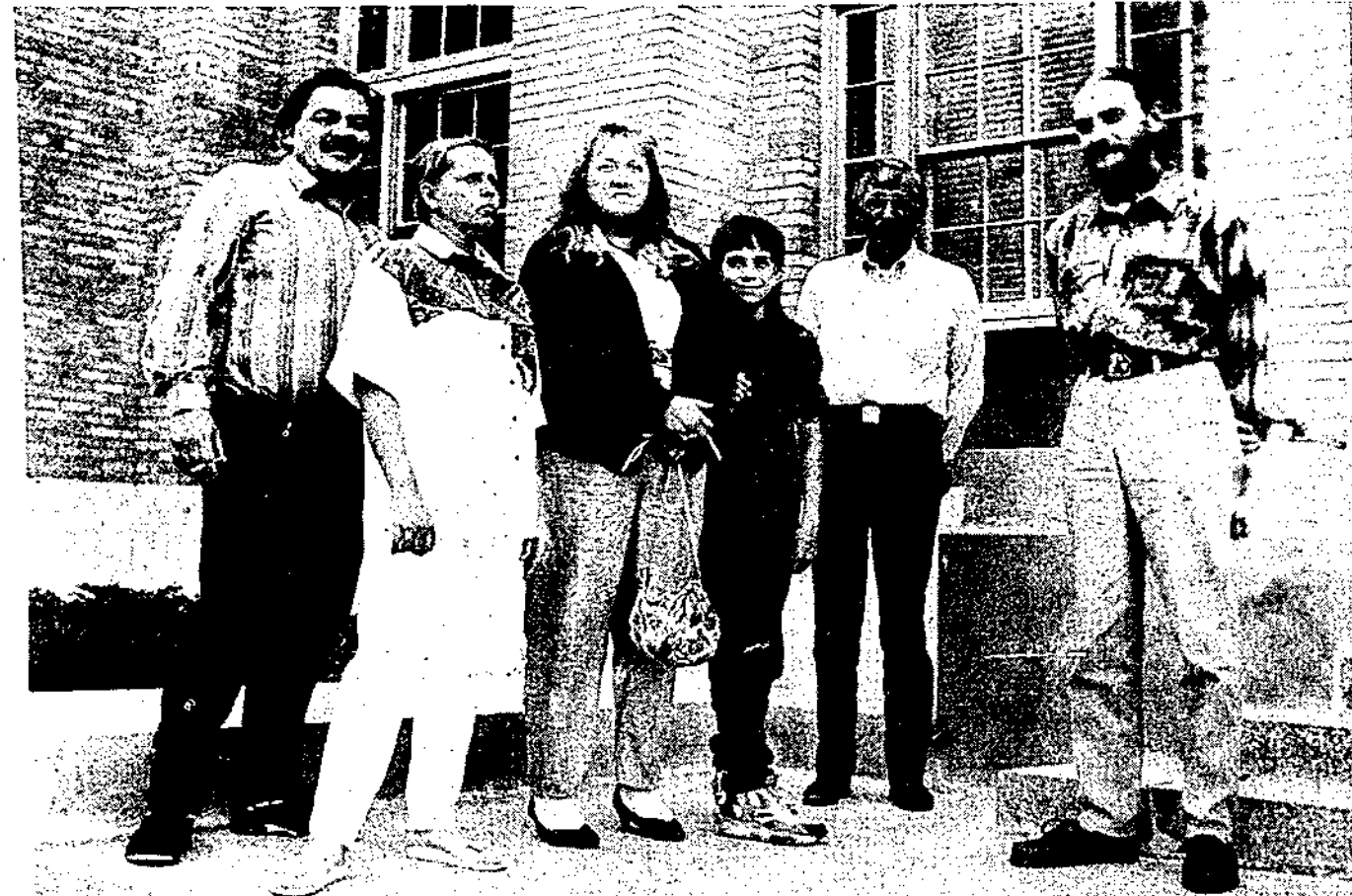
The continued push of environmental issues, addressed in the strategic plan, became even more apparent in 1993 when Exxon in partnership with Rio Algom renewed its intent to mine near the Mole Lake reservation, and Crandon Mining Company, the front for the Exxon/Rio Algom partnership, opened its doors in downtown Crandon.

Mining operations, such as the proposed Crandon Mine and the operating Flambeau Mine highlight tribal concern about the long-term environmental impacts. From a tribal perspective, the right to harvest natural resources means that those resources must be free from contamination. GLIFWC's member tribes want to protect the environment at least seven generations to come.

In response to these environmental concerns, GLIFWC convened a strategic planning conference to determine guidelines for GLIFWC's activities, inviting all GLIFWC board members, staff, committee members and tribal council members. Key environmental issues were identified and a final report on the conference is being prepared for board review.

1993 was particularly busy in Minnesota. GLIFWC assisted the Mille Lacs tribe in a series of public information meetings throughout the year regarding the proposed negotiated agreement with the State. The agreement, however, failed to be approved by the state legislature in May 1993, and the Mille Lacs case moved toward a court trial.

While Mille Lacs spent the remainder of the year preparing for the trial which will begin in June 1994, GLIFWC has continued to work with the tribe in preparation for the exercise of its treaty rights, through public information efforts, providing a fisheries biologist, and maintaining a satellite conservation enforcement office.



Numerous witnesses were called to the stand during the Dean Crist/STA trial in Wausau, Wis. in 1993. Taking a break from the courtroom are a few veterans of spring spearfishing landings, some of whom were called upon to testify during the trial. From the left, Brian Cross, Carol Cross, Anita Koser and Matthew Koser, Lac du Flambeau; Fred Ackley, Mole Lake and Art Koser, Lac du flambeau. (Photo by Sue Erickson)

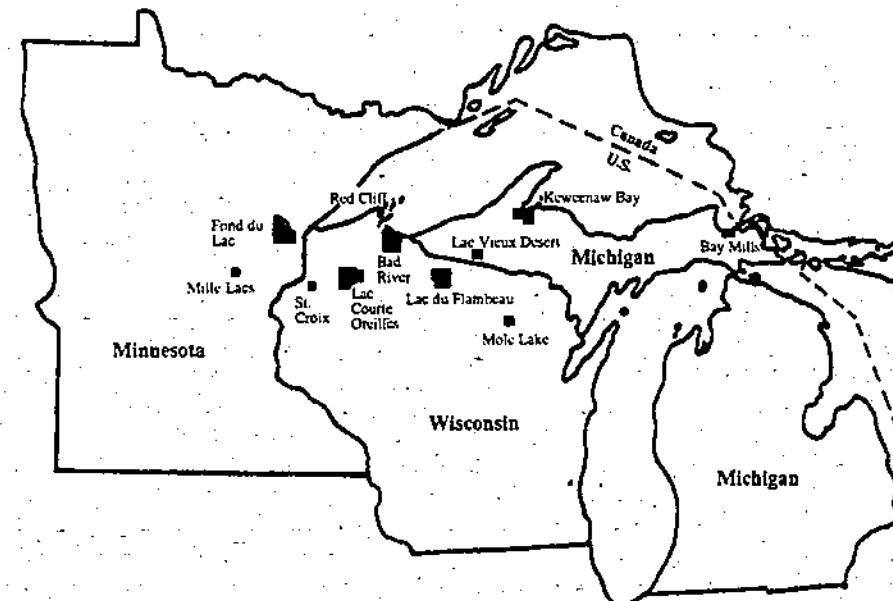
Satellite biological stations were developed both in Mille Lacs, for the 1837 ceded territory, where a fisheries biologist is staffed, and at Fond du Lac for the 1854 Treaty area, where a wildlife biologist and technician are staffed.

Similarly, GLIFWC began to serve tribal needs in Michigan more specifically with the addition of a wildlife biologist. Stationed at Keweenaw Bay, this biologist serves the Keweenaw Bay, Lac Vieux Desert and the Bay Mills tribe.

A suitable finale to 1993 was the completion of the book, **Plants Used by the Great Lakes Ojibewa**, published by GLIFWC, and jointly authored by Dr. James Meeker, former GLIFWC botanist; Joan Elias, UW-Trout Lake Biological Station, Center for Limnology; and John Heim, GLIFWC wildlife technician. The book, a five year project, identifies 384 plants used by the Ojibewa and provides Ojibewa names for those plants plus additional information regarding each species and their use.

With ten years of continuous growth behind, GLIFWC looks forward to the next decade with optimism, envisioning expanded opportunities for cooperative endeavors in many areas of resource management. The member tribes take seriously their commitment to the future generations and GLIFWC's role in providing a healthy and thriving resource for those who follow. □

GLIFWC member tribes



As part of GLIFWC's expanded services, a new enforcement satellite station was added at the Bay Mills reservation in Michigan. Above (left) GLIFWC Warden Donald Carrick stands with Bay Mills Conservation officer Terry Carrick by the vessel used by Bay Mills to patrol tribal commercial fishing activity on Lake Superior. (Photo by Amoose)

GLIFWC'S Enforcement Division emphasizes professionalism

By Sue Erickson
Staff Writer

Odanah, WI—Fifty-seven GLIFWC wardens on duty during the 1994 spring spearing season could breathe a sigh of relief as the tenth off-reservation spring spearing season drew to a close. For GLIFWC wardens, the season always heralds a nightly vigil which takes them from landing to landing about the ceded territory in order to enforce the tribally-adopted codes.

Approximately 18 of the wardens on the landings were full-time GLIFWC personnel. The remainder are hired to assist with the season. Many are veterans of seasons gone by with memories of much harder nights when the presence of angry protesters and threats of violence made each night unpredictable for GLIFWC wardens as well as spearsmen.

Chief Warden Charles Bresette heads GLIFWC's Enforcement Division which has been one of the fastest growing divisions within the inter-tribal agency.

The need to provide effective tribal self-regulation was immediate following the 1983 Voigt decision and became one of the first priorities of the Voigt Inter-Tribal Task Force (VITTF) responsible for the implementation of the treaty rights.

Once the VITTF merged with the Great Lakes Indian Fisheries Commission in 1984 the need to enforce tribal, off-reservation conservation codes included tribal harvests on Lake Superior as well as for inland hunting, fishing and gathering seasons.

Currently, GLIFWC maintains eleven staffed satellite enforcement offices on its member reservations in Michigan, Wisconsin and two at the Mille Lacs reservation in Minnesota. This was not always the case, Bresette observes. It was not until 1988 that GLIFWC was able to significantly expand its force from a base of seven full-time officers, and it was in 1993 that the Bay Mills Indian Community in Michigan, the most distant member band, obtained a satellite station.

Growth, Bresette observes, had been fast in some instances slow in others, but always steady.

