

Foreword

The Great Lakes Indian Fish & Wildlife Commission (GLIFWC) expresses appreciation to all the Ojibwe elders who have and continue to share knowledge of traditional lifestyles, values and skills.

The excerpt below is taken from an interview with Archie Mosay, a spiritual leader and teacher from the St. Croix Indians of Wisconsin, who influenced many lives before he walked on in 1996 at the age of 94.

During the interview, he talks about the traditional pattern of gathering through the seasons when he was a youth in the Balsam Lake area.

Because traditional foods and customs remain important to contemporary Ojibwe people, GLIFWC is committed to preserving and enhancing opportunities for traditional harvests well into the future.

What They Did Long Ago

Archie Mosay's words are published in the *Oshkaabewis Native Journal*, Volume 3, Number 2, edited by Anton Treuer. The publication as well as tapes are available through the Indian Studies Program, Sanford Hall, Box 19, Bemidji State University, 1500 Birchmont Drive NE, Bemidji, MN 56601-2699.

What they did long ago

By Archie Mosay

Gaye dash o'ow isa ziigwang, ow apiitak, mii apii mewinzha anishinaabe gii-kozid noopiming izhi-gozi, gii-ozhitood o'ow, o'ow isa ziinzibaakwad mitigong ininigaadeg zhiwaagamizigan. Mii gaa-ozhitoowaad. Mii iwidi gaa-taawaad, gaawiin waasa—gema gaye naano-diba'igan o'ow apii iwidi ingoji megwaayaak. Mii iwidi gaa-taawaad iskgamizigewaad.

And in the spring too, in the midst of this season, long ago the Indian moved then, moving into the deep forest, he made this, this here sugar from the trees as the syrup was handled in a certain way. That's how they made it. Over there where they lived, it wasn't far—five miles out in the woods somewhere. They lived over there when they sugared off.





*John Heim,
Bad River
tribal member,
harvests rice
on Totogatic
Lake, Sawyer
County.
(Photo by
Al Bonanno)*

Mii miinawaa ishkwaaw-iskigamizigewaad, miish imaa jiigibiig zaaga'iganiing Inaandagokaag, mii imaa gii-kabeshiwaad. Noongom miinawaa imaa gii-kabeshiwag gii-noojigiigoonyiwewaad waaswaawaad, ashiganan aajigwaawaad. Mii imaa gaa-tanakiid wa'aw, gaa-onjibimaadizid a'aw anishinaabe mewinzha.

Mii miinawaa giwegoziwaad. Mii dash zhayigwa gii-ozhitaawaad o'ow isa gii-midewid anishinaabe. Akina ingoji gii-midewi aw anishinaabe—Odaawaa-zaaga'iganiing, miinawaa a'aw Waaswaaganing, miinawaa Mashkii-ziibiing, miinawaa iwidi Dewegishigamiing. Namanj ezhinikaadegwen iw, anishinaabewinikaadeg iwidi ishkonigan. Miinawaa go omaa ayi'ing gaye Wekonamindaawagaansing

Again when they're done sugaring off, then there on the shore of Balsam Lake, that's where they set up camp. They set up camp there again at this time harvesting fish by shining them, hauling in the largemouth bass. He lived right there, that's how the Indian lived long ago.

Then again the Indian moved home. Then already they began preparations for when the Indian participated in the medicine lodge. The Indian took part in the medicine lodge everywhere—at Lac Courte Oreilles, again at Lac du Flambeau, and at Bad River, and again over there at Dewegishigamiing. I am not sure what it's called, what that reservation over there is called in Indian. And here too at Little Sand Lake (Maple Plain) as it's called,



izhinikaadeg, miinawaa iwidi
Metaawangaag, Bikoganaaganing—mii
imaa gii-midewiwaad iko ingiw anishi-
naabeg mewinzha.

Mii miinawaa ishkwa-midewiwaad,
mii dash miinawaa gii-sagaswe'idiwaad
o'ow baakibii'ang o'ow zaaga'iganiing,
gii-asemaakewaad onji-
naanaagadawenimigoowaad manidoon
imaa wenjishkaawaaniwenijin.

Mii miinawaa ishkwa-
zagaswe'idiwaad, mii dash miinawaa
ayiigwa o'ow isa gii-mawinzowaad
onow editeg miinan, miskominan,
godagaagominan, o'ow isa gegoo
editenig. Mii iw gaa- mawinzowaad.
Mii gaa-onji-bimaadizid a'aw anishi-
naabe mewinzha, gaye niin bi-de-
gikendamaan. Mii dash iw.

Miinawaa dagwaaginig, mii azhigwa
gii-madaabiigoziwaad o'ow isa gii-
manoominikewaad, manoomin gii-
bawa'amowaad. Akawe gii-
sagaswe'idiwag waa-
manoominikewaad, asemaakewag o'ow
isa zaaga'iganiing gii-kaagijitoowaad
o'ow isa manoomin
wii-pawa'amowaad. Gaawiin awiia
gii-izhi-boozisii. Akawe asemaan ogii-
pagidinaan nibiikaang.

Miinawaa gii-kiizhitood a'aw anishi-
naabe manoomin, akawe asemaan ogii-
pagidinamawaan manidoon wii-izhi-
miijisig iw manoomin. Mii gaa-
miijiwaad. Mii keyaa gaa-pi-izhi-
waabamagwaa ingiw anishinaabeg
ishkweyaang.

and again over there at Big Sand Lake
(Hertel), at Danbury—right there those
Indians customarily did the medicine
dance long ago.

And then when they finished the
medicine dance, then again they had a
pipe ceremony when the ice went out
on this lake, they made tobacco offer-
ings to the spirit to be thought of there
in what they were up against in their
lives.

Then again after they had the pipe
ceremony, then again already they
picked berries when they were ripe—
the blueberries, the raspberries, the
blackberries, whenever they ripened.
That's how they harvested berries.
That's why the Indian lived long ago,
from the extent of what I've come to
know of it myself. And that's it.

Again in the fall, now they move to
the shores of the water to pick rice,
knocking the rice. First of all they have
a pipe ceremony when they want to
pick rice, making tobacco offerings to
this lake, tying up this rice they want
to knock. Nobody embarked. First of
all he offered tobacco in the water-
ways.

And when that Indian finished the
rice, first of all he offered tobacco to
the spirit as he doesn't want to eat that
rice. Then they ate it. That's how I saw
those Indians [do things] in former
times.





Akina ingoji gii-izhaa gaye aw anishinaabe sa o'ow isa gii-paa-midewid. Gaye iwidi Odaawaa-zaaga'iganiing izhinikaadeg imaa Baatawiga-maag, mii imaa gaa-tazhi-midewiwaad mewinzha anishinaabeg. Ingoji gaa-izhi-bimoseyaang gii-o-midewiyaang gii-nandomaakawaa noosiban o-wiidookaazod owidi wiidookawaad akiwenziiyan gaa-midewiwinijin. Niso-giizhigon ingiitazhi-izhaamin gii-tagoshinaang. Mii keyaa gaa-izhichiged a'aw anishinaabe ishkweyaang gii-naazikang o'ow isa gaa-onji-bimaadizid. Noongom gaawiin izhichigesii a'aw anishinaabe bi-naazikang bi-onji-bimaadizid. Gaye o'ow midewiwin ogii-igoon a'aw manidoo, mii go gaa-ni-izhi-maama-wookang a'aw anishinaabe o'ow isa maanangid, o'ow isa gii-onji-maajiishkaad mii gaa-ininang manidoo. Mii sa iw gaa-izhichigewaad mewinzha ongow anishinaabeg, gii-izhaawaad gegoo inakamigizid ingoji anishinaabe.

And all the Indian people went to different places when he participated in this medicine dance. And over there at the Lac Courte Oreilles reservation as it's called, there at Whitefish, right there the Indians held the medicine dance long ago. We walked everywhere to go participate in the medicine dance as my father was summoned to go over and help out, assisting those old men who did the medicine dance. It took us three days to get there. That's how the Indian did things in former times when he approached this where his life originated. Today the Indian doesn't do this when he goes to where his life comes from. And the spirit told him of this medicine dance, that he was to come to do that which he had been given together, that this was the reason his life started as the spirit handed it down to him. That's how these Indians did things long ago when they went to where the Indian people did certain things.



The Great Lakes Indian Fish & Wildlife Commission

Commonly known by its acronym, GLIFWC, the Great Lakes Indian Fish and Wildlife Commission is an agency of eleven Ojibwe nations in Minnesota, Wisconsin, and Michigan, with off-reservation treaty rights to hunt, fish and gather in treaty-ceded lands. It exercises powers delegated by its member tribes.

GLIFWC assists its member bands in the implementation of off-reservation treaty seasons and in the protection of treaty rights and the natural resources. GLIFWC provides natural resource management expertise, conservation enforcement, legal and policy analysis, and public information services.

GLIFWC's member tribes include: the Bay Mills Indian Community, Keweenaw Bay Indian Community and the Lac Vieux Desert Band in Michigan; the Bad River, Red Cliff, Lac du Flambeau, Lac Courte Oreilles, Sokaogon and St. Croix Bands in Wisconsin; the Fond du Lac and Mille Lacs tribes in Minnesota. All member tribes retained hunting, fishing and gathering rights in treaties with the U.S. government, including the 1836, 1837, 1842, and 1854 Treaties.

GLIFWC's Board of Commissioners, comprised of a representative from each member tribe, provides the direction and policy for the organization. Recommendations are made to the Board of Commissioners from several standing committees, including the

Voigt Inter-tribal Task Force (VITF) and the Lakes Committee.

The VITF was formed following the 1983 Voigt decision and makes recommendations regarding the management of the fishery in inland lakes and wild game and wild plants in treaty-ceded lands of Wisconsin. The Lakes Committee recommends on matters pertaining to the management of the Lake Superior fishery and related issues.

GLIFWC's central office is located in Odanah, Wisconsin, on the Bad River reservation. Satellite conservation enforcement offices are located on most member reservations, and a satellite office of the Biological Services Division is located in Madison, Wisconsin.

Services provided through GLIFWC are summarized below:

Administration: All policies approved through the Board of Commissioners are implemented through GLIFWC's Administration Division, which also includes budgeting and financial management for the organization. As such, administrative tasks involve both in-house accounting and record-keeping, coordination of meetings and planning for anticipated needs of member tribes, as well as annual testimony before Congress which seeks appropriations to maintain and improve GLIFWC's funding base.





Tom Maulson, Chairman of the GLIFWC Board of Commissioners and the Voigt Intertribal Task Force.

Biological Management: GLIFWC provides a staff of biologists and technicians which assist in coordinating off-reservation harvest seasons and supply the technical expertise and data required in determining appropriate harvest regulations and in making resource management decisions.

Enforcement: GLIFWC provides fully-trained and equipped conservation wardens, stationed in the area of each member tribe, to assure that the tribally-adopted codes regulating each off-reservation season are enforced. In addition, GLIFWC assists tribal courts where conservation violations are cited.

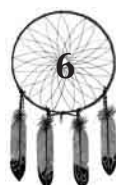
Intergovernmental Affairs: To further tribal self-regulatory capabilities, this office supplies the expertise necessary to formulate legally-acceptable codes and ordinances; interpret pertinent legislation which may affect off-reservation resources; and advise on issues pertaining to treaty rights.

Development and Planning: The primary responsibility of the Planning & Development office is to assist the Commission in implementing its Strategic Plan—*Wii Gimawanjii'idimin Gaye Wii Nibawaadaanamin*. GLIFWC also provides staff who work with member tribes in seeking opportunities to enhance and improve the natural resources and to most beneficially use harvested resources. This involves locating funding sources as well as economic opportunities on behalf of the member tribes.

Public Information: The public information office serves as a vehicle for public education for tribal members and the general public. Through publications, media contacts and information booths, timely, factual information pertaining to tribal off-reservation resource management and treaty harvest is disseminated.

Tribal Courts: GLIFWC assists in the maintenance of tribal courts which are an integral part of self-regulation. Citations issued for violations of off-reservation hunting, fishing and gathering codes are heard in tribal courts where penalties are imposed upon violators.

Tribal Registration Stations: Each member tribe receives financial assistance through GLIFWC for the support of on-reservation registration stations. The stations are sites to obtain permits, necessary tags and to register the harvest.



Off-Reservation Treaty Seasons

Each off-reservation harvest season is regulated through ordinances passed by the tribal council of member tribes. Off-reservation ordinances outline the regulations under which tribal members may exercise their treaty right during each season, and they may vary from tribe to tribe.

Tribal off-reservation conservation codes include restrictions on seasons, bag limits or quotas, and types of gear. Permits are typically required to exercise off-reservation harvests. GLIFWC maintains registration stations on most member reservations for the issuing of permits and registration of harvest. Codes are strictly enforced by GLIFWC conservation officers.

In general, contemporary treaty hunting, fishing and gathering activities follow seasonal harvesting patterns. In biboon (winter), off-reservation hunting includes the conclusion of the deer harvest, small game hunting and trapping, fishing through the ice with hook and line, spear, or in some cases nets, and on Lake Superior commercial netting in designated zones.

Ziigwan (spring) is busy for many off-reservation fishermen as the ice leaves the lakes and rivers. Off-reservation spring spearing and netting seasons open for many tribes. Maple syrup is also gathered during early spring, and seasons are open for a variety of small game, wild turkey, and Lake Superior commercial fishing.

Open-water fishing, including netting for some tribes, is an off-reservation harvest in niibin (summer) as are gathering activities for various plants and berries.

Dagwaagin (fall) is a very important time for off-reservation harvests. For many tribes, bear and deer seasons begin shortly after Labor Day. Waterfowl seasons and several small game seasons open, and wild rice season arrives.

Each of these off-reservation seasons is regulated by codes which are available from member tribes and GLIFWC enforcement stations on individual reservations.



