

Anishinabek/Ontario Fisheries Resource Centre



Fisheries Assessment

Capacity Building

Communications

Fisheries Issues

Partnerships



Annual Report 2006



Patrick Madahbee
Chairman of the A/OFRC Board of Directors

It has been an exciting year for the Anishinabek/Ontario Fisheries Resource Centre with the completion of more field projects than any other year in our history. Since beginning operations in 1995, the centre has now completed over 200 field projects along with a number of workshops and stakeholder forums.

One of the highlights in our field program was the Species at Risk impact assessments involving the shortjaw cisco on Lake's Nipigon and Superior. Species at Risk designations may have direct impact on commercial fisheries within many Anishinabek Nations and have created the need for communities to become proactive in managing their fishery.

The A/OFRC completed a total of 23 fisheries initiatives with fifteen different communities during the past year. The information that was collected is now being analyzed and presented to communities, and will be delivered through technical reports, our website, and newsletters.

It is my pleasure to once again present our Annual Report, highlighting the activities of the Centre in 2005.

Mii-gwetch,

Patrick Madahbee

Annual Report on A/OFRC Activities: 2005/06

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Introduction

Mission Statement

We strive to be an independent "Centre of Excellence" for fisheries assessment and management, recognized and trusted by First Nations, governments and all users of fisheries resources.

Our mission is to report on stock status, evaluate stresses on fish populations and habitats, offer management recommendations, and facilitate information sharing and participation among all stakeholders to promote sustainable fisheries and resolve conflict.

Our History

In 1995, the Anishinabek/Ontario Fisheries Resource Centre (A/OFRC) was established to serve as an independent source of information on fisheries assessment, conservation and management, promoting the value of both western science and traditional ecological knowledge. The A/OFRC is a not for profit corporation controlled by a Board with equal representation from Native and non-Native Directors.

Our Role

The roles of the Centre are to report on stock status, evaluate stresses on fish populations and habitats, promote the use of state of the art science and technology, and to provide a forum for information sharing and participation with stakeholders. The Centre also plays an important role in offering management recommendations to promote sustainable fisheries and resolve conflict.

Our Strengths

The demonstrated strength of the Centre is its ability to design and carry out field fisheries assessment studies, integrating traditional knowledge with scientific models. As well, a broad range of expertise enables the Centre to professionally analyze and interpret assessment information, and then communicate the results to First Nation communities and interested stakeholders. The assessment studies conducted by the Centre and its analysis of existing assessment data often lead to recommendations for management authority consideration. The A/OFRC has built an enviable relationship based on trust with First Nations, government and other partners.

Our Work

As a "Centre of Excellence" for fisheries assessment and management, the A/OFRC employs standardized assessment tools, innovative science and technology, and traditional knowledge to evaluate stock status and stresses on fish populations and their habitats. The Centre's studies integrate western science and traditional ecological knowledge (TEK), and lead to recommendations to management authorities. As a partnership between the Union of Ontario Indians and Ontario, the Anishinabek/Ontario Fisheries Resource Centre is well positioned to undertake many different fisheries projects.

Our Staff

A dedicated staff of professionals with a wide range of experience is available to tackle complex field studies, data reviews, and fisheries technology training. With a complete spectrum of expertise and backgrounds, our staff is well positioned to field a diverse team and complete challenging projects. A solid administrative and data management team supports the field staff. The A/OFRC includes a main office in North Bay and a Field Fisheries Unit, located at MacDiarmid on Lake Nipigon. The Centre has a core staff of 8 people.

Our Board

A Board of Directors composed of academic leaders, fishers, fisheries researchers, and tourism and resource managers provide progressive program direction. Both Native and non-Native Directors are represented in equal numbers, bringing a balanced approach to all decision making. The Ontario Minister of Natural Resources and the Grand Chief of the Anishinabek Nation each approve 4 directors and the chairperson is jointly approved.

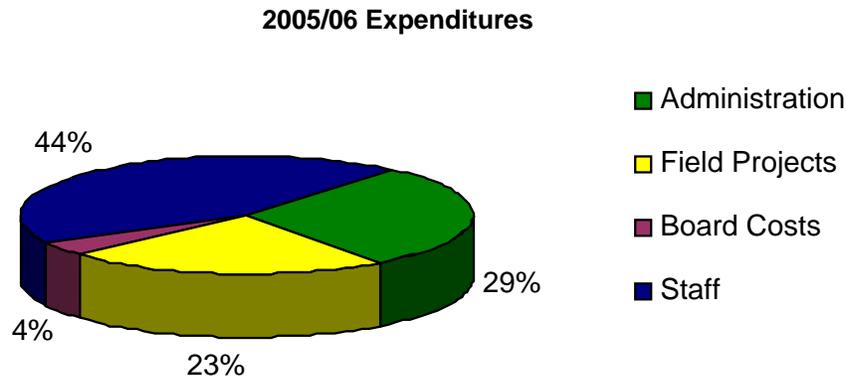
Our Outlook

The A/OFRC has established a solid working relationship with First Nations, Provincial agencies and community organizations by earning a reputation as a trusted independent source of fisheries information. We will continue to strive to maintain and strengthen these relationships in any future endeavours.