Because of the variety of seasons and the expanse of territory, the challenges confronting enforcement have been manifold, not only in terms of adequate personnel but also providing the equipment necessary to monitor a variety of tribal, off-reservation seasons throughout the year.

In total, GLIFWC wardens monitor eleven off-reservation seasons including; deer, small game, waterfowl, bear, wild rice, trapping, ice fishing, open water fishing, spring spearing, Lake Superior treaty commercial fishing and miscellaneous wild plant harvesting, such as wild rice.

So, familiarity with the seasons, areas of harvest and tribally-adopted codes is



Charles Bresette, chief warden.

necessary in regard to each of the seasons. By far the most intense activity occurs during the spring spear fishing season and the fall deer harvest, according to Bresette.

Looking back over the years and significant changes, Bresette feels 1986 saw a

big breakthrough for enforcement with the purchase of a 25' Boston Whaler for enforcement on the Michigan waters of Lake Superior. A full time dispatcher was also hired that year to operate the base station.

In 1987 the Division introduced the ranking structure and chain of command currently used with the Division.

The Division is divided into two districts. Lt. Richard Semasky supervises the Northeast District, which includes the Keweenaw Bay, Bay Mills, and Lac Vieux Desert reservations in Michigan and the Lac du Flambeau and Mole Lake reservations in Wisconsin. Lt. Gerald White Jr. supervises the

Northwest District, which is composed of the Red Cliff, Bad River, Lac Courte Oreilles, and St. Croix bands in Wisconsin and, the Mille Lacs band in Minnesota.

In 1988 Professor Kirk Beattie, Associate Professor of Wildlife Law Enforcement-UW Stevens Point, provided a three week training course on proper field law enforcement practices. The intensive training course combined classroom and real-life scenarios, and was the first of several such training sessions provided by Beattie over the next several years.

1989 was another highlight year for the Enforcement Division with a significant upgrade to its radio system, including the Division's own radio frequencies. Towers in Mellen and Hayward increased radio range. To Bresette, the upgrade in radio communication was particularly important in regard to insuring the safety of officers in the field.

1989 also saw eight officers deputized as special deputies for Bayfield (See Training, page 20)



Ice rescue training held at the Bay Mills reservation. (Photo by Sharon Dax)

Training enhances enforcement capabilities



Red Cliff Warden David Curran takes aim during an annual firearm qualification. (Photo by Amoose)

(Continued from page 19)
County, a breakthrough in an endeavor to achieve cross-credentialization with local and state enforcement officials.

In 1990 Enforcement staff attended a three day workshop sponsored by the Wisconsin Department of Natural Resources as a first step towards cross-deputization. Nine officers received credentials from the State of Wisconsin that year, with another officer cross-credentialized by the State in 1991.

Completing equipment needs for each reservation was also completed in 1991, with vehicles such as ATVs, snowmobiles and boats for each satellite station to enforce the various seasons.

GLIFWC has always emphasized that its conservation officers are fully trained. Therefore, all GLIFWC full-time conservation officers are certified and have completed training requirements comparable to those of state wardens, Bresette says.

In addition, the Division requires participation in annual training programs including firearm re-certification. Throughout the years GLIFWC conservation officers have received continued training in such areas as: CPR first responder training; hunter safety; ATV operation; ice/cold water rescue; supervisory training;

basic recruit training; crowd control; physical efficiency battery training; boat safety; firearms; command management; and fur trapping.

Many of the wardens are now certified instructors, for instance in hunter safety and cold water rescue.

Currently, warden staff are qualifying for certificates in cold water rescue, Bresette states. Six officers are already trained and certified and both Lt. Jack Lemieux, Bad River, and John Mulroy, Mole Lake, are certified instructors.

Bresette places importance on cold water rescue because of the number of tragedies related to cold water. With significant numbers of tribal members out spearing in early spring and ice fishing, the need for trained responders is obvious.

Wardens, he states, will be carrying equipment necessary for cold water rescue as a routine part of their equipment.

1994 should also see five more GLIFWC wardens cross-credentialized with the State of Wisconsin. According to Bresette, this will complete cross-credentialization for the GLIFWC Wisconsin-based wardens and achieve a goal that was envisioned since GLIFWC's inception.

Self-confidence and self-control key

While GLIFWC wardens perform duty typical to other conservation officers, Bresette sees their role as unique and requiring special skills.

The prejudice against Indians and Indian treaty rights creates a situation of its own for GLIFWC officers, who have had to withstand many seasons of taunting and harassment as they monitored tribal spearing seasons through the protest years.

Enduring name-calling, threats, and taunts was a part of regular duty in the Northwoods requiring a great deal of self-control. Derogatory attitudes regarding the ability of GLIFWC wardens to fairly enforce tribal codes and now state codes also stems from stereotypes and prejudices prevalent in the ceded territories, Bresette remarks.

Wardens need to have the self control to handle such difficult situations and not respond in an inappropriate or unprofessional manner, Bresette says. They also have to believe in themselves and the treaty rights of the tribes in order to maintain the self-confidence required of their positions.

Corporal Vern Stone, Bad River, has been with GLIFWC for six years. Thinking back to the days of more controversy, Stone states that as an enforcement official "you close your ears and maintain a high degree of professionalism. It's hard to accept, but you have to realize those things can happen anytime you are in law enforcement. When you go through training you are aware that those things will happen and are prepared not to be brought down to other people's level."

Stone regards cross-credentialization very positively. "It expands your authority whether on lakes, a snowmobile or out in the woods." At first, he says, their were some questions concerning our authority, but now he just shows "both credentials and am very well received and recognized as part of a professional enforcement division."

Prior to cross-credentialization, Stone said enforcement was difficult, because you could not always tell if a potential violator was or was not a tribal member.

Basically Stone enjoys conservation enforcement because it takes him out of doors through all the seasons, where he most enjoys spending his time. "I have of love for the outdoors. We check trap lines and nets on the rivers. . . The job takes me where I want to be. . . always outside."

In addition to regular duties such as patrol, court appearances, and training, GLIFWC wardens have frequently found themselves in a public relations capacity.

Many wardens have answered requests to speak at schools, to sports organizations, or at conferences. They also assist the public information office on a regular basis manning informational booths at sport shows and educational conferences.

The ability to relate easily with both an Indian and non-Indian public and respond to a variety of questions regarding not only the tribal codes but also broader aspects of off-reservation issues is necessary.

GLIFWC wardens who are certified instructors also provide classes on hunter safety, snowmobile safety and will be running courses on boating safety, according (See On water patrol, page 21)



Ralph Christensen, Chief DNR Conservation Officer (right) presents state credentials to Charles Bresette, GLIFWC Chief Warden in February 1991.

On water patrol monitors treaty fishery

(Continued from page 20)
to Bresette. These activities again require both knowledge and ability to relate well with the public.

GLIFWC duties in Michigan vary somewhat from those in Wisconsin and Minnesota as the seasons vary somewhat. At Keweenaw Bay two GLIFWC wardens monitor the treaty commercial fishery in Lake Superior, while two others focus on inland seasons. A satellite staff of two wardens at both Bay Mills and Lac Vieux Desert monitor inland, off-reservation seasons, according to Northeast District Lt. Richard Semasky.

Semasky, who has been part of GLIFWC's Enforcement Division for nine years, notes that enforcement of the Lake Superior treaty fishery takes place on land and on water. Using the Ojibwa Lady, a 25' Boston Whaler, GLIFWC conservation officers patrol the Lake almost daily, weather conditions permitting.

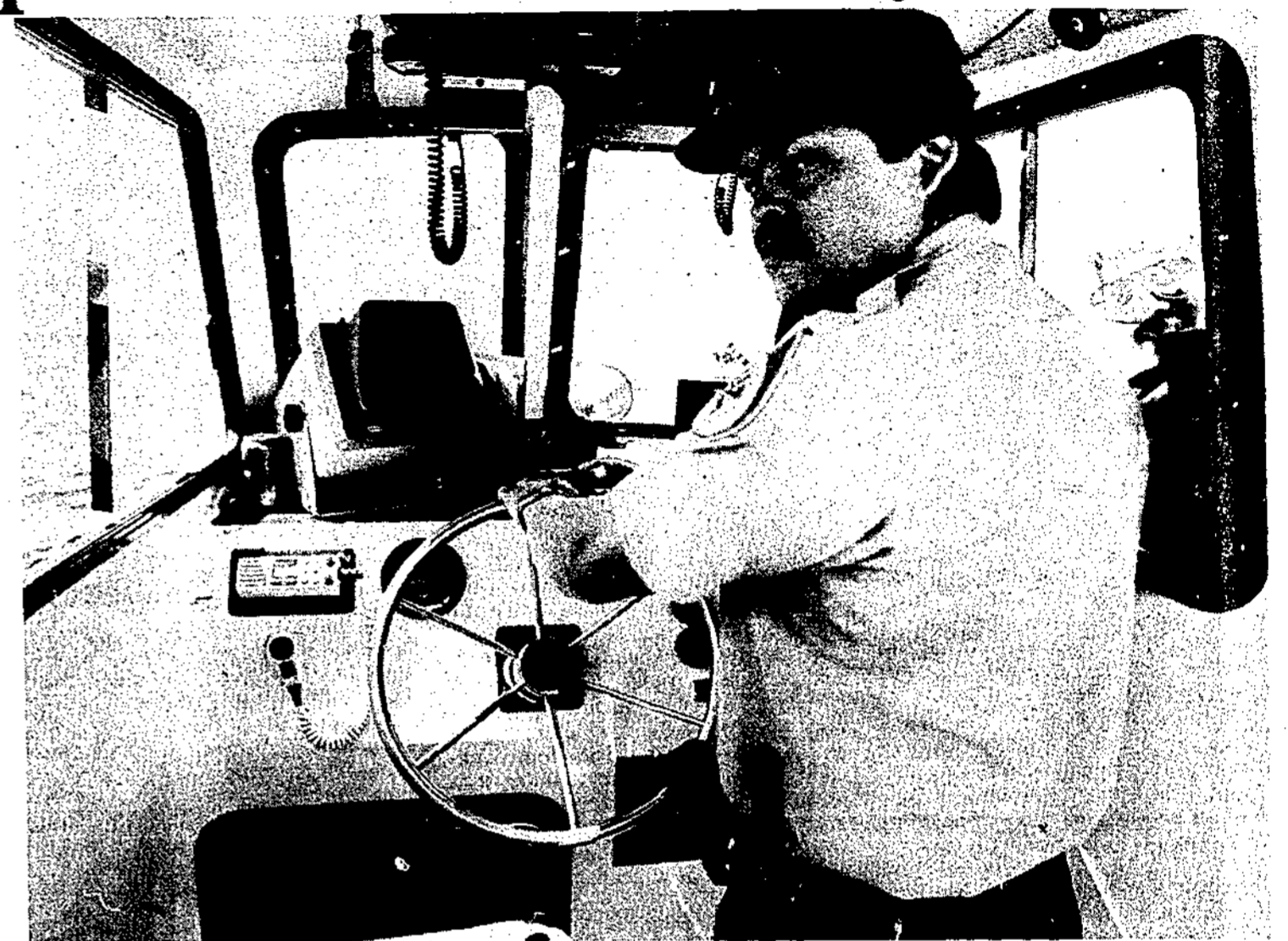
On the water, wardens monitor the fishermen, drag for lost nets, or if sportsmen find a lost net and buoy it up, GLIFWC pulls it out, Semasky says.