*preserving
the Circle of
the Seasons*



Preserving the Circle of the Seasons

The land cession treaties signed by GLIFWC's member tribes guarantee hunting, fishing and gathering rights in the territory that the United States obtained. This guarantee and GLIFWC's role in helping the tribes affirm and implement their treaty rights are easily understood in terms of the tribes' relationship to Aki (earth) and the circle of the seasons.

The court decisions affirming this guarantee serve as a reminder that Ojibwe bands and governments have a legal status and role under the US Constitution. In exercising their treaty rights, the tribes carry out sovereign powers of self-government and undertake a wide array of activities that perpetuate their culture. This means that other governments, particularly states, cannot maintain exclusive control of natural resource use and management in the ceded territories.

The tribes would not sign these treaties until the United States agreed that they could continue their way of life in the ceded territories to meet their subsistence, economic, cultural, spiritual and medicinal needs. As a number of federal courts have found, one of the primary purposes of these treaties is to provide a permanent right for the tribes to make a moderate living from the ceded territory lands and waters by engaging in hunting, fishing and gathering as they had in the past.

In affirming these treaty rights, the courts, including the US Supreme Court, have set forth a number of key principles regarding treaty interpretation. Indian treaties, like treaties with any other nation, are the supreme law of the land as provided in the US Constitution. They take priority over state laws, cannot be abrogated or terminated by implication, and the rights that they provide for the Indians are considered constitutional rights.

Also, Indian treaties are to be interpreted liberally in favor of the Indian signatories, and treaty ambiguities are to be resolved in the Indians' favor. This does not mean that "the Indians always win," as many treaty opponents might suggest. Rather, it means that the "facts" surrounding a treaty must be carefully examined to ascertain the treaty's history, the terms of the negotiations, and how the parties understood the treaties. After all, the United States and the tribes were not in an equal bargaining position, and the treaties were negotiated and written in a language foreign to the tribes.

After carefully examining considerable historical evidence surrounding the treaty negotiations, the courts have concluded that GLIFWC's member tribes intended to reserve, and the United States intended to guarantee, the right to continue the traditional hunting, fishing and gathering way of life. The



courts also looked at the historical record since the treaties were signed and found that there has been no action by Congress or the President to terminate these rights, and that “statehood” by itself does not take away the rights.

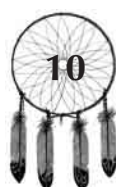
For ceded territory natural resource management and harvest regulation, the tribes’ hunting, fishing, and gathering rights have a number of important ramifications. First, a state’s management authority is narrowed to a significant degree by the rights, and the exercise of a state’s management authority is subject to judicial review to ensure that the rights are not infringed upon. Second, a state may restrict the exercise of the treaty rights only to the extent reasonable and necessary for conservation, public health and public safety purposes. However, the tribes may preempt state regulation if they establish an effective system of tribal self-regulation that meets legitimate conservation, health or safety requirements. These same principles have been applied to federal regulations that might impact the exercise of treaty rights.

Consequently, the tribes and the other governments involved have established various natural resource management and regulatory frameworks for exercising treaty rights. Some elements of these frameworks have been developed through agreements reached between the particular tribes and the state involved, and then incorporated into a court order. Others have been ordered after contested court proceedings where the court resolved disputed issues.

These management and regulatory frameworks meet two needs: 1) From a regulatory perspective, they establish the regulations that conserve natural resources and protect public health and safety; and 2) From a management perspective, they provide for coordination and cooperation between the governments involved. For example, they include:

- Natural resource management plans adopted by the tribes;
- Protocols for determining harvestable surpluses and treaty harvest limits for species with harvest quotas, such as deer and walleyes;
- Model regulations that the tribes must follow in regulating tribal members who exercise treaty rights;
- Harvest monitoring and reporting requirements;
- Data gathering and analysis procedures; and
- Cooperative management mechanisms involving the tribal, state and federal governments, including a number of technical committees or working groups through which these governments exercise their cooperative management responsibilities, exchange data and information, examine management or regulatory options, and attempt to reach consensus in the exercise of their respective authorities.

One important aspect of cooperation and coordination lies with the tribes themselves. For example, in the Treaty of 1837, each signatory tribe



reserved the hunting, fishing, and gathering rights for itself and its members. However, at the same time, all treaty signatory tribes reserved the same set of rights collectively and these rights may be exercised by each tribe throughout the ceded territory. Given these individually-reserved yet intertribally-shared rights, the tribes individually and collectively must:

- Undertake effective management programs and adopt and enforce regulations consistent with reasonable and necessary conservation, public health and public safety standards;
- Stay within the total tribal allocation of natural resources; and
- Engage in intertribal co-management to preserve their system of tribal self-regulation by effectively managing and regulating treaty rights.

This is where GLIFWC fits in. It functions as an intertribal off-reservation natural resources agency for its member tribes. It provides biological services to its member tribes, maintains an intertribal conservation warden force that enforces the tribes' ceded territory conservation codes into tribal courts, and assists the tribes in developing their treaty rights regulations. Also, GLIFWC frequently serves as the tribes' conduit

for communication and coordination with state and federal natural resource management agencies.

Just as the tribes' relationship to Aki is all encompassing during the course of the seasons' circle, so too are the tribes' ceded territory natural resource management plans and conservation codes comprehensive in their scope and coverage. They regulate tribal members engaging in a broad range of treaty rights activities, including fishing, deer hunting, bear hunting, small game and furbearer hunting/trapping, wild rice gathering, and wild plant and forest products gathering.

While the specific elements of each tribe's management plans and regulations may vary somewhat between portions of the ceded territories lying in Minnesota, Michigan, and Wisconsin, their import is the same. For the tribes and their members, they secure the exercise of treaty rights to meet subsistence, economic, ceremonial, medicinal, and religious needs, while protecting and enhancing the natural resources and habitats involved. For other governments involved, they compel acknowledgment of the tribes' treaty rights, recognition of the tribal self-regulatory system, and integration of the tribes as natural resource management partners.





Inland Fisheries

Inland Fisheries

During *ziigwan* (spring), or the *iskigamizige-giizis* (maple sap boiling moon), Ojibwe people traditionally harvested *ogaa* (walleye) as the ice left the shores of inland lakes and rivers. Using spears (*anitiin*) and torch lights (*waswaaganan*), the people took the fish when they were near shore and plentiful. Today, the Ojibwe continue to harvest *ogaa*, *maashkinoozhe* (muskelunge) and other species of fish each spring.

The treaty spring spearing season for walleye has been exercised in northern Wisconsin since 1985 under court protection. Although the spring spearing season was subject to considerable protest from 1985-1991, it has quieted in Wisconsin. In the 1837 Treaty ceded area in Minnesota, where the treaty rights of tribes who signed the 1837 Treaty were reaffirmed by the U.S. Supreme Court in 1999, spring spearing/netting seasons from 1998-2003 saw limited controversy.

In Wisconsin, public and tribal concern over the walleye population, a species popular with both state-licensed and tribal fishermen, prompted intensive studies of the walleye population by tribal, state and federal resource managers over the last seventeen years. A considerable amount of new data has been collected as a result of these cooperative fishery assessments.

However, the bottom line is that the spring spearing season is intensely monitored, highly regulated and limited in nature. No damage to a walleye population has occurred from either tribal spearing or netting.

Waaswaa: Fishing by torch light

In Wisconsin spearing has not harmed the resource

The 1991 federal/state/tribal joint report on the status of the Wisconsin fishery, *Casting Light Upon the Waters*, stated that the walleye populations in Wisconsin experience pressure from state-licensed angling and tribal spearfishing and are impacted by habitat degradation. However, findings indicated that Ojibwe spearing has not harmed the resources and that the tribal system of regulation adequately protected the resource.

Walleye fishing remains popular for state-licensed anglers in Wisconsin. Wisconsin Department of Natural Resource (WDNR) data on angler exploitation show that the projected catch by state fishermen since 1990 is higher on average than the 1980-89 period. The fact that the WDNR estimates anglers catch more walleye now runs counter to earlier claims that Ojibwe spearfishing had destroyed the recreational fishing economy.



Fish are counted, measured, and sexed at each open landing

GLIFWC monitors the spring spearfishing season in Wisconsin where tribal members harvest fish off-reservation under the 1837 and 1842 Treaties. Off-reservation conservation officers, as well as biological staff, are on each open landing nightly to check permits, bag limits, gear, and otherwise enforce tribal regulations.

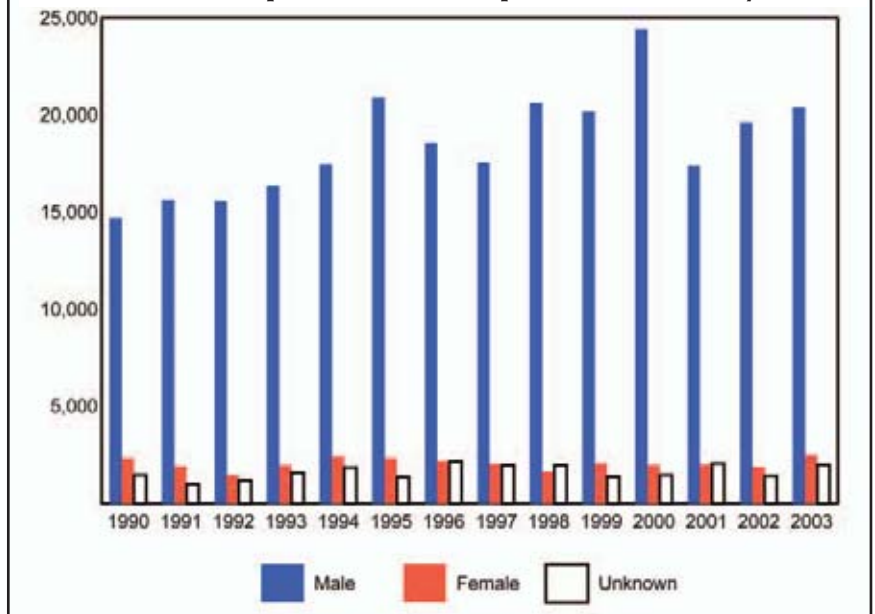
As tribal members return to the landing from fishing, their catch is counted and a sample measured and sexed before any fish can be removed from the landing. While spring spearfishing is a very efficient method of harvesting walleye, strict regulations and monitoring help insure that populations are protected.

Spearers harvest mostly males due to size restrictions

Size limits on walleye taken during the Wisconsin off-reservation spring spearing season serve to reduce the harvest of spawning female fish. Tribal members may take only two walleye over twenty inches per permit. This includes one between 20"-24" and one any size.

Since spawning females are generally larger fish, this regulation serves to limit the harvest of female fish. Data show tribes have taken 83% males during the past 19 spring spearing seasons;

Sex Composition of Speared Walleye



10% female; and 7% were of undetermined sex. In the 2003 Wisconsin season about 82% of the fish were male, and the average length of all walleye was 15.6 inches.

Nightly permit requirement prevents over harvest

A tribal member must obtain a daily permit either at the tribal registration station or from the monitoring staff at a landing if fish remain available in a particular lake. The daily permit identifies the lake, the day and the bag limit.

The number of permits available for a given lake is determined each day by dividing the remaining tribal quota for a lake by the bag limit selected for that lake.

For instance, if the remaining quota for Lake X was 100 walleye and the bag limit was set at ten, ten permits could be issued for that night. This process continues until the quota has been used or the season ends.



Tribes take only a small percentage of fish in any lake

Each spring tribes in Wisconsin are required to declare by March 15 the number of walleye and muskellunge they intend to take from each lake they name for spearing. The quotas are determined on the basis of a Safe Harvest Level (SHL) figure determined for each lake.

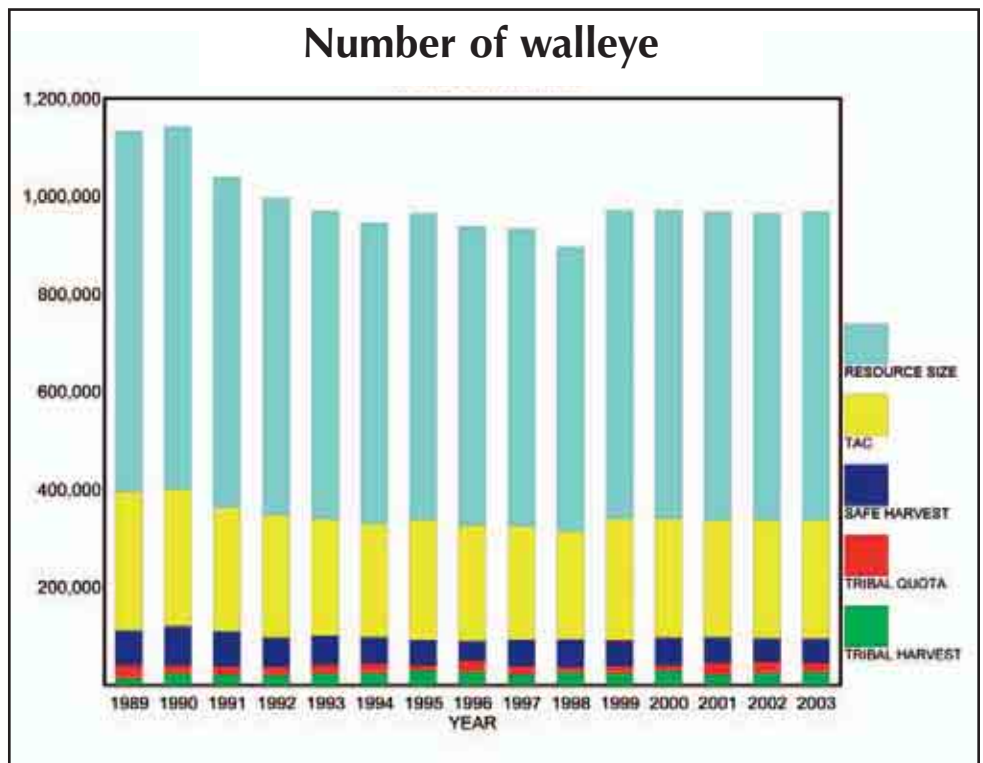
The “safe harvest level” system was proposed by the State of Wisconsin and adopted by the federal court during the Voigt litigation. The system is used by biologists to calculate the number of walleye and muskellunge that can be harvested by spearing or netting from each ceded territory lake.

The safe harvest system can be understood fairly easily. GLIFWC and WDNR biologists have agreed that 35% of a lake’s walleye population can be removed annually without jeopardizing the ability of that population to maintain itself. This 35% rate of exploitation can also be called the Total Allowable Catch (TAC).

The safe harvest level (SHL) figure is, on the average, one-third of the TAC, and as such, is a very conservative harvest limit. In theory, taking 100% of the safe harvest has only a one-

in-forty chance of exceeding the TAC. This management system insures that spearfishing is highly unlikely to seriously impact fish populations even during natural downturns in population. The fact that tribal quotas are typically less than 60% of the safe harvest level makes it even more unlikely that any biological harm will occur.

In 2003 tribal quotas were selected for 281 lakes and totaled 45,776 walleye in the Wisconsin 1837 and 1842 Treaty ceded territories. However, the actual tribal harvest in 2003 was 27,502 walleye. Tribes declare quotas on the basis of past harvest levels and expressed tribal need determined through meetings with tribal members.



The above graph compares the levels of the TAC, the Safe Harvest Level, the tribal quota and the actual tribal harvest to the size of the walleye resource. It clearly depicts that the actual tribal harvest represents only a small portion of the resource.



Tristan Oustigoff, St. Croix, harvests a walleye from Shell Lake in northwest Wisconsin.

The declared quotas provide the opportunity for tribal members to harvest needed fish. However, a number of factors, such as weather and length of the spawning period, can play a large role in determining the success of each season. Since 2001 the actual harvest has been around 60% of the declaration.

Tribal harvest is well below the state-licensed harvest

The number of walleye taken by tribal, treaty spearfishing in Wisconsin is a fraction of the number taken annually by state sport fishermen. In 2003 a total of 399 tribal members participated in the spearing season on 166 lakes. The table below shows the harvest by species in comparison to three previous seasons.

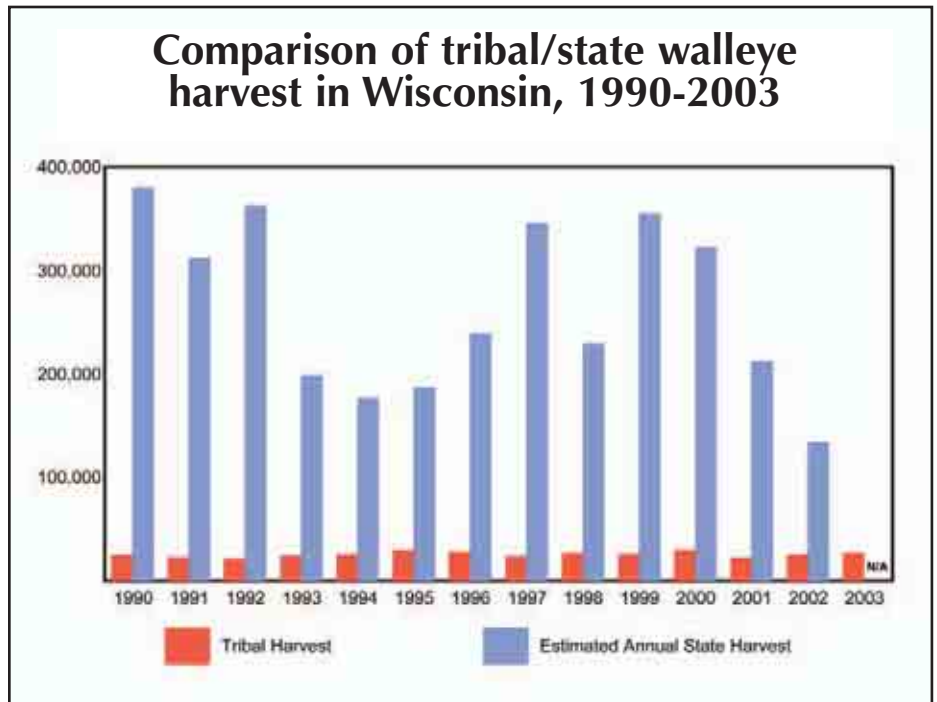
Number of various fish species harvested during spring spearing seasons in Wisconsin from 2000-2003

Small amounts of other fish species (e.g. rock bass and crappie) were also taken

Species	2000	2001	2002	2003
Walleye	30,367	22,999	25,543	27,502
Muskellunge	325	233	218	222
Bass Species	—	14	16	3
Largemouth Bass	179	114	118	158
Smallmouth Bass	42	70	19	35
Northern Pike	54	35	40	22

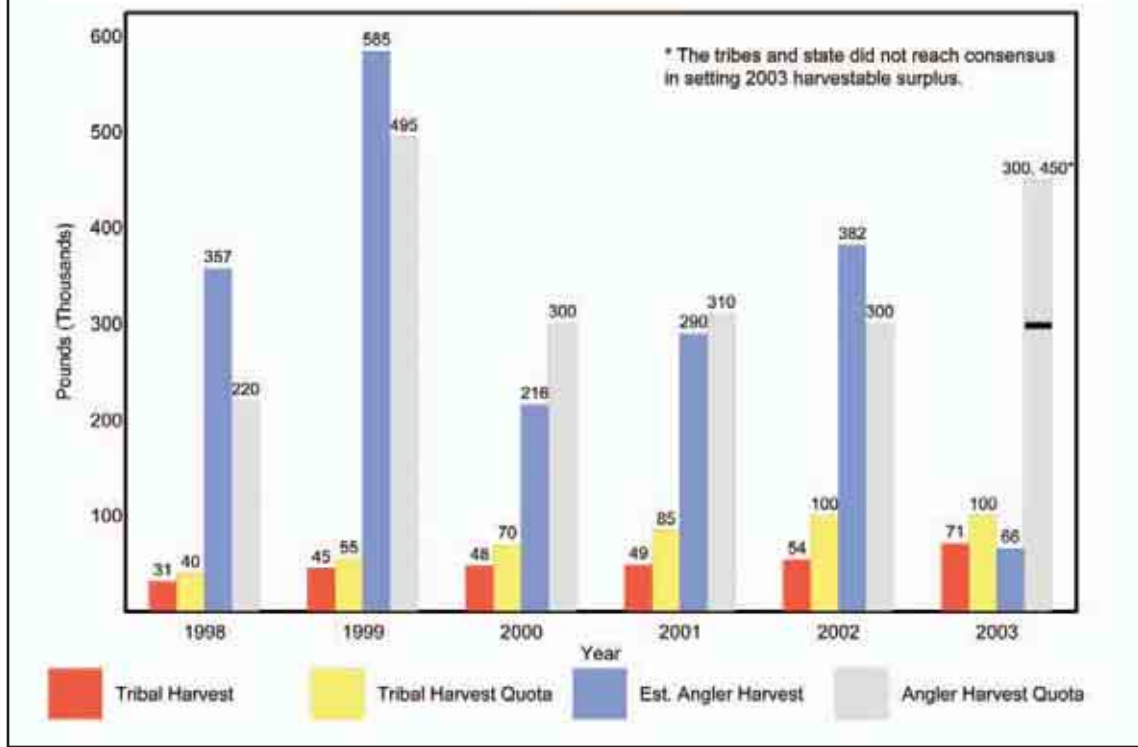
The graph to the right shows a comparison of walleye harvest by treaty fishermen and state-licensed anglers in Wisconsin.

The tribal harvest figure, because of its strict monitoring, represents an accurate count of fish taken rather than an estimate from creel surveys used by the state to extrapolate its numbers. The tribal figure is a fish by fish count, whereas the sport harvest figure is an estimate.



Spearfishermen prepare to launch their canoe just as the sun sets on Lake Gogebic.

Mille Lacs Lake Tribal and Estimated Angler Harvest of Walleye 1998-2003



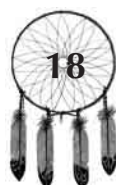
Treaty fishing in Minnesota 1837 inland lakes

In Minnesota, the 1837 Treaty rights of eight GLIFWC member tribes have been reaffirmed by federal courts, and stipulations governing the seasons were agreed upon or litigated. These tribes are Mille Lacs and Fond du Lac in Minnesota and the Red Cliff, Bad River, Lac du Flambeau, Lac Courte Oreilles, Sokaogon/Mole Lake, and St. Croix Tribes in Wisconsin.

Management of the fishery in Minnesota is somewhat similar to Wisconsin but relies upon different methods for determining state and tribal harvest opportunities.

Through the interim (1998-2002) and revised (2003-2007) treaty fisheries management plans, the eight tribes have formally adopted annual quotas for the treaty harvest of walleye from Mille Lacs Lake, which includes catch from both spring spearing and netting activities.

The tribal harvest management system, similar to that in Wisconsin, requires daily permits for tribal members to exercise their rights and allows the tribes to accurately monitor the tribal harvest. All fish are weighed and counted and a sub-sample of them are measured, sexed and aged.



The intent of the Interim Treaty Fisheries Management Plan for the 1837 Minnesota Ceded Territory for the years 1998-2002 was to provide for a gradual development of the treaty fisheries in the Minnesota 1837 ceded territories. It is described in the plan as follows:

“By incorporating a variety of conservative management measures, including restrictive quotas on spring spearing and net fisheries, the plan allows for the orderly development of treaty fisheries, provides the State with ample opportunity to adjust non-treaty fisheries, allows for the development of Band management capabilities, and allows new information about the status of the resources to be accumulated. This management approach is not intended to limit, waive or modify the Bands’ treaty entitlement to 50% of the harvestable surplus.”

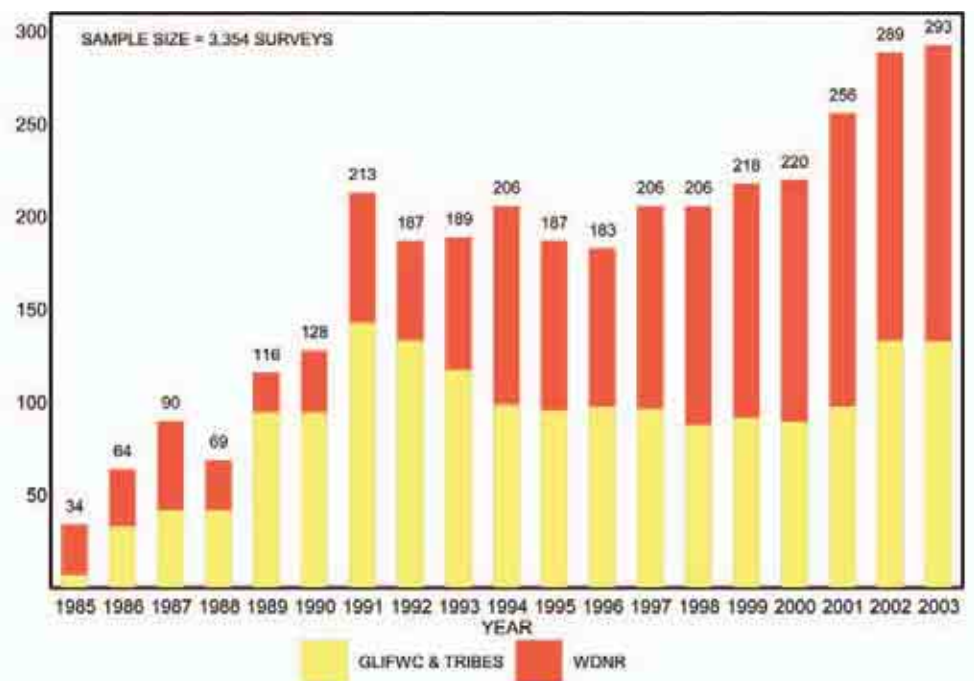
A similar second five year plan for the years 2003-2007 was developed by the tribes and provided to the State in December 2001. Under the new plan, a treaty harvest quota of 100,000 pounds for Mille Lacs Lake walleye will be maintained through 2004 and could increase to 115,000 pounds by 2007 if specific harvest criteria are met.

Cooperative fishery management provides more data on shared fishery lakes

Effective management of the inland fisheries is a big job, particularly that of obtaining and maintaining current population data on the scores of mixed fishery and naturally-reproducing walleye lakes within the ceded territories. Fisheries experts as well as public leaders recognize that cooperation between state, federal, tribal, and local organizations has been critical in obtaining the information needed to understand the fishery within limited budgets.

In Wisconsin, cooperative fishery assessments through the Joint Assessment Steering Committee provide essential fishery data which is shared by the state, tribal and federal participants.

Number of fall surveys in Wisconsin ceded territory



Cooperation has made more extensive assessment work a reality. As the graph on page 19 indicates, the number of lakes surveyed each fall has dramatically increased since 1985, when tribal off-reservation spearfishing resumed under protection of a federal court order.

With support from the Wisconsin Congressional Delegation, Senator Daniel Inouye, then Chairman of the Senate Committee on Indian Affairs, initially obtained funding for cooperative fisheries assessments in 1991. The Joint Assessment Steering Committee, with representatives from GLIFWC, WDNR, U.S. Fish and Wildlife Service (USFWS), the six Wisconsin Chippewa tribes, and the Bureau of Indian Affairs (BIA), manages the annual appropriation, reviews assessment activities, and shares the data.