On the beach or boarding tribal commercial fishing boats, wardens check for numbers of fish, for proper tagging, and safety equipment, according to Semasky. Checking for buoys in the nets, net limits, and use of proper units and corresponding tags are also part of the routine monitoring.

It is the different seasons that make the job interesting to Semasky, who says that everyday is different for him.

While there is a very limited spearing for trout near Keweenaw Bay, GLIFWC wardens help out during the Wisconsin spring spearing season. In Michigan, the wardens are also very busy during the fall hunting season from September through December, Semasky states.

Always armed with a radio, time off is often interrupted with calls and besides routine work throughout his district, Semasky takes time to speak to sports groups when asked, so also assists with public education.



Dwayne Misegan, captain of the Ojibwa Lady heads the Boston Whaler out into Lake Superior to monitor commercial fishing. Keweenaw Bay warden Patrick LaPointe mans the deck. (Photo by Amoose)

Behind the scenes

Not everyone in the Enforcement Division is a patrol officer. At the home base several staff are central to coordinating the activities of the Division's numerous satellites and consolidating record-keeping.

Both full-time dispatcher Jerry White, Sr. and part-time dispatcher Sharon Dax spend hours at the central switchboard. Dispatchers transmit all calls from the wardens, Dax states. "We have contact with Ashland and Bayfield county to run license and vehicle registration checks, and we dispatch information on regulations for codes if needed," she explains.

If the Chief needs to contact a field warden or a warden needs an explanation of codes, they go through dispatch, which is the hub for the far-reaching satellite offices.

Between calls, dispatchers are busy with computer entry for the Division. Currently, Dax states, they are updating all the back radio logs from 1986 and entering them on the computer. They also maintain radio and telephone logs of every transmission.

During the spring spearing season their hours become particularly grueling. Sometimes the office is open from 8 a.m. to 6 a.m. the following day, depending on the times that the various landings across the ceded territory close each night.

While not a certified warden, Dax has received certification for ice rescue and also participates in other training sessions, videotaping and taking pictures for the Division.

Also central to the operation of the Division is the Enforcement Administrative Assistant Kim Campy, a drill sergeant in her own right. Campy has been with the Division since 1986, so is familiar with the process of growth and the struggles entailed in developing the Division to its present status.

At the main office in Odanah, Campy works with Chief Bresette in budgeting for the Division and bookkeeping. She also enters citations and is responsible for entering the daily reports filed by the field wardens. She assists in organizing training, keeps up with correspondence and main-



GLIFWC's Keweenaw Bay wardens respond to a call for assistance from the electroshocking crew after being threatened on Huron Bay this spring. Local authorities also arrived at the site. Pictured above are: Sgt. Donald Shalifoe; Northeast Lt. Richard Semasky; and Warden Dwayne Misegan. (Photo by Amoose)

GLIFWC seeks to expand services, diversify funding

By Sue Erickson
Staff Writer

Odanah, Wis.—GLIFWC's Administrative Team prepared several proposals this spring for funding from other federal agencies to expand capabilities, particularly in fishery management.

GLIFWC Executive Administrator James Schlender provided testimony before the U.S. House Committee on Appropriations' Subcommittee on Interior and Related Agencies for funding from the U.S. Fish and Wildlife Service.

Schlender seeks to expand the fishery survey work on inland lakes to complement the present work funded through the Bureau of Indian Affairs.

Specifically, he proposes establishing a tribal fisheries modeling program to assist GLIFWC in setting total allowable catches. This would address allocation issues for tribal members and state licensed anglers alike.

The proposal also includes supplemental funding to equip the GLIFWC fisheries biologist stationed at the Mille Lacs reservation in Minnesota and provide help needed to undertake population assessments and habitat surveys.

A third component of the USFWS request would upgrade GLIFWC fishery management capabilities at the Lac du Flambeau and Lac Courte Oreilles reservations in Wisconsin and thus expand cooperative resource assessment efforts.

Another proposal presented by Schlender to the Subcommittee requests funding from the U.S. Forest Service (USFS) in order to establish a cooperative

Forest Service Planning Initiative. This would expand GLIFWC's ability to provide biologically and culturally based input in the planning process for many of the national forests within the ceded territories.

Another aspect of the request for (USFS) funding is to establish a Resource Monitoring and Research Program, which would insure that the USFS's ecological management and research system incorporate plants and animals traditionally harvested by tribal members under treaty. It would also determine the impacts upon ecological communities from harvest, logging, and/or land use designations.

A third objective would expand cooperative monitoring and research activities through four pilot projects. These would expand a northern furbearer study; expand wild rice enhancement activities; initiate a new long term fish contaminant assessment, and establish walleye exploitation studies on two lakes in Wisconsin.

From the Environmental Protection Agency, GLIFWC has requested an appropriation for an Intertribal Lake Superior Basin Initiative.

The initiative would: ① expand cooperative ceded territory fish contaminant studies; ② develop an intertribal ceded territory Natural Resource Damage Assessment Program; and ③ develop, coordinate, and implement tribal strategies to protect the Lake Superior ecosystem using intergovernmental partnerships and liaisons with other organizations working to protect the Great Lakes basin's ecosystem.

A fourth proposal seeks appropriations from the Bureau of Indian



Long-term furbearer studies in the ceded territory are among other cooperative programs for which GLIFWC is seeking more funding. (Photo by Amoose)

Affairs to provide full funding of contract support; expand public information capabilities in Minnesota; increase conservation enforcement in Michigan; develop expertise necessary to address mining development issues in the ceded territories; and increase fall

whitefish and lake trout stock assessments and data analysis capabilities in Lake Superior.

Another aspect of the request would serve to expand lake trout spring population estimates and support tribal court needs.

Promises of prosperity

(Continued from page 11)

This would cut a year off the supposed annual payment to the county and to any jobs the company has created, Churchill noted.

On the other hand Virgil Achenberg, Director of the Forest and Langlade County Citizens Conservation Association, testified in support of the mining proposal in Forest County. He feels the influx of business will help the community prosper. "Maybe a major hospital may be needed in the area," he commented.

In 1986 his organization had an agreement with Exxon to receive \$6 million in the bank for the use of area lake associations. The money would be used for lake enhancement activities, Achenberg said.

In 1994 the conservation group is asking for \$12 million for lake and stream restoration projects as well as two members on the Algoma Board of Directors, one from each county.

Of water and generations before and after

"My people use the water from the Wolf River to for survival," stated Lewis Hawpetoss, Menominee Warrior Society, during his comments. They have relied on the river and land for countless generations before the coming of the Europeans, he said.

Now a mine is proposed on a site where his grandfathers are buried. The WDNR has said that the Menominee are not impacted by the mine, so they have had to purchase land to achieve affected status.

Hawpetoss depicted the mining proposal as motivated by greed only. "Never mind the water, the birds, the snakes...Never mind the snails. We are going to come and mine here," is the attitude of Exxon and Rio Algom, he said.

And what about the graves? Menominee have no word for "reburial," he stated. And what about the grandchildren and the water?

(See Of water and generations, page 27)

GLIFWC calls for recognition of tribal role in Lake Superior LaMP process and Binational Program

By Sue Erickson
Staff Writer

Odanah, Wis.—GLIFWC comments submitted to the Environmental Protection Agency (EPA) on the proposed Stage 1 Lakewide Management Plan (LaMP) for Lake Superior pressed for more integration of the tribes into the entire LaMP process.

Ann Soltis, GLIFWC policy analyst, prepared the comments in conjunction with GLIFWC staff and submitted them on May 16th along with comments on the "Ecosystem Principles and Objectives for Lake Superior Discussion Paper."

By way of clarification, the International Joint Commission (IJC) has called for both the development of LaMPs and the creation of the Binational Program to carry out its objective of using Lake Superior as a demonstration for zero discharge.

Soltis notes that the draft LaMP, if implemented, will be a significant step towards attaining the International Joint

Commission's (IJC) goal of zero discharge in the Lake Superior basin.

Tribal support of the concept of zero discharge has been evidenced by GLIFWC's Board of Commissioners' resolutions affirming the principle of zero discharge of persistent toxins into the Lake and the overall goal of totally eliminating toxic amounts of toxic substances.

Another GLIFWC Board resolution opposes permission of any further mercury discharges into the air or waters of the ceded territory.

Since portions of the Lake Superior basin lie within the ceded territories of the 1836, 1842, and 1854 Treaties, GLIFWC's interest in the management of the region stems from its goal of protecting and preserving the hunting, fishing, and gathering rights of its member tribes as reserved in the treaties.

Consequently, GLIFWC's involvement in the ongoing management planning and processes are necessary to reflect tribal interests, and "tribal uses should serve as a



Ann Soltis, GLIFWC policy analyst.

baseline protection assumption throughout the LaMP," Soltis contends.

Since the goal of any LaMP is to reduce levels of designated pollutants in order to restore and protect beneficial uses, a Lake Superior LaMP should recognize existing tribal uses, she adds.

These uses would include fishing rights as well as cultural, spiritual and medicinal practices dependent on a clean water resource.

Unfortunately, the LaMP process and the Binational Program have "failed to effectively integrate tribes as meaningful partners," she says.

While progress has occurred in regard to tribal multi-media and environmental protection programs, the environmental protection infrastructure at a tribal level remains underdeveloped and "makes commenting on an initiative such as the draft LaMP difficult at best."

She also notes that, contrary to the EPA's description of the makeup of the Lake Superior Task Force, GLIFWC is not aware that tribal governments or tribal agencies currently sit in a representational capacity on the Task Force or the Workgroup.

The Binational Program organized to implement the zero discharge demonstration project in Lake Superior and the LaMPs has three components, Soltis explains. The Lake Superior Task Force comprised of senior resource managers working on policy; the Workgroup, which is largely technical level people; and the Forum which is open to all stakeholders.

While tribal members have taken part in the Forum, they do not do so as a representative of tribal government. Soltis recommends that the appropriate place for tribal government representation is on the Task Force and the Workgroup.

GLIFWC's Board of Commissioners has approved the Executive Administrator, or his designee, to participate on the Binational Program's Task Force or Workgroup from an off-reservation perspective, she states.