A major accomplishment was the committee's initial report, *Casting Light Upon the Waters*. The report detailed the status of the Wisconsin fishery resource as of 1991 and made comprehensive recommendations for continuing, cooperative management projects. Since then, three *Fishery Status Updates* have been published providing current statistics from assessments. *Fishery Status Update* is available from GLIFWC's Public Information Office. The committee released the latest *Fishery Status Update* in 2003.

GLIFWC biological staff are involved in fishery assessments in numerous lakes throughout treaty ceded territories of Wisconsin, Michigan and Minnesota. During a 3-4 week period each spring, GLIFWC crews in conjunction with USFWS and assessment units from the Sokaogon/Mole Lake, St. Croix, and Fond du Lac Tribes conduct mark and recapture studies to estimate numbers of adult walleye. In 2003 estimates were made in 15 Wisconsin lakes. In Minnesota, tribal, state and federal crews participated in a multi-year tagging study to estimate numbers of adult walleye in Mille Lacs Lake.

During an 8-10 week period in the fall GLIFWC, Bad River, Fond du Lac, Sokaogon/Mole Lake, St. Croix, and USFWS crews again use electrofishing boats for recruitment surveys of walleye. The surveys determine whether fingerling and yearling walleye are present

Butch Mieloszyk, GLIFWC inland fisheries technician, records data on walleyes captured during a spring electrofishing survey. Information from electrofishing assessments helps biologists determine population estimates and observe trends in the fishery.

or absent and whether these fish are from natural reproduction, from stocking, or both.

Also, fall surveys provide information on growth and relative abundance of juveniles. In 2003 fall surveys were conducted on 173 lakes, involving 515 hours of time to survey 1,456 miles of shoreline. In Wisconsin, 149 lakes were surveyed.

GLIFWC biologists work cooperatively with the WDNR through the Technical Working Group (TWG), where data from assessments are exchanged and reviewed. The data are used to update the formulas for calculating Safe Harvest Level figures for the upcoming walleye season and directly affect tribal quotas. In turn, WDNR managers respond to tribal declarations with annual or in-season adjustments to sport bag limits.

In the Minnesota 1837 Treaty ceded territory, GLIFWC fisheries biologists conduct electrofishing surveys along the entire 78 mile shoreline of Mille Lacs Lake each spring and fall for juvenile walleye.

Information from assessments is shared with the Minnesota Department

of Natural Resources during Minnesota 1837 Ceded Territory Fisheries Committee meetings.

Electrofishing crews also surveyed 22 lakes in Michigan in the fall of 2003.

Population levels naturally fluctuate

As data are collected over years, trends in the walleye populations of various lakes become apparent, and scientists are able to detect changes in trends that might cause concern. It is important to note that walleye populations fluctuate naturally, with some years providing stronger year classes of fingerlings than others.

This natural phenomenon must be taken into consideration when figures show increasing or declining walleye populations. Studies done on Escanaba Lake, Vilas County, Wisconsin, a lake which has not been speared, demonstrate this type of natural fluctuation. However, fishery biologists are also alert to other possible causes of population decline, especially if the decline continues. GLIFWC is monitoring long-term trends in walleye abundance and recruitment in nine Wisconsin lakes.





Tribal stocking programs benefit state and tribal fishermen

Many of GLIFWC's member tribes operate tribal hatcheries. GLIFWC biologists provide technical assistance as requested.

Tribes stock many on and off-reservation waters with an emphasis on walleye in inland lakes. Several hatcheries obtain eggs from speared fish. The eggs are fertilized, hatched, reared, and finally stocked back to the lake from which the eggs were taken. Both tribal and state-licensed fishermen benefit from these enhancement efforts.

Several tribal hatcheries which stock Lake Superior have turned their emphasis towards the rehabilitation of coaster brook trout, a native species.

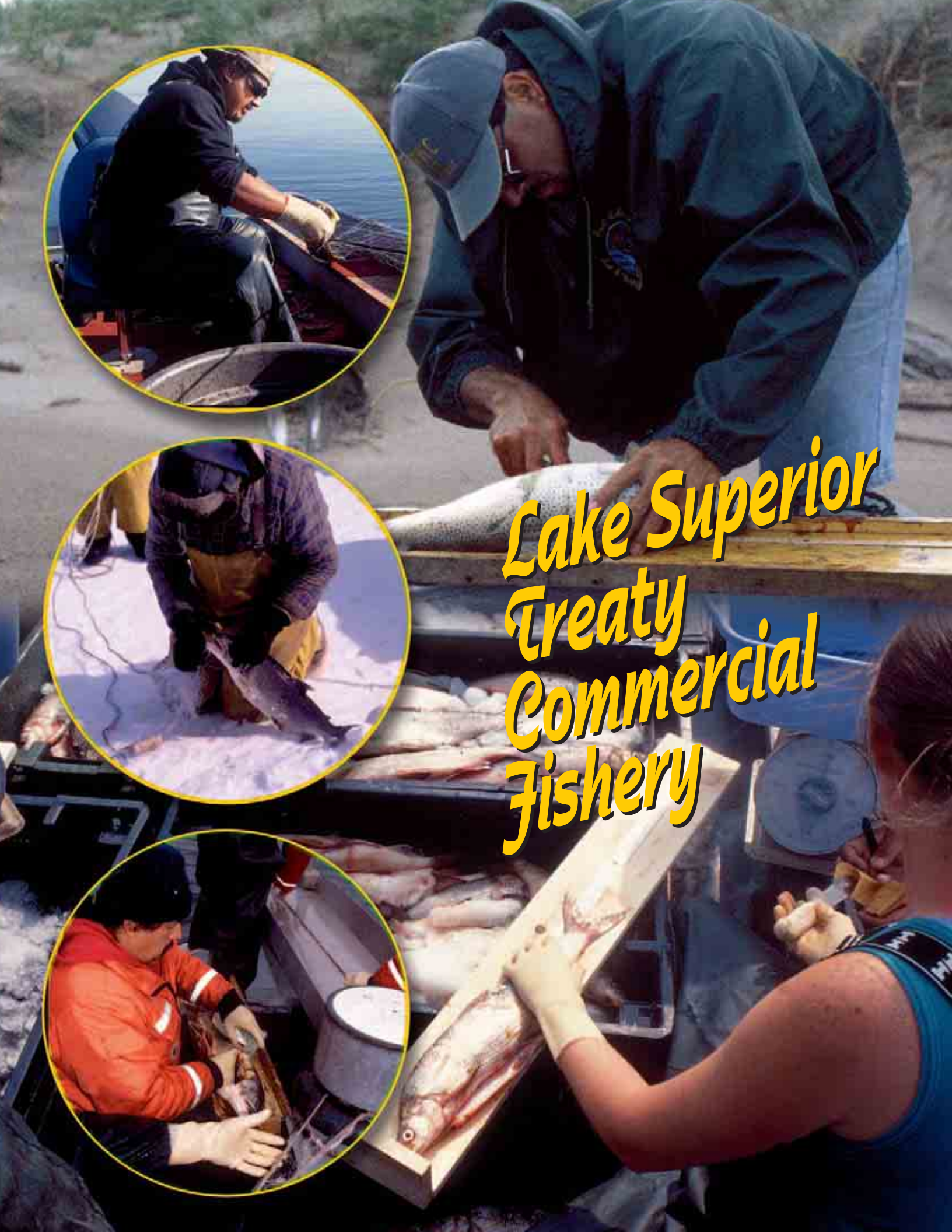
A recognition that native lake trout stocks are rehabilitated and self-sustaining in many areas caused hatchery managers to focus on other species. However, the Keweenaw Bay Indian Community in Michigan continues to stock lake trout to reestablish a population.

Former Red Cliff Tribal Hatchery Manager Greg Fischer displays coaster brook trout in one of the hatchery's indoor raceways. Production and stocking of coaster brook trout is one of the hatchery's priorities.

2003 tribal fish hatchery production

<u>Tribe Hatchery/Rearing Component</u>	<u>Fry</u>	<u>Walleye Fry</u>	<u>Fgl.</u>	<u>Muskellunge Fry</u>	<u>Fgl.</u>	<u>Brook Brown Rainbow Trout*</u>	<u>Lake Trout</u>	<u>White Sucker</u>	<u>Total</u>
Bad River	15,000,000	265,000							15,265,000
Keweenaw Bay	64,282					94,171	93,000		251,453
Lac Courte Oreilles	2,400,000	1,150		40,000	168				2,441,318
Lac du Flambeau	6,000,000	145,033		289,996	550	98,000		4,000,000	10,533,579
Lac Vieux Desert	2,500,000	125							2,500,125
Red Cliff		2,245				258,150			260,395
St. Croix	292,158	455,370							747,528
<u>Totals</u>	26,256,440	868,923		329,996	718	450,321	93,000	4,000,000	31,999,398

*Total number of one or combination of trout species



**Lake Superior
Treaty
Commercial
Fishery**

Lake Superior Treaty Commercial Fishery

The treaty fishery on Lake Superior extends through all of the four seasons. Both large and small tribal fishing boats ply the waters of the Great Lake during spring, summer and fall. Once winter sets in and ice covers the bays of the vast lake, some fishermen shift from boats to snowmobiles and set their nets below the ice.

Members of the Keweenaw Bay and Bay Mills Indian Communities in Michigan and the Bad River and Red Cliff Chippewa Tribes in Wisconsin exercise treaty commercial fishing rights as well as fish for "home use" in Lake Superior under the 1842 and 1836 Treaties. Treaty commercial fishing activities are monitored by tribal natural resources and conservation staff and by GLIFWC biologists and conservation officers.

The 2003 commercial, intertribal fishery in the 1842 treaty-ceded, Michigan waters of Lake Superior consisted of five large tugs and 17 small boats, representing 22 tribal licenses from the Keweenaw Bay, Bad River, and Red Cliff Tribes. Gill nets were the primary gear used in the fishery with one trap netting operation in Keweenaw Bay.

Lake trout and whitefish are important species for Ojibwe treaty commercial fishermen in Lake Superior. Consequently, GLIFWC and tribal biologists devote much of their time to

assessments of these fish populations and monitoring commercial fishing harvests. They also work on joint projects to control a variety of exotic species which threaten native fish populations.

Harvest management

Within the Michigan waters of Lake Superior the tribes have used a quota management system to regulate the harvest of lake trout and to limit mortality on recovering lake trout stocks. Total Allowable Catches (TAC's) are estimated for management units and for each fishing year.

Treaty commercial harvest is monitored through mandatory daily catch reporting. In addition, biologists from the tribes and GLIFWC monitor the catches each month and use commercial catch to obtain biological data.

Within the US waters of Lake Superior, tribal fishermen harvested a total of 1.7 million pounds of fish. Lake whitefish, the primary target species, accounted for 79% of the catch; lake trout made up 15%; siscowet was 1% ; and lake herring was 4%. Other species caught either incidentally or as a target species included smelt, salmon, menominee, chubs, and walleye.

In the 1842 Treaty area within Michigan waters of Lake Superior, GLIFWC staff collected biological information from 2,890 whitefish, 451 lake



trout, 74 siscowet, and 22 herring in 2003. This information, as well as harvest and effort data from catch reports filed by tribal fishermen, is compiled into an annual report by GLIFWC on the intertribal commercial fishery in Michigan waters of Lake Superior.

Biological assessment

Every fall since 1987, GLIFWC Great Lakes Section personnel have set gill nets over known spawning grounds around the Keweenaw Peninsula to identify discrete stocks of lake trout and determine movement. This work is part of an interagency effort to monitor lake trout spawning populations in Lake Superior waters.

Captured fish are measured, sexed, tagged with a floy tag, and an otolith sample is taken for ageing. Tribal commercial fishermen assist with the assess-

ments in Michigan waters. In 2003, six lake trout reefs were sampled. They were: Copper Harbor, Copper Harbor-Inside, Devils Wash Bowl, Buffalo Reef, Traverse Point and Trout Reef No. 1. On the six reefs sampled, a total of 381 lake trout were caught, of which 179 were tagged. Also, two whitefish reefs were sampled: Point Abbaye and Rabbit Bay. On the two reefs a total of 267 whitefish were caught, of which 182 were tagged.

In addition a project funded by the U.S. Fish and Wildlife Service Great Lakes Fish and Wildlife Restoration Act collected information on the depth and temperatures used by lake trout in Lake Superior through the use of archival tags. Fourteen of 124 lake trout implanted with depth and temperature archival tags in 2001 and 2002 were later recaptured and data retrieved for analysis. Lake trout were at large an average of 372 days.

Temperature data can be used to fill an important data gap in bioenergetics models of both lake trout and sea lamprey and to refine stock assessment models. Depth data gathered can be used to better understand the ecology of lake trout. The data can also be used to draw insights into possible interactions between fish species, predator-prey relationships, and the interactions between lake trout and the sport and commercial fisheries.

In 2003, Section personnel also set graded mesh gill-nets during

Fisheries Biologists Sean Sitar, MiDNR, (right) and Bill Mattes, GLIFWC, work cooperatively during a spring lake trout assessment aboard a tribal commercial fishing tug.





GLIFWC's Great Lakes Section staff seine for juvenile whitefish as part of summer assessment work for the Lake Superior fishery.

summer at depths from 32 to 529 feet to collect information on the relative abundance of siscowet in management unit MI-4 in outer Keweenaw Bay, Michigan. A total of 16,800 linear feet of net was set over a seven-day period, with a total of 242 siscowet being captured. The relative abundance of siscowet was 14.4, given as number of fish per 1,000 linear feet of gill net set.

Annual assessments provide a database used by biologists to make management recommendations on the fishery. The information allows fisheries biologists to track trends in numbers of spawning fish by stock over time. Biological information such as growth, mortality, and movement between stocks is also obtained and gives insight into how fishing affects various stocks of fish.

Wisconsin state/tribal agreement

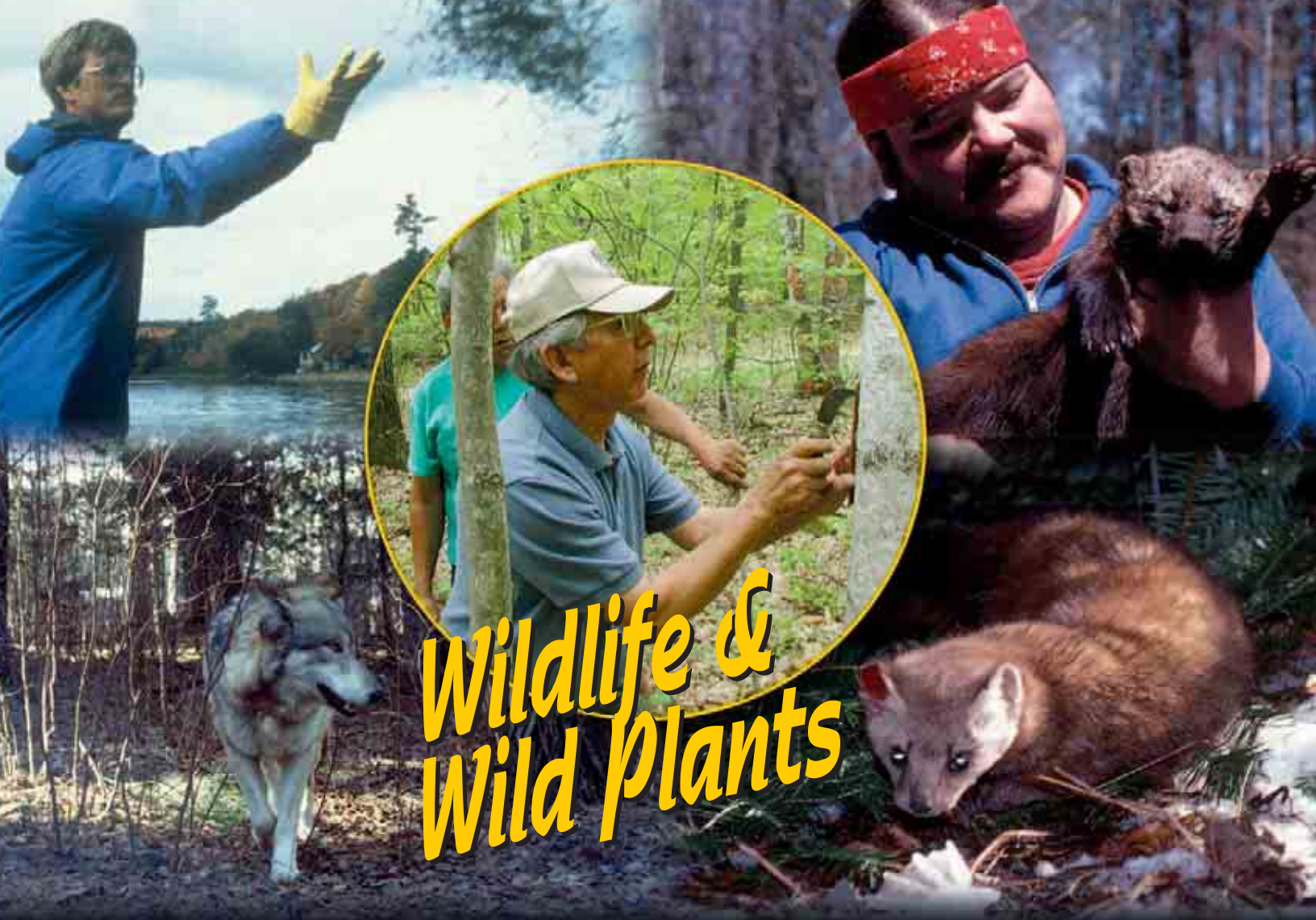
Within the Wisconsin waters of Lake Superior, an agreement between the Bad River Tribe, the Red Cliff Tribe, and the WDNR establishes management principles and sets quotas. Each agreement is made for a five-year period. This treaty fishery is managed and regulated by tribal fisheries departments, tribal conservation enforcement and the WDNR biological and enforcement staff. GLIFWC provides enforcement,

biological monitoring and technical assistance when requested by one of the tribes.

GLIFWC/Bad River assess sturgeon population

A cooperative project between GLIFWC, the Bad River Natural Resources Department and the USFWS to gather information on the distribution and movement of juvenile sturgeon in and around the Bad River, Ashland County, Wisconsin, continued in 2003.

This river has one of the only four known sturgeon populations that spawn in Lake Superior tributaries. Over the past nine years of sampling, biologists have observed a rising population trend.



Wildlife & Wild Plants

2003 Ojibwe off-reservation harvests in the 1836, 1837 & 1842 Treaty ceded territories

Tribal Registration Stations*	waawaashkeshi (deer)	makwa (bear)	ojiig** (fisher)
Bad River	300	6	5
Bay Mills	61	0	0
Fond du Lac	326	0	0
Keweenaw Bay	45	2	0
Lac Courte Oreilles	678	6	92
Lac du Flambeau	563	7	7
Lac Vieux Desert	43	0	0
Mille Lacs	135	0	0
Mole Lake	160	11	0
Red Cliff	470	10	17
St. Croix	443	14	34
Totals	2,432	17	155

*Numbers indicate registration by station, not by tribal affiliation.
 **Ojiig figures are for 2003-2004 season.

Wildlife & Wild Plants

By Ojibwe tradition the waawaashkeshi (deer) are ready for harvest when fireflies begin making small sparks in the night air. Today, the off-reservation deer season in the 1837 and 1842 Wisconsin and Minnesota ceded territories begins the day after Labor Day and continues through December 31st.

Early fall also brings anxious eyes to the wild rice beds, checking to see when the delicate crop is ready to harvest. Waterfowl hunters set out to the marshes for the off-reservation migratory bird season. As fall edges into winter, tribal trappers set their trap lines. This is a time when pelts are thick and rich, but the snow not too deep to traverse.

In cooperation with the tribes, GLIFWC monitors off-reservation, treaty trapping, hunting and gathering seasons. In a typical year, over 2,000 tribal members participate in these treaty seasons in Michigan, Minnesota and Wisconsin.

Registration of harvest

GLIFWC supports reservation-based registration stations on all member tribes' reservations, so tribal members can conveniently register their harvest as well as obtain necessary permits and tags for each season. As in other seasons, the permitting and registration process makes sure tribal quotas are not exceeded.

In Wisconsin, deer, bear and furbearers are managed by management units or zones, with tribal quotas set for each area. Biological quotas are determined jointly by state and tribal resource managers based on population estimates and population goals for each species.

GLIFWC wardens enforce the rules for each off-reservation hunting, trapping and gathering season, checking for compliance with tribal regulations.

Deer, bear and furbearers

In most years, tribal members harvest about 4,000 waawaashkeshiwag (deer) off-reservation in Wisconsin, Minnesota and Michigan. There are deer management units which sustain relatively large tribal harvests annually. These units are typically close to reservations, have lots of public land and healthy deer populations. There is some variation in harvest levels from year to year, and this may be due to changes in deer populations and hunter effort. Generally, there are plenty of deer to satisfy tribal deer harvest needs.

Other wildlife species subject to treaty harvest include: makwa (bear), ojiig (fisher), nigig (otter), gidagaa-bizhiw (bobcat) and waabizheshi (marten) (in Minnesota and Michigan). The black bear is a clan animal in Ojibwe culture, and many tribal mem-





GLIFWC's Jonathan Gilbert (left) and Joe Dumyahn, USFS, carefully nestle a marten trap under an arbor of pine boughs and snow.

bers are hesitant to harvest this species. Annual bear harvest is about 10–20 animals.

Trapping is an art which has been practiced by the Ojibwe people from time immemorial. This form of harvest continues today. Fishers are the most commonly captured animals among the registered furbearers. Otters and bobcats are harvested at lower rates than fishers.

Martens, another clan animal, are an endangered species in Wisconsin and therefore not harvested there. The tribes began trapping marten in the Upper Peninsula of Michigan and in Minnesota in 2000, but the harvest of this culturally important animal remains low.

Waabesheshi (marten) project

GLIFWC biological staff, in collaboration with the US Forest Service (USFS), have undertaken a research project on the status of martens in

Wisconsin and the reasons for their apparent lack of colonization of new habitats. In particular this project is examining the effects of habitat fragmentation and predation on dispersal patterns of martens from reintroduction sites.

Martens in the Great Divide District of the Chequamegon-Nicolet National Forest have been radio-collared and are being monitored for habitat use and activity patterns. Marten prey species are being monitored to learn if there is

sufficient prey (mostly small mammals) to sustain them. Predation events are documented to learn of the major predators of martens and to document if habitat conditions are important in mitigating this predation. It is hoped that the results of this project will help the tribes and the Forest Service ensure that this culturally important animal is alive in our northern forests to the Seventh Generation.

Waterfowl

GLIFWC and USFWS biologists work together to annually establish the Ojibwe off-reservation waterfowl season. In recent years the treaty zhiishiib (duck) season has been open for 79 days with a daily bag limit of 20 in Wisconsin and Minnesota and 10 in Michigan. The nika (Canada goose) season has run for 93 days, with a daily bag limit of 10 in all states.

Post-season phone surveys are used to determine harvest figures and the



number of active hunters. Tribal participation has ranged from 60 to 141 treaty hunters per season. Wisconsin treaty harvests since 1988 have averaged approximately 1,470 ducks and 240 geese annually. Harvest in Michigan and Minnesota has been much lower.

GLIFWC biological staff work on annual spring breeding and fall migration surveys, collecting data necessary for evaluating waterfowl season frameworks. These surveys also provide information about relative abundance of local populations of various waterfowl species.



A trumpeter swan released on the Bad River reservation is part of an effort to reintroduce the native species to the region.

Waterfowl habitat enhancement

GLIFWC participates each year in the “Circle of Flight” project, an inter-tribal initiative coordinated through the Minneapolis Area Office of the Bureau of Indian Affairs which targets enhance-

ment of wetlands and waterfowl habitat in the upper midwest.

In the first decade of the Circle of Flight program, which ended in 2001, GLIFWC partnered with other natural resource agencies in the ceded territory to conduct projects that created 118 acres of new flowages and renovated the dikes and/or water control structures on another 2662 acres of existing impoundments.

Other projects created 24 small pair ponds for waterfowl, established fire-breaks for habitat management, and established 280 acres of nesting habitat. Finally, Circle of Flight funding has driven a highly cooperative, interagency wild rice seeding program, coordinated by GLIFWC. The program plants about four tons of rice annually in an effort to restore some of the historic abundance of this ecological treasure.

Wild plant gathering *Manoomin*

In the fall comes the traditional harvest of manoomin (wild rice), a basic food in the diet of Ojibwe people. Growth of the plants throughout the summer is carefully watched. Sensitive to weather conditions and water levels, the abundance of wild rice can vary greatly from year to year.

In Wisconsin, tribal rice chiefs and the WDNR work together in setting dates for the opening of off-reservation lakes to wild ricing. GLIFWC then monitors off-reservation harvest by both state and tribal ricers. Rice harvest varies greatly by year, driven largely by

crop abundance. Since surveys began in 1987, Wisconsin's off-reservation harvest has varied from approximately 20,000 pounds to over 115,000 pounds, with tribal ricers accounting for about a third of the total.

Wild rice management and restoration has always been a priority for member tribes, because manoomin is such a culturally important food to the Ojibwe people. Management activities to enhance wild rice abundance include reseeding, assessment efforts and participation in the State/Tribal Wild Rice Committee.

Each year GLIFWC conducts annual surveys which are used to determine the abundance and condition of wild rice in various waters within the ceded territory. About 40 waters are surveyed annually from the ground, and an additional 40–60 waters are surveyed from the air.

Each fall, up to seven tons of wild rice is purchased from hand harvesters for seeding by GLIFWC staff and its cooperators. Cooperators have included the Chequamegon-Nicolet and Ottawa National Forests, the Wisconsin and Michigan DNRs, the US Fish and Wildlife Service (USFWS), local sports groups, lake associations, and GLIFWC's member tribes.

Wild plants

The wild plant program at GLIFWC strives to protect and enhance traditionally gathered plants and their habitats. This entails providing technical assis-

tance to member tribes and regularly consulting with the government agencies responsible for managing public lands within the ceded territories. Consultation often focuses on the development or revision of management plans affecting wild plants. GLIFWC also partners with universities and government agencies to develop research projects addressing wild plant issues.

One long-term research project, developed in coordination with the U.S. Forest Service, will eventually provide information on the impacts to wild plants caused by various logging practices. Data gathered before and after timber harvest will be compared to data gathered at sites protected from timber harvest. Harvested and protected sites were carefully selected and paired to minimize differences in habitat characteristics.

A second project, also coordinated with the U.S. Forest Service, will serve to monitor the status of wiigwaasi-mitig (paper birch). The project specifically addresses various characteristics of this tree's bark. The Ojibwe use this bark for many purposes including the construction of lodges, canoes, and baskets. Unfortunately, tribal members have recently experienced difficulty in finding suitable bark for their myriad of needs. This project has been implemented to respond to this concern raised by tribal members.

GLIFWC also pursues the development of systems and procedures for permitting the harvest of wild plants on



public lands within the ceded territories. For example, GLIFWC member tribes and the Eastern Region of the U.S. Forest Service entered into a Memorandum of Understanding (MOU) in 1998, which facilitates the tribal gathering of wild plants on four national forests. Under this MOU, tribal members obtain tribally-issued permits to harvest wild plants for both non-commercial and commercial purposes. Generally, over 2,000 non-commercial permits and 150 commercial permits are issued during most gathering seasons.