The omission of tribal programs in the EPA's interpretation of "LaMPs as management tools designed to: Integrate Federal, State and local programs to reduce

loads of toxic substances," as stated in the Federal Register, totally ignores the role of tribal programs developed or being developed to help reduce these loadings, Soltis comments.

"Tribal land holdings and treaty reserved rights in the Basin are significant and a failure to integrate tribal programs fails to truly take an ecosystem approach to reducing toxic loadings in the Basin," she concludes. Other areas of comment submitted by GLIFWC include:

The goal of zero discharge and a LaMP

GLIFWC comments that while the current focus must be on the nine chemicals designated as "critical," the LaMP should continue to expand its focus to include other chemicals whose persistence and toxicity become known.

Also, GLIFWC suggests that the Binational Program take the lead in developing the research plan to develop accurate estimates of toxic depositions and begin the process of determining the origin of these substances.

Elimination timetables

GLIFWC recommends phase outs of point source releases of persistent toxic substances be uniform across all boundaries, with the exception that environmental protection would somehow be compromised.

Blueprint for zero discharge

GLIFWC suggests that in assessing zero discharge, simple evaluation of whether effluents are below analytical detection is insufficient protection, particularly where bioaccumulation may occur. GLIFWC suggests that conditioning NPDES permits on scheduled phase outs would be useful in this regard.

Point sources

GLIFWC feels the LaMP must address point source air emissions from minor sources, such as cars, wood stoves and lawn mowers. If data reveals persistent toxic substances, especially critical pollutants, the LaMP should include plans to ensure progression toward the goal of no use, production or potential for release within the basin.

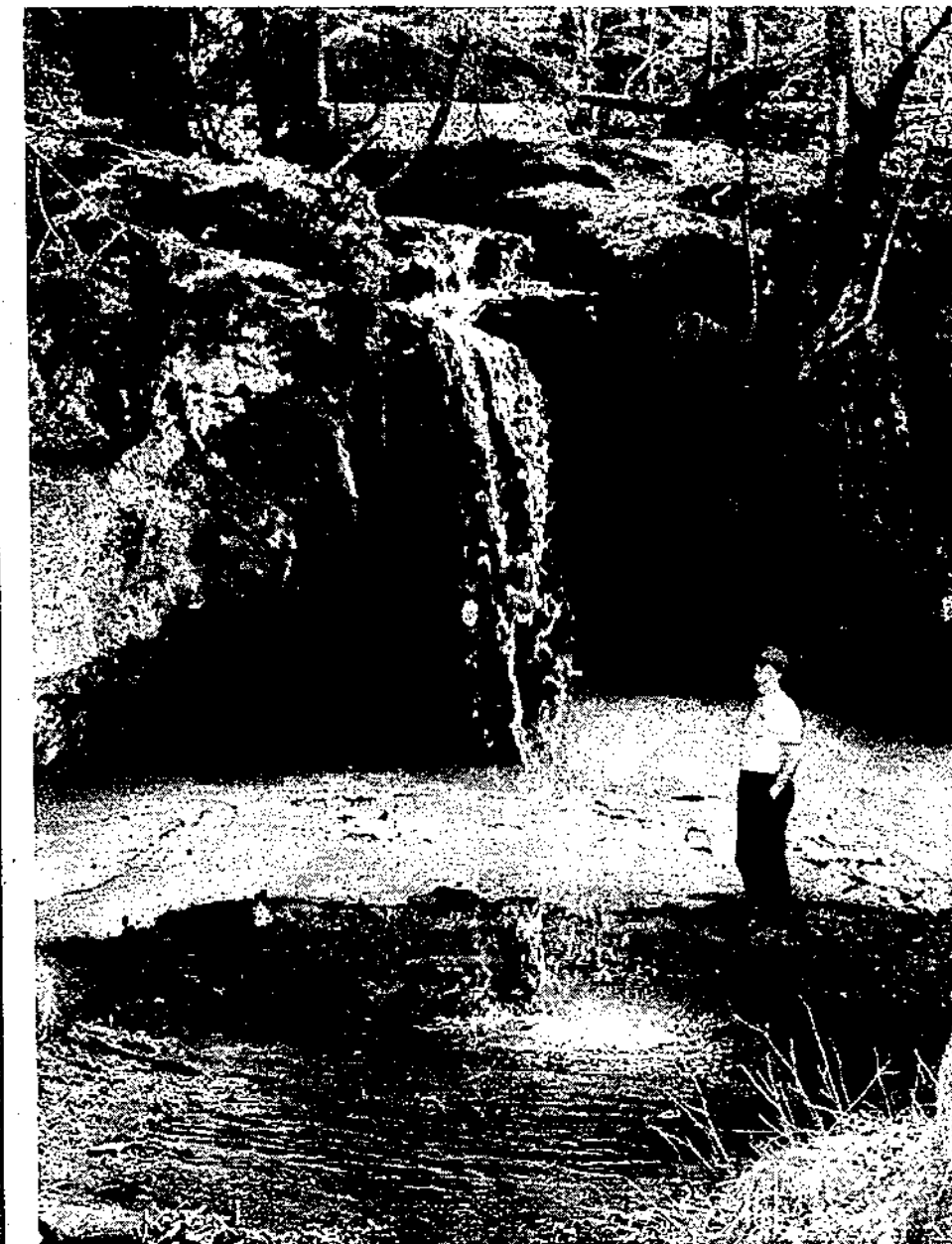
Defining causal pollutants

GLIFWC suggests that planning for zero discharge must also contain a mechanism for reclassifying causal pollutants as critical pollutants and also for adding pollutants to the list of causal pollutants.

Management strategies for nine critical pollutants

While the LaMP recommends a strategy to encourage "twinning" between U.S. and Canadian municipalities, consideration should also be given to twinning tribal governments with other governments, such as First Nations.

(See GLIFWC comments, page 27)



What has human society done to the water? Can we stop the flow of pollution? This is the challenge of the International Joint Commission's goal of zero discharge into Lake Superior. The Lake Superior Lakewide Management Plan (LaMP) takes into consideration the needs of the entire Lake Superior basin in eliminating toxic amounts of nine designated, critical pollutants. (Photo by Amoose)

LAC VIEUX DESERT



LAKE SUPERIOR
CHIPPEWA INDIANS



Former GLIFWC Board of Commissioners Chairman Donald Moore was presented with a certificate of appreciation for his years of service to the Commission. Moore served the Commission from October 1989 to November 1993. Above, GLIFWC Executive Administrator James Schlender presents the certificate to Donald Moore during a Board of Commissioners meeting at Lac Vieux Desert, Michigan. (Photo by Amoose)

Visions for Lake Superior Region emerge from ecosystem management conference

By Sue Erickson
Staff Writer

Duluth, Minn.—GLIFWC Biologist Jonathan Gilbert, wildlife section leader, participated in an international conference on ecosystem management and strategic planning for the Lake Superior region.

Gilbert, who spoke on the control of purple loosestrife in Fish Creek Sloughs, reported that the session drew participants from Canada and the United States, including representatives of state, federal, and provincial governments, tribes and private industry.

A two day conference focused on techniques of ecosystem management with top-

ics including old growth forests, biological diversity, ecological sustainability, management at multiple scales, and social/economic/political factors.

The conference was followed by a one day strategic planning session during which vision statements for the management of the Lake Superior region were developed and strategies outlined.

The need for developing common techniques in resource management processes and increasing cooperation across political boundaries were recurrent themes during the planning session, which sought to develop methods to achieve and maintain biodiversity and a sustainable ecosystem for the region. Some highlights from the planning session follow:

Conferees concluded that in the last decade biodiversity "has become a controversial, international issue." This has resulted in a high level of interest and the emergence of programs at the international, national, state/provincial, and local levels.

The high level of interest increases the potential to protect biodiversity in the Lake Superior region, as do the low population densities and the number of "undisturbed" areas in the region.

However, to achieve biodiversity in the Lake Superior region several needs were identified, including a central clearinghouse to prevent duplication of effort and facilitate common baselines, techniques and data management. Essentially this would provide a communication link between agencies, researchers and the public.

Conferees also concluded that the social and economic implications of biodiversity must be evaluated to assess the impact of human needs.

Several visions were established for the region during the planning session. One reads: "We envision a Lake Superior Region that sustains a diverse mix of functioning natural landscapes, ecosystems, communities, species, associated processes, and human cultures over time."

In order to achieve that vision, it was decided that managers would have to: 1) use integrated and common data sets for inventory and assessment; 2) identify and understand natural and human caused disturbances; 3) development multi-owner management cooperation.

Another vision regarding management at multiple scales was that, "Local, regional and global ecosystems will be sustained by understanding and living within a framework that recognizes ecosystems and their processes."

To achieve this vision managers will need to: 1) commit to cooperate across administrative and political boundaries, recognizing social concerns; 2) use the best science to promote a better understanding of ecosystem structure and function in aquatic and terrestrial ecosystems of the region; and 3) coordinate international ECS/ELS by 1997, recognizing evolutionary nature of the ECS and develop a common framework of classification, inventory and shared information systems.

Many problems face the maintenance of a diverse and sustainable ecosystem in the Lake Superior Region. A few that were cited include: inter-jurisdictional and political boundaries; current and ongoing pollution, lack of communication, and lack of public education; special interest groups; exotic species; and water diversion. (See Visions, page 27)



Lake Superior—a precious resource. Above, breakers hit the shore of Whitefish Bay, Michigan. (Photo by Amoose)

ECOSYSTEM STEWARDSHIP PROGRAM: GREAT LAKES TRIBAL LANDS

By Kent Pemo
White Water Associates, Inc.

Amasa, Mich.—In early 1994, the Keweenaw Bay Indian Community, Baraga, Mich. received a grant from the Great-Lakes Protection Fund for a project entitled *Ecosystem Stewardship Program: Great Lakes Tribal Lands*.

In this program, Keweenaw Bay's environmental coordinator, Howard Reynolds, is working closely with ecologists from White Water Associates to develop a process that enables tribal leaders and members to effectively establish land use planning and management strategies based on information about natural and cultural resources and the risks that these resources face.

The Ecosystem Stewardship Program is guided by a Project Council with representatives from Great Lakes area tribes and other interested parties. The Project Council advises and participates in environmental issue identification, relative risk analysis, and information transfer to respective tribes and organizations. Red Cliff tribal lands and Keweenaw Bay tribal lands form two focus landscapes toward which the program will direct its efforts.

Program scientist Dean Pemo, White Water Associates, Inc. indicated "the program's utility is tightly linked to the individual landscapes and the people who live there." Members of the Project Council assembled on March 21 in Baraga despite a messy spring-time snowstorm. They exchanged and discussed ideas and per-

ceptions from multiple points of view—Native Americans, Americans of European descent, scientists, policy makers, and resource agency staff.