During 2001 and 2002, GLIFWC implemented the Traditional Ecological Knowledge (TEK) Wild Plant Project, funded by the Administration for Native Americans (ANA). The project entailed the documentation of non-medicinal uses of plants as shared by over 200 elders from GLIFWC member tribes. The elders also identified perceived threats to plants and harvesting areas. GLIFWC staff then reviewed western scientific literature to integrate this information with the gathered TEK.

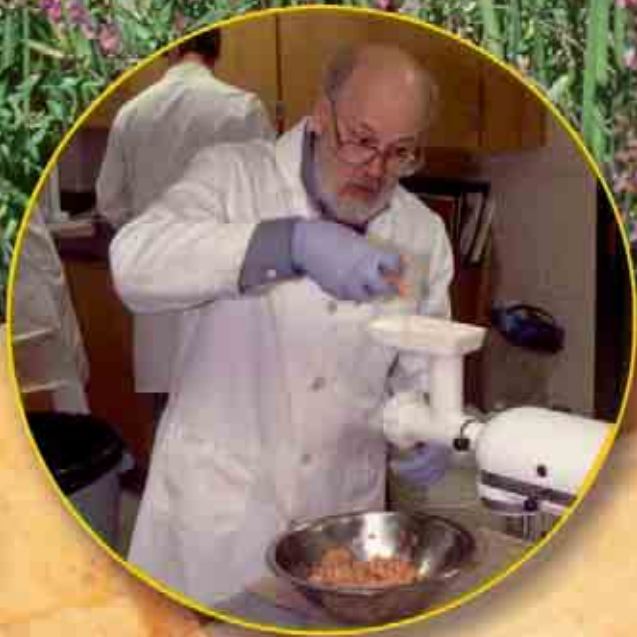
A computer CD was created that contains an immense database that links non-medicinal uses with the elders providing the specific knowledge, Ojibwe plant names, harvest techniques, perceived threats, and other pertinent information. Also included on the CD are elder interviews, a seasonal harvest calendar, two reports integrating TEK with western scientific knowledge, stories, and recipes. The CD is available to participating elders, tribal gov-



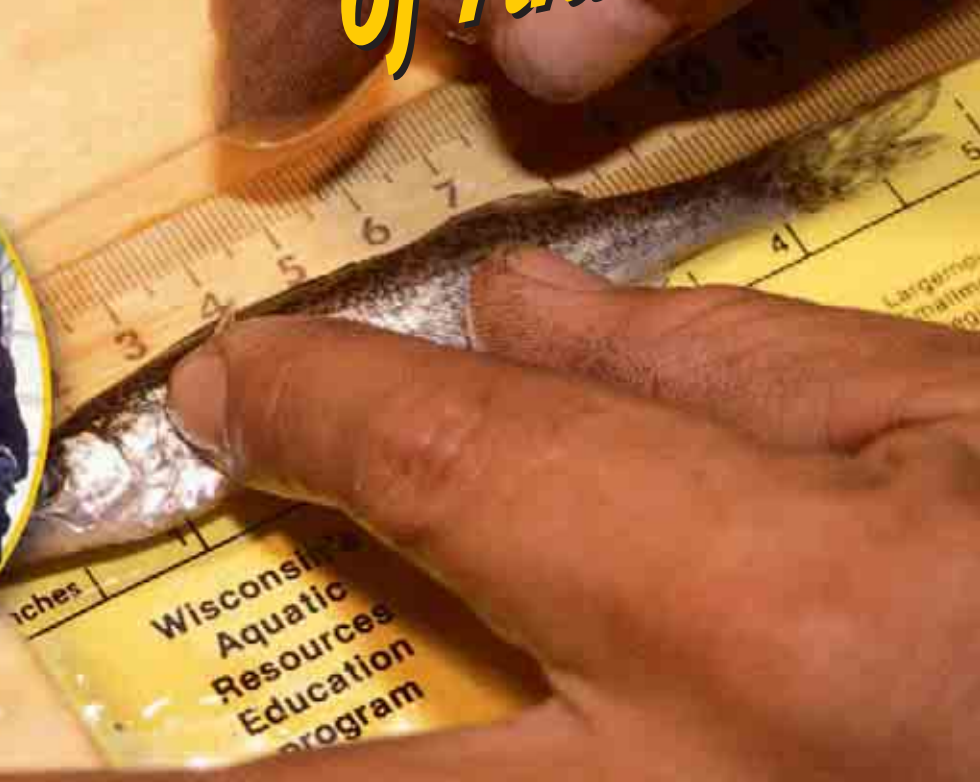
It's usually in early June that bark of the birch loosens and is easily removed. Above a Mille Lacs tribal member gathers birch bark in the Chequamegon-Nicolet National Forest.

ernments and communities, and tribal schools and colleges.

This project also resulted in the production of an educational display on non-medicinal plant uses. This display is used at teacher conferences, state fairs, and other locations where the general public may be shown the essential interconnection between the Ojibwe and wild plants. Lastly, yet most notably, this project has produced a comprehensive library of the collected information, which is archived at GLIFWC offices for use by future generations.



*protecting
the Health
of Aki*



Protecting the Health of Aki

The ongoing health and well-being of Aki as she moves through the changing circle of her seasons each year is of major importance to the Ojibwe people. Traditional recognition of the interconnectedness of all living things contributes to a holistic resource management view.

It is with thanks that life is taken so we might live, but we must also seriously consider the well-being and preservation of all species and look forward to the needs of the Seventh Generation.

As those that walked before us provided for the well-being of today's people, so must we think of who will walk the Circle in many years to come. In recognition of these concerns GLIFWC's resource management extends into areas of environmental protection, re-source enhancement and youth education.

Water as it flows through the rivers, lakes and streams, seeps through underground passageways, or spurts out of the Earth's surface as an artesian well—the Earth's water system is compared to the human circulatory system in Ojibwe thought.

So, the well-being of the water, which affects every other living part of the Earth, is of vital importance to Ojibwe people and to all people. Water, known as *nibi* in Ojibwemowin (Ojibwe language), is the source of life

and, as such, becomes the responsibility of women. *Nibi* must be protected, kept pure, for all life now and to come.

Water and sulfide mining

The threats posed by sulfide mining, especially the potential for harm to lakes, streams, wetlands and the resources they support, have been high on GLIFWC's priority list.

Of particular concern has been a proposal to develop a copper-zinc mine in the 1842 ceded territory upstream of the Sokaogon Mole Lake Chippewa reservation in Forest County, Wisconsin. The potential for environmental damage from the mine led GLIFWC and its member tribes to be involved in the state and federal permitting processes and to monitor sites that could experience mineral development in the future, including the Crandon site. In 2003 the proposed Crandon mine project was bought and retired by the Sokaogon Chippewa and the Forest County Potawatomi Communities because of their concern about the environmental damage that the proposed project would have caused.

The Environmental Section of GLIFWC's Biological Services Division, continues to lead GLIFWC's efforts to evaluate the potential impacts of mining, particularly impacts to surface water, groundwater and aquatic resources.



GLIFWC staff have been collecting baseline data near potential mine sites in order to better characterize the ecosystems and resources that may be at risk should any of the sites be developed. For example, GLIFWC has collected baseline data on the levels of certain metals in wild rice roots and seeds from eight ceded territory lakes near potential mine sites. For three years, 2001-2003, mussels, fish and water quality data were also gathered from sites near the proposed Crandon mine.

The Environmental Section staff coordinate research and assist in document review and comment development on proposed mine and industrial projects. GLIFWC's Division of Intergovernmental Affairs has also provided input into a review of the Crandon mine. They also provided a variety of support services to the intertribal effort to coordinate input into permit review processes.

As the Flambeau Mining Company monitors the now-closed Flambeau Mine, near Ladysmith, Wisconsin, GLIFWC staff are reviewing the monitoring results to see whether the Wisconsin DNR and the mining company's predictions of water quality coming from the mine site were accurate.

Staff have seen slightly increased levels of contaminants in the Flambeau River below the mine site and have submitted their findings to the state. In addition, over the last four years runoff from the closed mine site has contained levels of copper above state surface water standards. Staff continue discussions with the state on these issues.

As the Environmental Section's efforts to review the Crandon project wind-down, staff are directing more of their attention to review of other potential sulfide mine projects in northern Wisconsin and the western Upper Peninsula of Michigan.



A handful of wild rice to be used for reseeded wild rice beds.

Mercury maps advise tribal members

Mercury contamination in fish has been a concern of GLIFWC member bands because fish is a primary source of food for many tribal members. Tribal communities are likely to consume larger quantities of fish, especially following spearing and netting seasons, than the average non-Indian citizen. This potential for higher exposures to methyl-mercury requires quantification to determine if tribal members and their families face an increased health risk.

The issue of mercury contamination of walleye is publicly well known. GLIFWC has focused on providing tribal members easy-to-use information about how to find walleye that are low in mercury by producing “Mercury in Walleye” GIS maps.

These maps provide specific information for those most-at-risk, such as fetuses, women of childbearing age, and young children. GLIFWC wants tribal members to be aware of health issues and consider ways to minimize exposure, especially for those most-at-risk.

To assist tribal members in finding walleye that are low in mercury, GLIFWC collects samples of walleye fillets in lakes commonly speared or netted by tribal members. During the fifteen year period from 1989 through 2003, a total of 2,736 walleye fillets have been tested from 190 lakes. Of these lakes, 12 are part of a long-term

study to monitor trends in spring mercury levels. In addition, 70 muskellunge have been analyzed from 17 lakes. All contaminant data collected by GLIFWC from inland waters and Lake Superior are shared with the WDNR.

In the spring of 2001, maps showing lakes named for spearing by tribal members from six reservations were updated from the 1999 version. In the springs of 2001 through 2003 these maps were distributed to tribal members and posted in tribal registration stations. The maps indicate the size range of fish where both 0.5 and 1.0 ppm of mercury occurs. This project was made possible initially by a grant from ANA and the Agency for Toxic Substances and Disease Registry (ATSDR) but is currently funded by the United States Environmental Protection Agency (USEPA). Maps are available from GLIFWC’s Biological Services Division.

A five-year tribal fish consumption study, started in 1997, ended after the 2002 fishing season. The study examined the amount of fish consumed per meal over the course of a year by family members and was funded by ATSDR.

In 2003, GLIFWC began a three year study to look at how tribal members use the fish consumption advisories developed by GLIFWC. This effort is funded by an USEPA Science To Achieve Results (STAR) grant and will use tribal input and additional data on mercury in fish to refine and improve GLIFWC's fish consumption advisories and GIS mercury occurrence maps.



Great Lakes initiatives

Binational Program

GLIFWC staff continue to participate in the Binational Program to Restore and Protect Lake Superior, attending meetings of the Task Force, which is the Program's policymaking body, and the Binational Workgroup, which is the Program's technical body.

Staff participate on four committees of the Workgroup: the Chemical Committee, the Habitat Committee, the Aquatics Committee, and the Terrestrial Wildlife Committee. Staff also helped draft the Lake-wide Management Plan (or LaMP) 2004 document, which reports progress in restoring and protecting the Lake Superior basin.

Lake Superior fish sampling and contaminant testing

In 1997, the U.S. Food and Drug Administrations (FDA) began implementation of final regulations that require fish processors to develop and implement plans that address safety issues related to potential physical, chemical and biological hazards of fish products.

Realizing that the treaty fishery and its markets are impacted by publicity surrounding fish contamination issues and FDA's new seafood safety regulations, GLIFWC contracted funding from ANA to undertake a contaminant study of Lake Superior fish and develop a tribal regulatory structure in compliance with FDA's Hazard Analysis Critical Control Point (HACCP) seafood safety regulations.

Overall study findings

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



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

GLIFWC collected lake whitefish (48), herring (48), lake trout (120) and siscowet trout (210) representing lengths of fish commonly harvested from treaty resource waters on Lake Superior. Eight to twelve fish of similar lengths and ages were ground into single samples according to US EPA recommended procedures. The samples were analyzed for mercury, polychlorinated biphenyls, and a suite (30 chemicals) of chlorinated organic chemicals that may be found in Great Lakes fish. In addition, samples were archived for future testing.

Results of this testing indicated that commercially harvested sizes and ages of Lake Superior lake trout, lake whitefish and herring were below US FDA chemical action limits for fish. Thus, for these three species GLIFWC found that all commercially harvested sizes were safe for commercial sale. The large sizes (>22 inches) of siscowet trout analyzed were found to exceed the US FDA's chemical action limit for the pesticide chlordane.



GLIFWC staff worked with tribal fishermen and staff from MSU Sea Grant to test smoked fish samples for chemical reduction levels. Above from the left are: Kory Groetsch, GLIFWC environmental biologist; Ron Kinnunen, MSU Sea Grant; and Ralph Wilcox, Wilcox Fishery, Brimley, Michigan.

For a copy of "How to enjoy fish safely," which provides more detailed information from this study, contact GLIFWC's public information office.

As follow-up to the earlier ANA fish contaminant study, two additional studies were begun in 2003 with EPA funding. First, a subset of the archived fish samples were tested for dioxin. Second, additional size groups of Lake Superior lake trout were collected and are being tested for levels of mercury and select chlorinated organic chemicals.

Invasive species

The degradation of native plant communities and wildlife habitat by introduced species is a growing problem. GLIFWC has developed an effective noxious weed program that incorporates education, inventory, control, and evaluation to manage invasive non-native plants. Because invasive plants do not recognize land ownership boundaries, coordination with cooperating state, federal and tribal land managers as well as non-governmental organizations and private landowners is essential to achieve success.

Educational efforts inform the public of the threats posed by invasive non-native plants and the steps to take to limit their further spread and prevent new introductions. Regular inventories provide data for planning and prioritizing control activities. Integrated pest management stresses plants using multiple methods to increase the likelihood of successful control. GLIFWC crews have used manual, chemical and biological controls alone and in combination to achieve successful control of

purple loosestrife, an invasive herb that threatens wetland habitats throughout the ceded territories. A recent evaluation revealed that purple loosestrife acreage has decreased by over 350 acres in areas treated by GLIFWC between 1994 and 2000. GLIFWC's Internet Map Server (www.glifwc-maps.org <<http://www.glifwc-maps.org/>>) provides public access to purple loosestrife distribution and control data throughout Minnesota, Wisconsin, and Michigan, effectively facilitating regional coordination among state and federal agencies, tribes, and citizen volunteers.

The success of this approach is now being applied to other invasive plants that could potentially threaten treaty resources. While purple loosestrife degrades wetland habitats, several other species invade forest communities (e.g. garlic mustard, honeysuckle and buckthorn) or open barrens habitats (e.g. leafy spurge and spotted knapweed). GLIFWC staff have been busy conducting inventories to document the distribution and abundance of numerous non-native invasive plants in the ceded territories. This data, along with information compiled on life histories and available control options is being used to prioritize future education outreach and control work in this ongoing effort to preserve and protect native plant communities.



Purple loosestrife, an exotic plant, takes over wetland areas, crowding out native species. GLIFWC has been active in public education about purple loosestrife and in eradication efforts.

Maintaining a healthy fishery

Maintaining a viable native fishery in Lake Superior has long been an objective of GLIFWC's member tribes. Degradation of the habitat through pollution and introduction of exotic species seriously threaten various native fish species, such as lake trout. Therefore, GLIFWC biologists are involved in several projects targeting these exotics.

Sea lamprey control

GLIFWC continues to cooperate with U.S. Fish and Wildlife Services' Sea Lamprey Control Program.

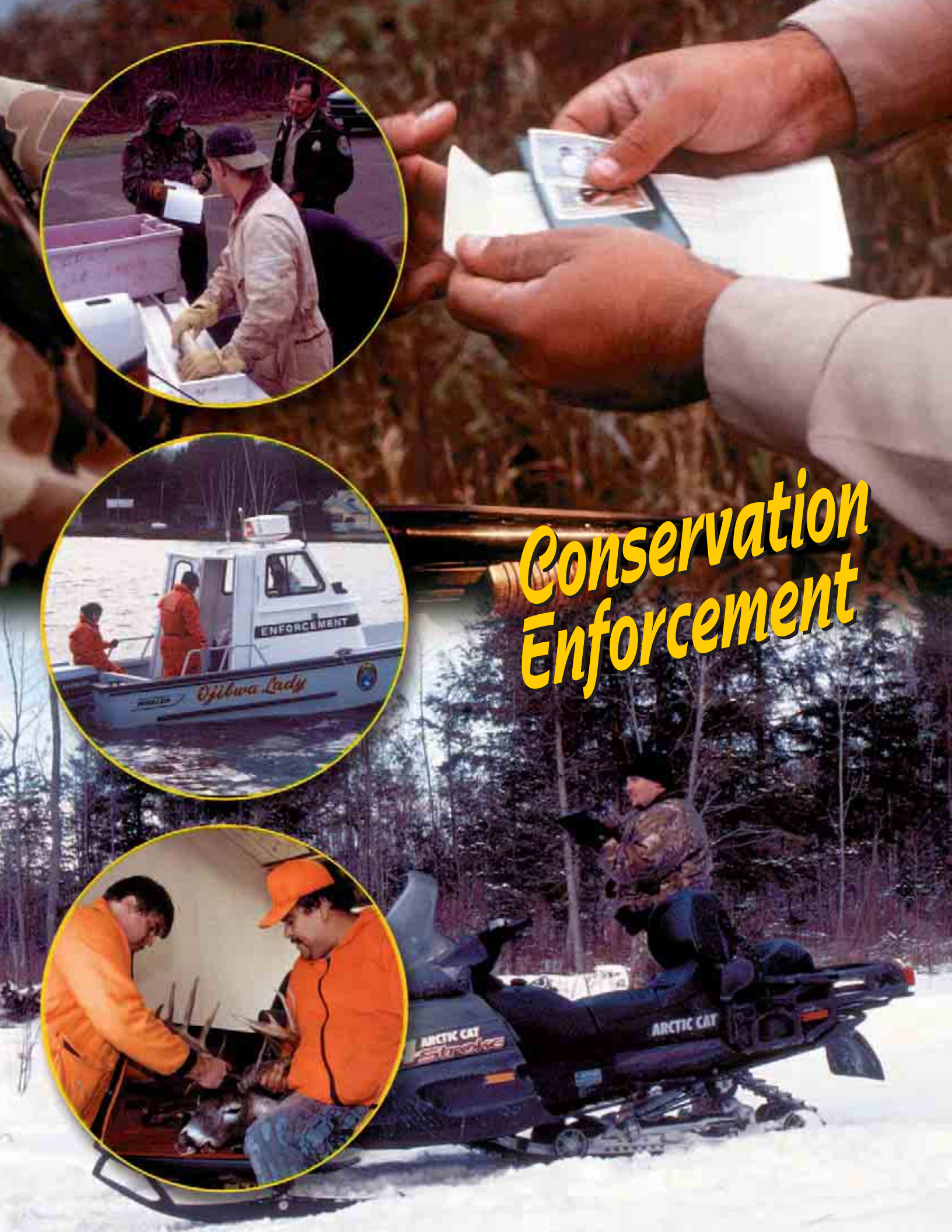
2003 marked the 17th year of GLIFWC's cooperative involvement in lamprey assessment and control. The data collected by GLIFWC staff during annual population estimates contribute to a lakewide management plan to control and reduce lamprey populations. Studies show each adult lamprey can kill 10 to 20 pounds of fish, so they pose a serious threat to the native fishery.

In late April 2003 GLIFWC crews set traps and nets in four Wisconsin and three Michigan rivers along the south shore of Lake Superior to catch sea lamprey as they moved upstream to spawn. A total of 1,083 adult lamprey were captured, many of which were marked and released downstream of the traps.

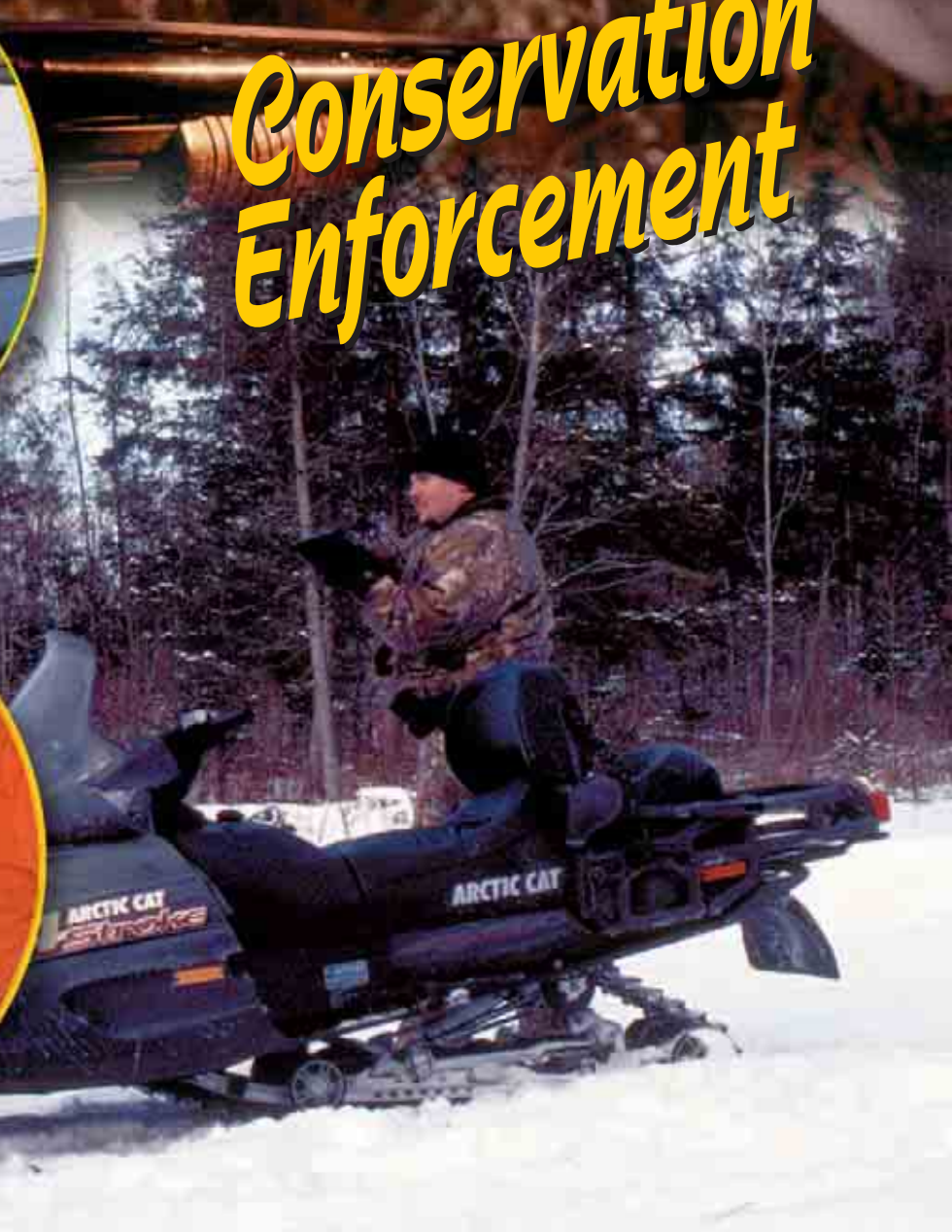


Joe Newago, Bad River commercial fisherman, displays a lamprey wound on a lake trout.

When lamprey are recaptured, they are killed, and biological information is taken. Population estimates, biological characteristics and catch summaries are generated from these activities. In 2003 the adult lamprey population in US waters of Lake Superior was estimated at around 39,500 with an estimated 30,100 spawning in tributaries west of the Keweenaw Peninsula (USFWS data).



Conservation Enforcement



Conservation Enforcement Officers, teachers and PR

GLIFWC's primary representatives in the field

GLIFWC's Division of Enforcement is responsible for monitoring all off-reservation, treaty harvests and enforcing tribal, off-reservation codes. These objectives are accomplished through maintaining satellite enforcement offices on ten of GLIFWC's eleven member reservations, while maintaining an administrative enforcement and dispatch office at GLIFWC's central office on the Bad River reservation.

Through a reservation-based conservation enforcement system, GLIFWC conservation officers establish a rapport within their respective tribal communities and understand the community's harvest needs and patterns.

Two certified conservation officers generally staff each satellite office. Three officers are present at Keweenaw Bay because of the additional responsibilities related to tribal commercial harvest in Lake Superior.

GLIFWC maintains enforcement satellite offices on the following reservations:

In Michigan

Lac Vieux Desert
Keweenaw Bay
Bay Mills

In Minnesota

Mille Lacs

(Also in Minnesota, the Fond du Lac tribe provides its own off-reservation conservation enforcement.)

In Wisconsin

Bad River
Lac Courte Oreilles
Lac du Flambeau
Mole Lake/Sokaogon
Red Cliff
St. Croix

GLIFWC conservation officers patrol during all open treaty seasons, sometimes monitoring several seasons that are open concurrently. For instance, deer, bear and wild rice seasons may all be open simultaneously.

Tribally-adopted codes govern all off-reservation seasons. Violations of tribal, treaty season codes are cited into tribal court. Each reservation maintains its own tribal court with the help of funding that GLIFWC provides.

Enforcing the seasons

Seasons monitored by GLIFWC conservation officers include all off-reservation treaty seasons such as:

Ice fishing
Spring spearing and netting
Open water fishing
Commercial fishing in Lake Superior
Large game—deer and bear





GLIFWC's wardens, as well as creel clerks, monitor all open landings during spring spearing and netting seasons. GLIFWC wardens check permits and enforce the regulations governing each season.

Small game

Waterfowl

Trapping

Wild rice & other gathering activities

The spring spearing and netting seasons are by far the most rigorous for the Enforcement Division, requiring staff at all open landings on a nightly basis. In order to accommodate the demand to monitor multiple landings nightly, GLIFWC's Enforcement Division employs seasonal, temporary staff to assist during this intense season.

On the landings, enforcement personnel check permits, tribal identification, equipment and each harvest for adherence to quotas and size limits. For treaty, spring spearing and netting, all fish are creeled in order to insure walleye or other quotas are not being exceeded on any declared lakes.

Officers monitoring Lake Superior commercial fishing also are certified as vessel inspectors through the U.S. Coast Guard and are qualified to inspect craft on Lake Superior for appropriate equipment. An aluminum welded, 30-foot vessel is used to monitor the treaty commercial fishery on Lake Superior.

Training

All GLIFWC conservation officers are fully-trained and certified through basic training and fulfill requirements identical to state-licensed conservation officers. In Wisconsin, GLIFWC officers also attend an annual, state-sponsored training as part of an effort to increase the number of GLIFWC officers with state credentials.

GLIFWC officers work cooperatively with local, state and tribal enforcement agencies in Michigan, Minnesota and Wisconsin. They are available to assist when necessary, for instance, in search and rescue operations, medical emergencies, and other mutual aid situations.

Quarterly enforcement training sessions insure GLIFWC officers maintain their basic skills and become proficient in other areas related to their work, such as First Responder and cold water rescue skills. All GLIFWC enforcement officers are certified First Responders. Most are also certified in cold water/ice rescue. Wintertime training for cold water or ice rescue is held annually.



GLIFWC officers carry First Responder and cold water rescue equipment in their vehicles while on duty.