They resolved to focus on the landscape and its mix of ecological, cultural, and spiritual qualities and the problems that confront them. Dr. Pemo states "In the Ecosystem Stewardship Program, we will try to integrate modern and traditional 'sciences' and perspectives in our approach to caring for Mother Earth.

Rather than the scientists providing the answers, we hope we can join with others in the program to help ask good questions and craft plausible solutions."

(Editor's note: A larger article on the Ecosystem Stewardship Program is planned for the fall issue of MASINAIGAN.)

Award winning wetland project dedicated

By Sue Erickson, Staff Writer

Hiles, Wis.—The Hiles Millpond Project, near Hiles, Wis., illustrates the strength of a cooperative effort. In this instance, 713 acres of wetland habitat—home to eagles, osprey, kingfisher, ducks and a variety of amphibians—was preserved by a joint effort coordinated by Tom Matthia, US Forest Service.

Wildlife Biologist Peter David and Gerald DePerry, deputy administrator participated in the dedication ceremony on behalf of the Great Lakes Indian Fish & Wildlife Commission (GLIFWC). David felt the project received a special affirmation from an eagle which observed the proceedings from a treetop perch and circled overhead at the conclusion.

The restoration project has actually been underway for several years, according to Matthia. The small Town of Hiles was confronted with a dilemma in 1991 when the Wisconsin Department of Natural Resources found the 100 year old dam at the Millpond to be in need of repair, a project well beyond the financial capabilities of the town, which owns the dam.

Hiles could only consider abandoning the dam and draining the pond, and thus destroying acres of wetland habitat, Matthia stated.

While the dam belongs to the town, much of the Millpond is on National Forest land, and resource managers strongly felt such a valued wetland should not be destroyed.

That's when the work of finding partners for the preservation project began, according to Matthia. A series of meetings brought about a variety of partners, each with their own contributions.

The U.S. Forest Service provided engineering, design and construction. Funds came from Ducks Unlimited and the U.S. Fish and Wildlife Service. GLIFWC contributed \$10,000 through The Circle of Flight Project, a Bureau of Indian Affairs initiative aimed at preserving wetlands.

The Town of Hiles, the Wisconsin National Guard, and the Wisconsin Department of Natural Resources provided in-kind services, such as the temporary bridge constructed for the project by the National Guard.

By the fall of 1993 the dam was reconstructed, the impoundment reflooded, and the project completed. The large wetland habitat remains intact as a home for wildlife and will continue to be a recreational area for humans, Matthia states.

Because of its scope and the cooperative nature of the project, the partners in the Millpond Project were honored with the prestigious "1993 Taking Wing Award" last year. This is a national award from the USDA Forest Service, Matthia indicated.

The award is based on project merits such as cooperation, and overall value to wildlife, Matthia says. In the Hiles Millpond project, the size of the wetland and its value to threatened and endangered species such as the eagle were important considerations.



A dedication ceremony in honor of the cooperators in the Hiles Millpond Project was held at the Millpond site last month. The award winning endeavor preserved over seven hundred acres of wetland habitat. Above, GLIFWC Wildlife Biologist Peter David and GLIFWC Deputy Administrator Gerald DePerry are congratulated by Project Coordinator Tom Matthia, U.S. Forest Service, for GLIFWC's participation in the joint endeavor. (Photo by Amoose)



Conservation Congress

(Continued from page 2)
remarked on the cordial atmosphere at the Congress meeting. He was asked to provide opening prayers at the Saturday meeting and Menomonee was also welcomed back to the Congress. The Menomonee tribe, which is also a county, had not participated in Conservation Congress for a number of years, Hawpetoss states.
However, he feels that participation will provide opportunities for working cooperatively and effectively with the Congress on resources issues.
In regard to the controversy over Chairman Murphy's remarks about Indians and women at a previous Congress meeting which upset numerous Wisconsin tribes, Hawpetoss feels that Murphy is more a "character than a racist."
"Bill Murphy—he's an Irish man who's got a lot of stories and tells them very openly. You see characters like this, like Tip O'Neil. . . he's a good story-teller," Hawpetoss comments. ■



Hiles Millpond has been, and will continue to be, a wetland habitat for a variety of birds and wildlife, including eagles, osprey, and black tern as well as a popular recreational area. (Photo by Amoose)

Wolf recovery in the northwoods

By Lisa Dlutkowski
GLIFWC Wildlife Biologist

According to Ojibwa culture the Creator sent Anishinabe a brother to accompany him on his early travels:

"Together as brothers Maengun and Original Man traveled to name all the plants, animals, and places of Earth. After completing this task the Creator instructed them to walk their separate paths. The Creator told them that what happened to one would happen to the other; and that each would be feared, respected, and misunderstood by the people that would join them later on Earth."

—Mishomis Book

After their separation maengun, later known as the eastern timber wolf or gray wolf, suffered greatly at the hands of the early traders, trappers, and settlers in the north woods. Wolf population declines are historically linked to loss of habitat; over-management of the wolf's primary prey base; and direct trapping and killing for bounty, sport, or malice.

European settlement and organized elimination campaigns in the north woods had a detrimental effect on wolves. Although pushed nearly to destruction and plagued by misunderstandings, wolves managed to persist in present-day Minnesota; wolves disappeared from Michigan's Lower Peninsula around 1910 and from Wisconsin around 1960. Only a remnant population of lone individuals occupied the Upper Peninsula by the mid-1950s.

Today, valued as an essential component of the ecosystem, wolves were continuing to expand their range and numbers in the ceded territories and are present again in Minnesota, Wisconsin, and Michigan.

A brief outline of the recovery and status of maengun in the ceded territories of the Lake Superior Chippewa follows:

⇒ Minnesota's northern wilderness has acted as a reservoir for wolves in the upper Great Lakes region and as a source of immigrating wolves into neighboring states. However, an entrenched anti-predator sentiment in the state ardently targeted wolves for over a century. Wolves are finally granted state protection in 1974 and today are listed as threatened in Minnesota. The current wolf population estimate for Minnesota is around 1,650 to 1,850 wolves.

⇒ The winter 1993-1994 wolf population survey in Wisconsin found evidence of 49 wolves in the state. A total of 18 packs, ranging from 2 to 7 individuals, and 4 lone



wolves were identified. The highest wolf densities in Wisconsin are in the northwest and northcentral counties, with little wolf activity in the northeast except those animals spanning the border with Michigan. Since wolves know no political boundaries, Wisconsin shares border wolf packs with both Minnesota and Michigan.

⇒ Wolf populations were expanding in the western portion of the ceded territories before recovery was noted in Michigan. Then pioneering wolf populations began immigrating into Michigan from the more stable wolf centers in Minnesota, Wisconsin, and Ontario, Canada. Wolf recovery in Michigan is centered on the rugged forests and abundant game of the Upper Peninsula. It is not believed that wolves can thrive in the more heavily populated northern Lower Peninsula. Today there are an estimated 57 wolves in the state, consisting of seven breeding packs and a number of lone wolves and non breeding pairs. Presently, the wolf is listed as endangered in Michigan.

⇒ The future of the isolated wolf community on Isle Royale, Michigan, is looking brighter after the addition of eight pups last season. Over the decades Isle Royale's wolves have fluctuated with the moose herd—with high moose numbers resulting in high wolf numbers. However, a dramatic crash of wolf numbers in the early 1980s (from 50 to 14 wolves) led scientists to believe that the Island's wolves were doomed. The die-off was presumably linked to problems of genetic inbreeding. Presently there are 15 wolves and an estimated 1,770 moose on the island.

Recent computer modeling of optimal wolf habitat in the northern Great Lakes states, based on data from Minnesota, revealed that Michigan's Upper Peninsula could potentially support more wolves than Wisconsin and may ultimately act as a future source of breeding and dispersing wolves for the region.

The healthy deer herds throughout the ceded territories, a result of mild winters and accelerated timber harvests, have aided wolf survival. As populations expand wolves face other threats besides humans—there are cases of mortality from mange, parvovirus, Lyme disease, and heartworm.

Another hindrance may be the fact that the coyote season remains open in Minnesota during the state gun-deer season and that bounties still exist on provincial islands of Canada off the eastern Upper Peninsula.

Time, human tolerance and acceptance, and a healthy ecosystem will dictate whether or not our future generations will experience a wild northern landscape capable of nurturing a flourishing wolf society.

Poisoning deaths of 17 bald eagles being looked into as deliberate, \$5,000 rewarded offered

Burnett County, Wis.—Seventeen eagles have been found dead in Northwestern Wisconsin and the deaths are being attributed to ingestion of a chemical insecticide, carbofuran, according to news reports.

A \$5,000 reward is being offered for information that leads to the arrest and conviction of anyone who may be responsible for killing the eagles which are a federally protected species.

Over a period of several days, the 17 eagles were found in a small area near Fish Lake in Burnett County. Also found nearby were the carcasses of a raccoon, muskrat and raven.

Wisconsin conservation officials and federal investigators declined to speculate as to how the insecticide was introduced into the environment, but they have ruled

out the possibility that it was used for normal farming purposes.

One possibility is that carbofuran (more commonly known by its brand name, furadan) may have been used intentionally to kill the eagles.

Another possibility is the pesticide was used illegally to try to kill raccoons or other animals, and the eagles may have ingested the poison once it was in the food chain.

Under federal law, the use of carbofuran is strictly limited in use as a pesticide in either its liquid or granular form and prohibits its use as a pesticide to control predators.

Carbofuran is used to kill worms in corn, strawberries, and potatoes, all of which are grown in Burnett County.

Due to the limited use of the pesticide, only licensed, state certified landowners can apply it to their crops.

Investigating officials have stated that it is too early to apply carbofuran in Northwestern Wisconsin.

They have said that if any application of the pesticide was done, it was either done during spring or early summer of last year and would have rapidly biodegraded in the environment, thereby being no threat to wildlife.

Stricter limits on the use of carbofuran will take effect in September. Although the ban is nationwide, it already has taken effect in several states to protect birds in ecologically sensitive areas.

(Reprinted from *Nah-Gah-Chi-Wa-Nong, Di-Bah-Ji-Mo-Win-Nan*, April 1994)



Plants Used by the Great Lakes Ojibwa

The book "Plants Used By The Great Lakes Ojibwa," is now available in abridged and unabridged versions through the Biological Services Division of the Great Lakes Indian Fish & Wildlife Commission (GLIFWC).

The unabridged version includes a brief description of the plant and its use, a reproduced line drawing, and a map showing approximately where each plant is distributed within the ceded territories. The abridged version is much the same but without the drawings, maps, and descriptions.

Both versions include tables which are sorted by the Ojibwe, scientific, and common names so that looking up a particular plant is made easier.