GLIFWC officers also qualify with firearms under a variety of conditions, such as at night or on water, during each quarterly training session.

GLIFWC's Enforcement Division sponsors and instructs a variety of safety courses on its member band's reservations. Safety courses attract participants from both the tribal and non-tribal public. Hunter Safety, ATV Safety, Snowmobile Safety, and Boating Safety are among the courses offered.

Community Oriented Policing Services (COPS)

GLIFWC plays a vital role in the proper functioning of several emergency mutual assistance networks in the largely rural areas that they patrol. As deputized by its member tribes, GLIFWC's force of 20 officers patrol and respond to emergencies in an area encompassing nearly 60,000 square miles in the three-state region, including parts of upper Lake Superior.

In the past few years, GLIFWC has solidified its law enforcement and emergency response infrastructure utilizing US Department of Justice/COPS funds to: 1) improve radio communication capabilities between GLIFWC officers and county, state, and federal law enforcement agencies; 2) provide emergency response equipment and training (i.e. First Responder and Heart Saver AED

certification); 3) expand officer training; 4) replace obsolete ATVs, snowmobiles, and boats for emergency re-sponse, ice rescue, field patrols, and safety instruction in reservation communities; 5) improve computer technology and install video cameras in patrol vehicles; and 6) recruit, train, and staff three additional officers.

Given budget realities, many activities or services that one law enforcement agency may wish to pursue would not be possible without collaboration and the shared resources of other agencies. GLIFWC officers work closely with other law enforcement including county sheriffs' departments, state police and state patrol, Wisconsin DNR, Minnesota DNR, Michigan DNR, USDA-Forest Service, National Park Service, U.S. Coast Guard, U.S. Fish and Wildlife Service, tribal on-reservation conservation departments, and tribal police departments.



During winter training sessions, GLIFWC wardens receive training in cold water/ice rescue in Lake Superior.



Treaty Rights
2002 Edition

CHIPPEWA TREATIES

SANDY LAKE
Tragedy & Memorial

LAKE SUPERIOR
Indian Fishery

With an Eagle's Eyes
Protecting Ojibwe
Oil-Reservation Treaty
Rights & Resources

Masina
A Chronicle of the Lake Superior Ojibwe

Ojibwe
Treaty Rights
& Resource
Management
WILD RICE
Ecology • Harvest • Management

public
Outreach

NO
EXXON
MINE

Public Outreach

Promoting peaceful off-reservation seasons

GLIFWC has a story to tell—the story of Ojibwe treaty rights, including the struggle to preserve those rights and the natural resources upon which they depend.

The story reaches back to the times when treaties with the Ojibwe were signed between the tribes and the U.S. government and also covers the contemporary legal and social efforts of the Ojibwe to retain those treaty rights. GLIFWC's story is also one in the making, as member tribes continue to pursue treaty resource harvest and management. It is the job of the GLIFWC's Public Information Office to tell the story as it unfolds.

Providing accurate, current information about Ojibwe treaty rights and harvest seasons, the Public Information Office (PIO) serves both the tribal and the non-Indian publics. PIO's primary responsibility is to keep tribal members informed on treaty-related matters, such as political issues, resource management issues, and harvest opportunities. For the non-tribal public, information on treaty rights and off-reservation seasons, tribal natural resource management activities and tribal sovereignty helps close the information gap regarding these important tribal issues.

PIO produces a wide range of informational materials, making treaty information readily available to tribal

members, the general public and policy-makers. PIO mails complimentary copies of most publications to schools within the treaty-ceded area, state universities, public libraries, tribal centers, and legislators. Most PIO publications can be found on GLIFWC's website at www.glifwc.org. A complimentary copy of most publications is also available on request. There is a modest charge when multiple copies of publications are ordered.

PIO publications

The following are GLIFWC publications available upon request:

Mazina'igan, a free, quarterly newspaper with current information on treaty-related activities.

A Guide to Understanding Ojibwe Treaty Rights, a booklet providing basic information on Ojibwe treaty rights, including some of the treaties and an historical background of the treaty rights.

Ojibwe Treaty Rights: Understanding and Impact, written at middle-school level, this booklet also provides basic information on Ojibwe treaty rights and activities.

Seasons of the Ojibwe, a booklet detailing the diverse resource management activities of GLIFWC, which represents eleven member Ojibwe tribes.





Manning an information booth at a boat show in Marquette, Michigan is Mike Plucinski, GLIFWC Great Lakes Fisheries Technician (left) and Bill Mattes, Great Lakes section leader. Information booths are one way to provide treaty information to the general public.

Annual poster, an 18" by 24" full-color poster usually reflecting the cultural significance of treaty rights and resource harvesting.

Fishery Status Update, a booklet particularly about the management of the shared fishery in Wisconsin.

Sulfide Mining: The Process & The Price: This publication enhances the reader's understanding of the threats posed by sulfide mining and raises issues that should be considered before decisions concerning mine permitting are made.

With an Eagle's Eyes, a 25-minute video on Ojibwe treaty rights and resource management.

Growing Up Ojibwe, a 20-page supplement to the *Mazina'igan* written for elementary students and containing activities.

How to enjoy fish safely, a 16-page supplement to the *Mazina'igan* covers areas such as making choices to reduce health risks from chemical contaminants found in fish, health benefits of eating fish, fish sampling and testing programs for inland and Lake Superior waters, etc.

Brochures relating to: wild rice, off-reservation enforcement, the Lake Superior treaty commercial fishery, the Sandy Lake tragedy, hatchery production, invasive plants and GLIFWC.

Where the River is Wide: Pahquahwong and the Chippewa Flowage, a book by Charlie Otto Rasmussen, traces the history of the Chippewa Flowage region in northwest Wisconsin, vividly describing the human and environmental impact of the Chippewa Flowage.

Ojibwe Journeys: Treaties, Sandy Lake & The Waabanong Run, a book by Charlie Otto Rasmussen explores key events in the history of Ojibwe people in the greater Lake Superior region.

Plants Used by the Great Lakes Ojibwa, a book that includes a brief description of many native plants and their use, reproduced line drawings, and maps showing approximately where each plant is distributed within the ceded territories.

Also available through the PIO is *BIZHIBAYASH: Circle of Flight*, a booklet featuring tribal initiatives to preserve and enhance wetlands and waterfowl habitats.

Outreach

Distribution of educational materials on Ojibwe treaty rights is the key to outreach. Developing and manning informational booths is one effective means of outreach. Besides distributing material, many personal contacts are made and questions answered.

PIO maintains a variety of photographic displays on treaty-related topics, which are set-up at education conferences, sport shows, career/health/environmental fairs, state fairs, and pow-wows. Display themes vary widely, including general treaty issues and off-reservation resource management, traditional uses of plants, off-reservation enforcement, environmental activities, and wild rice. They often reflect the blending of contemporary science with the cultural values of the Ojibwe.

Another critical tool for outreach is the internet. Most PIO publications are available on GLIFWC's website. The *Mazina'igan* is also available on the web. PIO maintains an e-mail address, pio@glifwc.org and an "information line," (715) 685-2150 to take information requests. Requests for materials are generally answered and mailed out weekly.

Keeping costs of publications down also helps PIO reach a larger public. The *Mazina'igan*, which is free, has a quarterly distribution of 16,000. Providing a complimentary copy of most materials and maintaining modest prices on GLIFWC publications helps get information into the hands of people without requiring a significant investment.

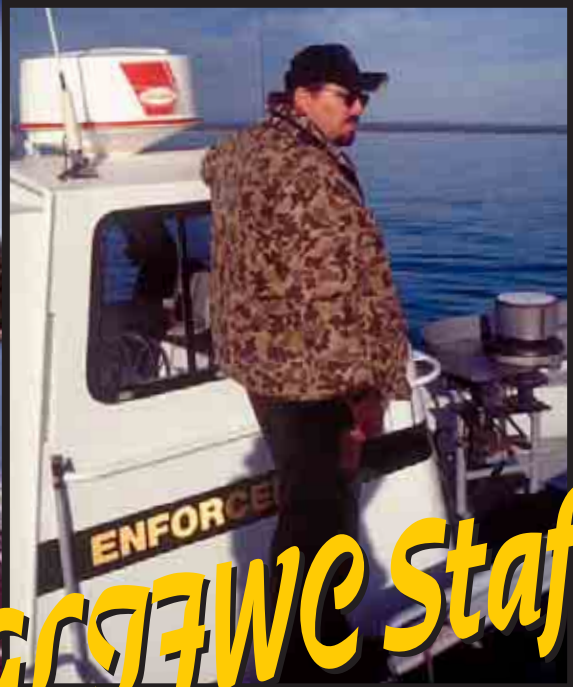
Networking and advocacy

Keeping in touch with member bands, other tribal, state and federal resource management agencies, and treaty support groups helps PIO keep informed on issues related to treaty rights and resource management. State and federal legislation, resource management initiatives, potential mining ventures, and activities of several anti-treaty organizations can all impact the treaty interests of member bands. Through networking, PIO stays abreast of issues, shares the information and advocates on our member bands' behalf.

Networking creates a broad circle of friends, all working in their own way to maintain and preserve the circle of seasons and the resources Aki so generously affords her people.

***Most of GLIFWC's
publications are available
on our website:
www.glifwc.org***





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GLIFWC Staff

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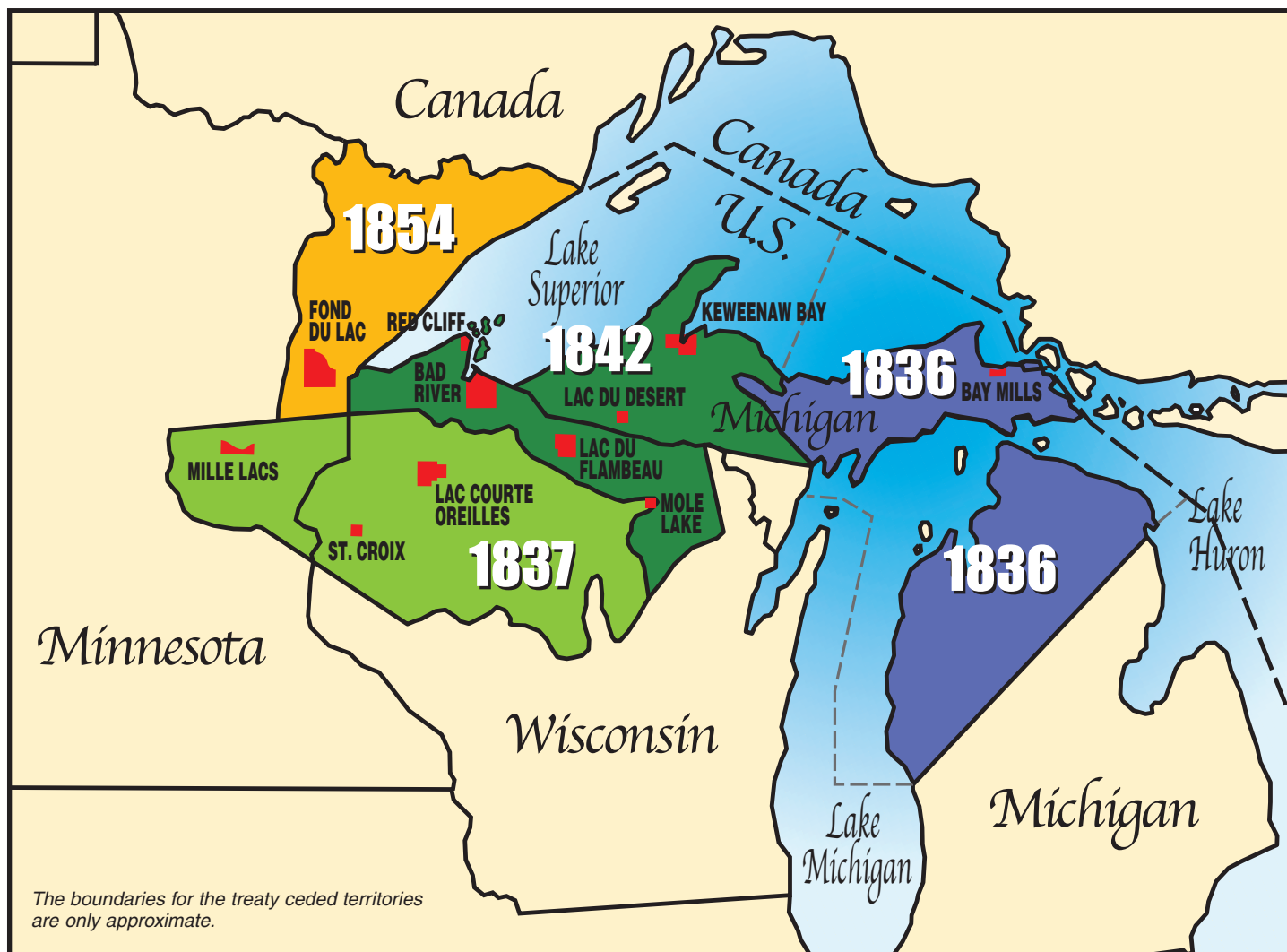
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Bay Mills Area Warden.....Duane Parish
Keweenaw Bay Area WardenJames LaPointe
Keweenaw Bay Area WardenSummer Cohen
Lac Courte Oreilles Area Warden.....vacant
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Lac du Flambeau Area WardenChristopher Spaight
Lac Vieux Desert Area Warden.....Ruben Gonzales
Mille Lacs Area WardenJames Mattson
Mille Lacs Area Wardenvacant
Mole Lake Area Warden.....John Mulroy
Mole Lake Area Warden.....Roger McGeshick
Red Cliff Area Warden.....Mark Bresette
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St. Croix Area Warden.....Chad Brugman
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Glifwc Member Tribes and Treaty Ceded Territories



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