The cost of the unabridged version is \$29.00 for the first copy and \$27.00 for each additional copy. The abridged version is \$6.25 for each copy; these prices include postage. A check, money order or purchase order should be made payable to "Great Lakes Indian Fish & Wildlife Commission, Plant Book."

Order Form

Quantity	Plants Used By The Great Lakes Ojibwa	Price Each	Total
	Unabridged First Copy	\$29.00	
	Unabridged Each Additional Copy	\$27.00	
	Abridged	\$6.25	
	Prices include postage!		Total

Clip and mail along with a check, money order or purchase order made payable to Great Lakes Indian Fish & Wildlife Commission, Plant Book, P.O. Box 9, Odanah, WI 54861.



Gerry Walhovd, forester with the Great Lakes Agency of the Bureau of Indian Affairs, was recently awarded an Outstanding Lake States Region Foresters Award from the Intertribal Timber Council on April 28th for his significant contributions in the field of Indian forestry. Walhovd is the Great Lakes Area Inventory and Management Planning Forester. His work includes Integrated Resources Management Plan development, Forest Management Plan development as well as Geographical Information System applications for all ten reservations in the Agency's jurisdiction. (Photo by Allison Hamilton, PIO summer intern)

Of water and generations before and after

(Continued from page 22)

Like many other who commented at the hearing, Hawpetoss knows well that the contamination from the mine may well impact far beyond the boundaries designated as the "affected" area and, if allowed, far beyond the time that we can imagine.

As Al Gedicks of the of the Wisconsin Resource Protection Council stated, the potential of the waste deposit being sensitive to earthquake action is not even considered, but should be.

The tailings will last into perpetuity, and the odds of such seismic activity are good over the years. If such possibilities are not considered, we will be "guaranteeing a major ecological disaster." □

Michigan elk could be used in Wisconsin restoration

Wausau, Wis. (AP)—Elk living in Michigan could be the source of animals with which a wildlife professor establishes a herd in northern Wisconsin despite doubts among property owners.

There are questions of whether Wisconsin has enough natural habitat for elk, an animal much larger than the whitetail deer that is already a foraging nuisance in the grain fields of many farmers.

Ray Anderson, a University of Wisconsin-Stevens Point professor known for his restoration of species in their former haunts, received permission several months ago to experiment with 20 elk in Chequamegon National Forest near Clam Lake.

He reported this week that "the possibility of getting the elk from Michigan is becoming a reality."

He plans to capture some elk after the mating season, quarantine them near Clam Lake in southern Ashland County for six months, then free them next June.

The elk herd he hopes to tap has flourished near Atlanta, Mich., in a climate and habitat similar to the Clam Lake area, Anderson said.

Anderson's group says Chequamegon National Forest has open forage land for elk. The land was cleared by the Defense Department when stringing antenna in the 1970s and 1980s for the Navy's ELF (extremely low frequency) radio, whose transmitter is at Clam Lake, Wisconsin.

Each elk will be ear-tagged with a radio transmitter so researchers can monitor their behavior, eating habits and impacts on resources.

Supporters said the four-year, \$360,000 elk study could be the start of a herd that grows to perhaps 1,000 elk, attracting tourists to the region and providing new game for hunters.

In 1989, a proposal to restock elk in neighboring Bayfield County was scrapped because of opposition from residents.



GLIFWC comments on Lake Superior LaMP process

(Continued from page 23)

Also, the Great Lakes Indian Fish & Wildlife Commission recommends that Lake Superior be designated as an Outstanding National Resource Water under the Clean Water Act. Such a designation would provide the highest level of protection available under the Act and prevent new or increased discharges of persistent toxic pollutants. GLIFWC recommends that the Environmental Protection Agency take the lead in this regard.

GLIFWC also suggests enforcement strategies be included to penalize failure to implement the recommendations of the government. Also, incentives could be provided, such as tax breaks, to polluters for the purpose of developing and implementing pollution control technologies.

Visions

(Continued from page 24)

However, managers agreed that the problems were not unlovable, nor insurmountable, particularly if a commitment to finding common grounds and achieving a cooperative effort can be reached.

Planning will continue during two upcoming ecosystem management conferences, one scheduled in Thunder Bay, Ontario in August 1994 and another at Sault Ste. Marie, Michigan in June 1995. Gilbert states. He is hopeful that the conferences will be able to effectively build on one another and provide a basis for action.

Zebra mussels in rivers 'almost a national crisis'

An Illinois biologist warns that zebra mussels' depletion of the oxygen in inland waters could cause big ecological changes and force cities and industries to hold back waste discharges



The zebra mussel could have a much greater impact on inland waters and streams than in the Great Lakes. (Photo submitted)

Madison, Wis.—Zebra mussels are well-known for clogging water intakes at power plants and factories. Now an Illinois biologist says the mollusks could literally put a life threatening choke hold on inland waters and streams.

The mussels appear to consume huge amounts of dissolved oxygen in lakes and streams, according to biologist Doug Blodgett of the Illinois Natural History Survey. And a depleted oxygen level, he said, could contribute to the decline of some aquatic organisms. Blodgett also speculates that the oxygen depletion could have serious implications on current sewage and wastewater discharge.

"The impact of zebra mussels inland could be much greater than in the Great Lakes," Blodgett said. "This is a scary situation."

Blodgett studied the population dynamics of zebra mussels in the Illinois River and their effect on native mussels, such as the unionid mussels. He said zebra mussels have flourished in the lower Illinois River. During the summer of 1993, the average density of zebra mussel colonies at one spot in the lower Illinois River averaged more than 60,000 per square meter.

The high numbers of mussels coincided with low levels of oxygen in the river. What was surprising was that aquatic organisms usually have a smaller effect on oxygen levels in the river when the volume of water increases during a flood. This time, however, the dissolved oxygen in the

Illinois River was lower during the flood of 1993 than it was during the drought of 1988. Blodgett said he believes the proliferation of zebra mussels since 1988 may explain the difference.

"Zebra mussels are voracious filter feeders," Blodgett explained. "They take in a lot of water, and any time they're filtering that much water, they're using a lot of energy—they need a lot of oxygen to support their respiratory needs."

Running lab experiments to gauge the mollusks' effect on oxygen in rivers and streams, Blodgett said he and his colleagues "came up with some astounding numbers."

"It looks like zebra mussel populations could strip out approximately 2.4 milligrams of oxygen per liter of water per mile," he said. "So as water moves down the river, every mile it travels zebra mussels will use about two milligrams of oxy-

gen per liter. And keep in mind that our water quality standard in the Illinois River is five milligrams per liter—that's what we think is the minimum to keep the fish healthy. Now, take a point on the river where you have five milligrams per liter. Two or three miles downstream it [the dissolved oxygen level] will be critically low because of the zebra mussels."

That oxygen depletion could have serious effects on fish and other aquatic creatures.

"If we get low oxygen levels, we might see a shift in the fish population," he said. "Instead of a community of active fish that sport fishermen like to catch, such as largemouth bass, we could see them replaced by fish that are more tolerant of low dissolved oxygen levels, like carp. Not many people are going to be happy about that."

Lower oxygen levels could also seriously affect industrial wastewater dumping. Blodgett said water quality rules for the Illinois River do not allow a discharge of effluents, such as treated wastewater, that creates a biological oxygen demand and lowers oxygen levels below the standard of five milligrams of dissolved oxygen per liter of water.

"Last year, during the flood, we saw dissolved oxygen levels less than five milligrams to begin with," he said. "So, by the letter of the law, factories and treatment plants might not be able to discharge anything that creates an additional demand on dissolved oxygen."

The problem may be more serious in rivers than lakes, cautioned University of Wisconsin Sea Grant Advisory Services Zebra Specialist Cliff Kraft, who writes Zebra Mussel Update and coordinates UW Sea Grant's Zebra Mussel Watch monitoring program.

"The water-flow conditions in rivers are different than in lakes," said Kraft. "I think these conditions may be peculiar to rivers and probably to certain rivers. I don't think this is going to happen in the Great Lakes, and I doubt this will happen in inland lakes."

But Blodgett emphasized that this latest development in the on-going zebra mussel story should not be taken lightly.

"While the zebra mussel invasion is almost a national crisis for our inland waterways, few people have recognized it as such," he said. "We all need to realize that just as the Great Lakes system is different from the European system, and the rivers are a lot different from the Great Lakes. We're likely to have population densities on inland waters that exceed the average densities in the Great Lakes. The dissolved oxygen problems that we're likely to see are going to be critical, and we need to realize that just because we've spent a lot of money on the Great Lakes, it doesn't mean we've solved all the problems inland."

(Reprinted from Sea Grant Institute)

Coaster brook trout targeted for study/rehabilitation

Tribal hatcheries ready to assist

By Sue Erickson, Staff Writer

Odanah, Wis.—Several tribal hatcheries will be part of a cooperative endeavor to study and rehabilitate the coaster brook trout population in the Great Lakes according to Bill Mattes, GLIFWC Great Lakes section leader.

Declining populations of coasters have sparked the concerns of resource managers, including the Great Lakes Fishery Commission (GLFC). GLFC's "Fish Community Objectives for Lake Superior" call for the re-establishment of depleted stocks of native species, such as the brook trout, Mattes states.

The coaster is a brook trout (*salvelinus fontinalis*, meaning char living in springs) which spends part of its life in the Great Lakes. According to Mattes, streams along Minnesota's north shore once teemed with them, but today, coasters persist in only a few areas, including the Nipigon area of Ontario and near Isle Royale in Michigan.

Mattes feels that the population reduction is a result of numerous pressures, including human induced habitat changes, possible over-harvest, and possibly negative interactions with introduced species.

A sub-committee of GLFC's Lake Superior Technical Committee was recently established to assess the status and develop a restoration plan for brook trout in Lake Superior.

Several Chippewa bands as well as the USFWS will be working with the enhancement of coasters as well, according to Mattes. Both the Red Cliff and Keweenaw Bay bands are interested in using their hatchery facilities to hold brood stock for enhancement purposes.

Red Cliff is working in cooperation with the USFWS on experimental introductions of coasters into Lake Superior, Mattes says. The Keweenaw Bay band is also evaluating potential stream sites for introduction of coasters.

Additional work is being conducted on coasters on the Grand Portage reservation and in Isle Royale National Park through cooperative efforts led by the USFWS, and in the Nipigon area of Ontario by the Ontario Ministry of Natural Resources.



Bill Mattes, GLIFWC Great Lakes section leader. (Photo by Amoose)

Congress blocks environmental bills

By Congressional Quarterly

Washington, D.C.—Major environmental bills in the 103rd Congress have been blocked or delayed by concerns about private property and other issues. The bills include:

Safe Drinking Water Act renewal and revision: The nation's mayors and governors want more flexibility to test and monitor chemicals in water. They want the Environmental Protection Agency (EPA) to set standards for contaminants based on costs and health risks of implementing new rules. Senate committee has approved bill; no action yet in the House.

Endangered Species Act renewal: Opponents want the federal government to take into account the law's effect on people, and to compensate landowners who cannot use their property because of protections for endangered species. No action is likely this year.

Cabinet Status for EPA: There is bipartisan support for elevating the Environmental Protection Agency to a Cabinet-level agency. But some lawmakers want to require the new department to conduct a wider range of analyses on the costs and risks of regulations. Passed by the Senate, the bill is at an impasse in the House.

National Biological Survey: This proposed inventory of plants and animals is intended to help prevent them from becoming endangered. Opponents say a survey would be used to restrict the use of private property. The House passed the bill Oct. 26 only after amending it to limit the government's access to private land. No Senate action scheduled.

Clean Water Act renewal: Funding for the 1972 law on clean water and wetlands protection runs out this year. Property rights advocates want to compensate farmers and developers whose land is restricted by wetlands regulations. Senate committee has approved the bill; no action yet in House.

Proposed legislation to strengthen tribal powers

By Paul Nyhan
Congressional Quarterly

Washington, D.C.—A House Natural Resources subcommittee approved two measures by voice vote April 26 designed to secure and strengthen Indian tribal powers.

The first bill (HR3508), approved by the Subcommittee on Native American Affairs, would give tribal governments more independence and control over federal funds and programs. It was sponsored by subcommittee Chairman Bill Richardson, D-N.M.

In 1988, Congress established a demonstration project within the Bureau of Indian Affairs that allowed 20 tribes to take over the administration of federal programs

for their tribes and tailor them to the needs of their reservations.

For example, participating tribes could take over federal housing programs and redesign them with their rural members in mind.

The bill would make the project permanent and would expand it by allowing up to 20 new tribes to join the program every year.

The Senate approved similar legislation (S1618) by voice vote November 24, (1993 Weekly Report, p. 3278)

The second bill (HR4231), also sponsored by Richardson, would prohibit the federal government from making a distinction between "historic" Indian tribes—which includes almost all tribes—and "created" tribes.

The Bureau of Indian Affairs considers roughly 20 tribes to be "created" because they cannot sufficiently document their tribal history. Historic tribes enjoy greater autonomy, including the right to levy taxes and handle law enforcement on Indian lands.



Status of Major Indian Legislation 103rd Congress—Second Session

Number of Bill	Title	Reported in House	Passed House	Reported in Senate	Passed Senate	Date Approved	Law No.
H.R. 1267	A bill to grant state status to Indian tribes for the purpose of enforcement of the Solid Waste Disposal Act.			House Conference held 9/28/93 Senate Conference held 8/6/93			
H.R. 1425	A bill to improve the management, productivity and use of Indian agricultural lands and resources.	9/22/93	11/16/93	11/19/93	11/19/93	12/3/93	103-177
H. R. 334	Lumbee Recognition Act	10/14/93					
H.R. 478	Amendments to Internal Revenue Code of 1986 allowing credit against income tax for severance and personal property taxes paid to a tribal government.			Referred to Ways and Means Committee January 6, 1993			
H.R. 1846/ S. 295	Native American Trust Fund Accounting and Management Reform Act			Referred to House Subcommittee on Native American Affairs June 2, 1993 Referred to Senate Committee on Indian Affairs April 22, 1993			
S. 100	A bill to provide incentives for the establishment of tax enterprise zones and for other purposes. (Contains tribal provisions)			Referred to Finance Committee January 21, 1993			
S. 162	A bill to Amend the Internal Revenue Code of 1986 allowing Indian tribes to receive charitable contributions of inventory			Referred to Finance Committee January 21, 1993			
S. 184	Utah Schools and Lands Improvement Act of 1993	8/2/93	8/2/93	6/16/93	6/24/93	10/1/93	103-93
S. 211	A bill to amend the Internal Revenue Code of 1986 to provide tax credits for Indian investments			Referred to Finance Committee January 26, 1993			
S. 260	Indian Education Assistance Under Title IV of the Arizona-Idaho Conservation Act of 1988			Referred to Committee on Indian Affairs January 28, 1993			
S. 278	A bill authorizing the establishment of Chief Big Foot National Memorial Park and Wounded Knee Memorial			Referred to Energy and Natural Resources Committee February 2, 1993			
S. 284	Amendments to the Food Stamp Act of 1977 permitting state agencies to require households residing on reservations to file periodic income reports . . .	3/31/93	3/31/93	3/29/93	3/29/93	4/1/93	103-11

Reprinted from American Indian Report, a publication of the Falmouth Institute.

Tribes and treaty rights

Washington tribes agree not to take coho

Renton, Wash. (AP)—Nineteen Western Washington Indian tribes have agreed to restrict salmon fishing severely this year and halt coho fishing entirely to protect dwindling runs.

The announcement by the Northwest Indian Fisheries Commission came during two days of talks with commercial and sport fishermen, who also have agreed not to take coho in the hopes of revitalizing salmon runs.

A final agreement between the two groups probably will be concluded next week, negotiators said.

The two-day meeting ended on a glum note. "The Puget Sound fishery will be extraordinarily constrained," said Bob Turner, state fish and wildlife director. "The big picture here is we don't have any fish."

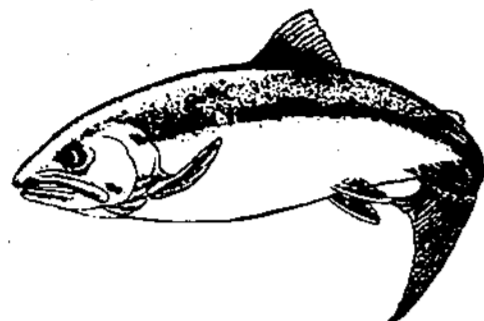
Jim Harp, Quinault tribal commission member, said the Indians decided against harvesting coho "at great cost to our economy and culture."

The Northwest Indian Fisheries Commission represents 19 federally recognized tribes in Western Washington, including the Puyallups, Muckleshoots, Quileutes, Makah and Elwhas.

Nancy Shippentower, the Puyallup representative, said the sacrifice was necessary to protect fish stocks for the long term.

"Without salmon, we have nothing, the native people," she said. "It's our livelihood. It's our spirituality."

"If we work together as one people, we may be able to bring back the stocks."



Tribal and non-tribal fishermen from Washington and Oregon met to discuss how many fish they will be allowed to catch this year. Under the law, they split the salmon harvest about equally.

The two sides must agree on harvest figures before the Pacific Fisheries Management Council meets in San Francisco.

In Puget Sound and the associated inland marine waters, fishing will be largely limited to the waters south of Seattle, where hatchery fish predominate, and in the San Juan Islands, where most fish are returning to Canada, Turner said.

Commercial chum and sockeye seasons will be shortened to avoid an impact on the dwindling wild coho.

"It's going to have a tremendous financial impact on our fleet," said Lanny Pillatos, president of the Puget Sound Gillnetters Association. "Everybody's feeling the pain."

Turner said he was dubious about allowing other fishing in the Strait of Juan de Fuca, the mouth of Grays Harbor and Willapa Bay.

Some fishing will be allowed inside Willapa Bay and Grays Harbor, he added. Low returns of salmon to spawn in the Pacific Northwest this year are blamed partly on low streamflows and ocean conditions that reduced the food supply for young salmon and increased the number of predatory mackerel.

Salmon also continue to be hard-hit by logging, urban development, dams, hatcheries, heavy fishing by Canadians and fishing mistakes of the past, said Lorraine Loomis of the Swinomish Tribe.

But Jack Nichol, a British Columbian and an alternate commissioner on the Pacific Salmon Commission, says the Americans should look at themselves, rather than blaming others.

"It's an old game where you point your finger at somebody else and say they are the ones responsible for our decline in our salmon stocks," said Nichol, former president of the United Fishermen and Allied Workers Union.

"I think they'd better look inward and look at their own fishing practices."

"It leaves us in a place of having to question society about its values," said Terry Williams of the Tulalip Tribe. "The salmon are a treaty right and part of our culture, and the preservation of that culture no longer seems viable."

"As we watch the salmon demise, we are watching our own demise."

Much of the problem is due to the loss of salmon spawning habitat, something fishermen can do little about, Williams said.

"The bottom line is we have 4 1/2 million people living in Western Washington on spawning grounds," he said.

Fishermen warn that if something isn't done now, the region could face environmental protections far more severe than those imposed for the threatened northern spotted owl.

Donald Stuart, a lawyer for Salmon for Washington, an organization for Puget Sound commercial fishers and processors, said all fishermen want to conserve salmon but need help from those who use land around spawning streams.

"If they don't do something to solve the problem, theoretically they should feel fear," Stuart said. "The federal courts are going to step in and make them do worse things than they'd be willing to do now."



Tribal member cited for netting northern pike in Duck Creek

Green Bay, Wis. (AP)—It could take years to decide a legal dispute that began when an Oneida tribal member netted a northern pike in Duck Creek and a warden cited the man for illegal fishing.

The Department of Natural Resources issued the citation Sunday to Simon DeCoteau after he netted a 23-inch northern pike in the creek near Pamperin Park.

The action set the stage for a fight between the tribe and state that could continue for years, depending on appeals. Larry Kriese, district warden for the DNR, said Monday.

The central issue of reservation boundaries makes the dispute somewhat different than one between the Chippewa tribe and the DNR. That battle resulted in federal court rulings upholding Chippewa treaty rights to spearfish, hunt and gather other resources from off-reservation parts of northern Wisconsin.

But the Chippewa dispute also originated with DNR allegations of illegal fishing by tribal members.

Last week, Oneida Vice Chairwoman Loretta Metoxen said her tribe would provide legal assistance to any tribal member cited for illegal fishing.

The tribe claims an 1838 treaty that established its reservation allows its members certain fishing rights in the creek. But the state contends the reservation boundary makes the creek near Pamperin Park off limits for spearing and netting, and the tribe has no off-reservation treaty rights.

Bolstered by a recent opinion from Attorney General James Doyle, the DNR said the tribe's fishing rights end about 1,000 feet north of the dam in the park.

The dispute dates to 1991, when the creek began producing more and bigger walleye for hook-and-line anglers. The Oneidas say they have netted and speared

fish in the creek each spring for 170 years without state interference.

"I'm just fishing like I've always fished," DeCoteau, 47, said before being cited. "I fished here when I was a young man and this year is no different than last year."

His citation carries a \$644 fine. DeCoteau is to appear in Brown County Circuit Court on July 7, Kriese said.

The DNR confiscated the northern pike that DeCoteau caught and released it back into the creek, Kriese said. In another development, Kriese said the DNR refused to cite some Oneida juveniles who went into the creek and used nets to catch some fish.

The children were acting at the direction of some adult supervisors, Kriese said. "I don't want to bring the children into this controversy. If this continues, we will have to figure out how to deal with this."

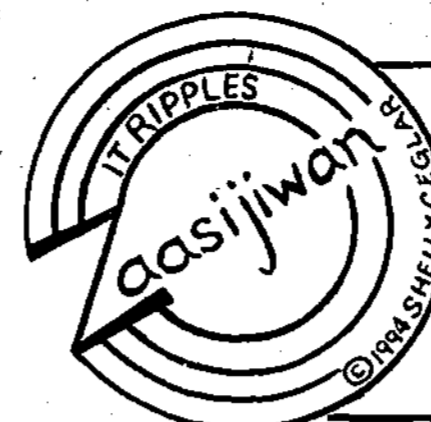
It appeared the fish the youth caught with nets were released back into the creek higher upstream, above Duck Creek dam, which was built in the 1920s, Kriese said.

About 50 people watched DeCoteau net the northern pike below the dam. Several said everyone should have the same fishing rights.

"I don't care if they go in there, but then let everybody do it not just the Oneidas," said Ken Larscheid of Green Bay. "And I don't care about the northerns and the suckers. But I don't want to see any walleyes netted."

Bob Kuske of Green Bay said walleyes were just beginning to show up in Duck Creek after years of absence.

"They were taking walleyes out of here last year, too," he said. "I don't think it's right. These treaties are done."



Niibin — It is summer

Gidagaakoons, Makoonsag, Bineshiiyag, Memengwaa, Giigoozensag, Zagimeg, Ojiig, Enigoonsag, Waawaatesiwag

(Spotted fawn, Bear cubs, Birds, Butterfly, Minnows/Small fish, Mosquitos, Flies, Ants, Fireflies)

Bezbig—1

OJIBWEMOWIN (Ojibwe Language)

Double vowel system of writing Ojibwemowin

Alphabet vowels: A, AA, E, I, II, O, OO

Consonants: B, C, D, G, H, J, K, M, N, P, S, T, W, Y, Z, glottal stop'

Double Consonants: CH, SH, ZH

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

—Generally the long vowels carry the accent.

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

DOUBLE VOWEL PRONUNCIATIONS

Short vowels: A, I, O

Miingan — as in about

Ingiw — as in tin

Qmaa — as in only

Long Vowels: AA, E, II, OO

Omaa — as in father

Ambe — as in jay

Miinan — as in seen

Enigoons — as in moon

Niizh—2

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

A. Megwayaak gaazo, a'aw gidagaakoons.

B. Agidaaki, ingiw makoonsag, omiijinaawaan ingiw miinan.

C. Jiigibiig bimaadagaawag, ingiw giigoozensag.

D. Mashkawiiwag, ingiw enigoonsag.

E. Bimisewag apane dibikak, ingiw waawaatesiwag.

F. Niibing, apane bimisewag, ingiw ojiig dash zagimeg.

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

Niswi—3

IKIDOWIN ODAMINOWIN (word play)

Down:

- 1. Here
- 2. Bear cubs
- 4. Blueberries
- 7. Fly (insect)

Across:

- 3. Butterfly
- 5. Mosquitos
- 6. S/he hides
- 8. Flies (insects)

Translations:

Niizh—2 A. In the woods she hides, that spotted fawn. B. On the hill those bear cubs, they are eating blueberries. C. Along the shore they swim, those minnows. D. They are strong, those ants. E. They fly always when it is night, those fireflies. F. When it is summer, always they fly, those flies and mosquitos.

Niswi—3 Down: 1. Omaa. 2. Makoonsag. 4. Miinan. 7. Ojii. Across: 3. Memengwaa. 5. Zagimeg. 6. Gaazo. 8. Ojiig.

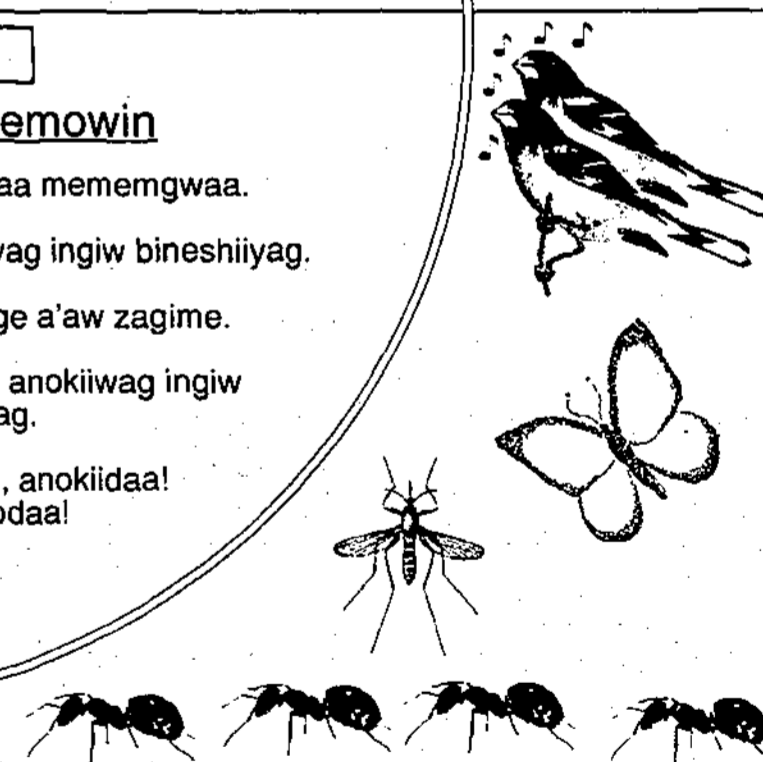
Niibin—4 1. Come here butterfly. 2. They sing those birds. 3. He bites that mosquito. 4. All together they work, those ants. 5. All together, let's all work! Let's all speak Ojibwe.

There are various Ojibwe dialects, check for correct usage in your area. Note that the English translation will lose its natural flow as in any foreign language translation. This may be reproduced for classroom use only. All other uses by author's written permission. All inquiries can be made to MASINAIGAN, P.O. Box 9, Odanah, WI 54861.

Niibin—4

Ojibwemowin

- 1. Ambe omaa memengwaa.
- 2. Nagamowag ingiw bineshiiyag.
- 3. Dakwanjige a'aw zagime.
- 4. Maamawi anokiiwag ingiw enigoonsag.
- 5. Maamawi, anokiidaa! Ojibwemodaa!



Ethnobotanical thoughts

Concern for special places?

By Dr. James Meeker
Associate Professor, Northland College

Everyone who uses and respects the out-of-doors has some favorite places. One may be where we go to see wolf tracks in the snow; another a place to make the annual walk to gather herbs, or maybe to revisit a rare orchid colony. Often these special places are areas that have not been recently disturbed. They contain a sense of natural "history" and can put one back in time.

For example, when I begin to soak up the deep green lighting in an old growth cedar swamp, I feel a sense of time past. It gives me goosebumps. These places are special because in them, people have lived "lightly." Here resource uses and cultural activities have not modified the land greatly.

A cultural activity such as the gathering of berries, roots, bark and herbs in special areas is a private or spiritual event. It is not an activity that is performed with much fanfare, and the collectors often keep the locations of these areas to themselves.

No one, for example, has volunteered to tell me the location of their favorite morel mushroom site! For the most part, I agree with the need for privacy, because while the next user may have good intentions, it is almost inevitable that increased use puts a strain on resource abundance. There are a number of plants that have been collected almost to extinction, such as American ginseng which now requires a protection program to maintain its populations. However, there is a down side to complete privacy, and it is the topic of this summer's column.

Many special areas are small, isolated, and in danger of undergoing a reduction in biological diversity. In my last article I talked about the lack of knowledge we have to guide us through many of our land management activities. We do not know for sure if populations of understory plants are in major decline since the cut-over. Many of us have warned that this may be the case, but the northwoods is a large area, and no one to my knowledge has enough first hand experience across the region to document any trends.

This is where the knowledge of local experts comes in, and secrecy of place may work against the exchange of information. Many people have been visiting the same locations, their special places, for a number of years. These people may be in the best possible position to answer an important ecological question such as, "What kind of changes are taking place?" Changes can be major like that of timber harvest, fire or wind throw, rapid succession into an open area; or they can be less obvious, like fewer populations of some species.

In many cases a change in light availability will cause changes in species abundances, as some plants are favored by more light and some by less light. In either case, there is a definite lack of information about what happens to the ground flora of an area over the long haul.



Dr. James Meeker

What can be done about this lack of knowledge? In today's world of the shrinking monetary resources we cannot count on "government" to do the necessary monitoring to protect all (especially non-economic) resources.

One possible solution might be to enlist a group of volunteer plant "experts" to come together and discuss what type of information is necessary to protect plant resources. Then, we could begin to apply for funds to train volunteer plant "rangers" to fine tune their plant identification and observation skills. Finally, we could begin to establish a long-term program and ask volunteers to commit to being the "watchers" of a special place near them. Perhaps two to three times over the growing season volunteers could list the plants of their area, estimate plant abundances, and observe any other changes.

This volunteer approach may be difficult at first. Not everyone can commit for the long term. Also, it may be necessary to enlist local botanists to confirm the identification of some of the difficult-to-determine species. However, the hope is that eventually the volunteers would become the experts of their special spots.

If all these people came together with information across the region, maybe we could begin to look at some long term trends in abundances, which could then alert us to potential problems before they become severe.

There is a new ecosystem or holistic emphasis that land managers believe to be the best way to both use and protect our natural resources. This new landscape emphasis has required a re-consideration of the human component in the conservation equation. Since we realized that we can not preserve all biological diversity in small, isolated natural areas, it has become necessary to include in the conservation equation lands with different levels of human use and development.

The "humans too" approach is complimentary with the popular idea of sustainability; that is the successful integration of compatible human activities into our biological preservation designs. What better way to begin to monitor the resource landscape than to involve some of the people who use the resource and are committed to the protection of their special places?

A number of years ago I happened to read a bumper sticker that proclaimed "We are spending our children's inheritance!" I thought it was amusing at the time; however, if we begin to think of this inheritance in terms of the earth's resources, the whole idea takes on a different tone. I think most of us would agree that we need to offer future generations "out-of doors" experiences similar to ours. One way to insure this is to maintain special places for generations to come.

(Jim Meeker is Assistant Professor of Natural Resources at Northland College, and active in regional conservation. Jim received his PhD in Botany from the University of Wisconsin at Madison. His research interests include studies of Great Lakes wetlands and investigations in regional ethnobotany, including joint authorship of "Plants used by the Great Lakes Ojibwa," recently published by GLIFWC.)

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