The A/OFRC's clients are located in four regions in Ontario, delineated by Treaty Areas. The Southwest Region encompasses the Upper Canada Treaties Area 2, the Southeast is made up of both the Upper Canada Treaties Area 1 and the Williams Treaties Area, the Lake Huron Region encompasses the Robinson-Huron Treaty and the Lake Superior Region encompasses the Robinson-Superior Treaty.

Financial Management

Total revenues available to the A/OFRC in 2005/06 were \$1,260,000. Four percent of this total was generated by funding provided through partnership agreements with external agencies which included FedNor, the Northern Ontario Heritage Funding Corporation and the Ontario Ministry of Natural Resources. The Centre expended a total of \$868,000 during the 2005/06 fiscal year. The addition of a new vehicle and replacement of ageing office equipment raised administration costs over last year's level. Twenty-three percent of the total, \$200,000 was expended directly on field projects. Our audited financial statement is provided as an appendix of at the end of this document.



Activity Report

When fisheries issues arise suddenly or when our clients have questions regarding some aspect of fisheries management, the Centre provides information and support. The Centre continues to play an information transfer role to local communities.

The Centre has begun to gauge interest in a wide scale capacity building initiative that could be delivered to First Nations wishing to expand their existing programs. If this initiative receives support, planning would begin in 2006 for implementation the following year.

Amendments to the A/OFRC policy manual have been completed and a condensed version has been created for distribution to all field staff starting in 2006.

John Seyler resigned as the General Manager in January of 2006 and was replaced by former Senior Data and Technical Specialist, Ed Desson. A Senior Biologist position was created to fill the void created by these staffing changes. The Centre will fill this position during the field season of 2006/07.

Grant Stevens of Nipissing First Nation was employed by the Centre during the summer of 2005, as a student intern assisting with a number of field projects. Based on the success of this initiative, the Centre would like to continue building capacity in this fashion.

Perry McLeod-Shabogesic continues in his capacity as an aboriginal advisor to the Great Lakes Fisheries Commission. The A/OFRC also provides representation to various scientific/technical and resource stewardship groups within the Anishinabek territory.

Field Activity Report

The following is a report on the projects that were undertaken by the A/OFRC during the 2005/06 field season. The report is presented in accordance with the work plan that was approved by the Centre's Board of Directors and submitted to the Ministry of Natural Resources (MNR).

Southeast / Southwest Regions

Alderville

Double-crested Cormorant Impact Study: Rice Lake

Rice Lake has undergone several changes in recent years due to the introduction of various exotic species. The Double-crested Cormorant has now colonized at two locations and community members have become concerned over the possible impact these birds might be having on their fishery. Some type of major disturbance occurred during the implementation of this project, leaving the nesting colonies void of cormorants. Nest counts were completed to provide rough estimates of nesting populations.



Algonquins of Pikwakanagan

Double-crested Cormorant Impact Study: Golden Lake

The Centre has completed several walleye population assessments on Golden Lake, leading to the implementation of a recovery plan. Concerns that the recent invasion of the Double-crested Cormorant may hinder walleye restoration efforts prompted this baseline study to determine population status and summer diet. Results were inconclusive, as the methodology employed was not ideal for surveying tree nesting birds. Nest counts were completed to provide rough estimates of nesting populations.

Algonquins of Pikwakanagan

Early Summer Trapnetting (ESTN): Cedar Lake

Cedar Lake is located at a major access point for Algonquin Park (Brent, Ontario) and receives fishing pressure from both park users and members from the A. of P. community. Local fishers have reported a decline in walleye abundance and size in the lake in recent years. To confirm results obtained in the 2004 Cedar Lake ESTN, the project was completed again this year. In 2004, trap nets were set in 30 different locations around the lake, capturing a total of 48 walleye. The 2005 study yielded much different results, with a total of 148 walleye



being captured in 32 net sets. This year's catch rate (4.77 fish per net) indicates average walleye abundance, whereas the 2004 catch rate (1.66) painted a much bleaker picture. Based on catch and population structure, this year's results appear to be more credible.

Chippewas of the Thames

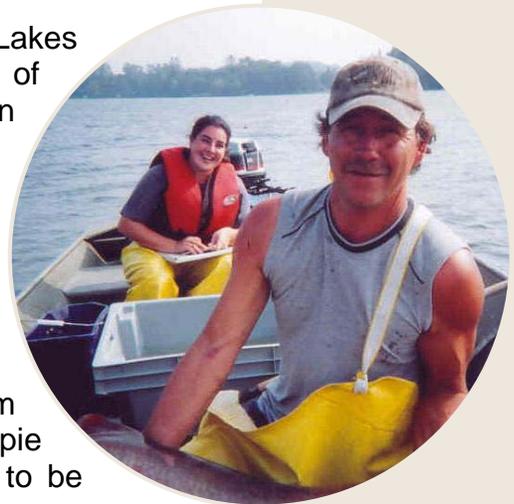
Thames River Walleye Assessment

First Nation communities along the Thames River are concerned with declining water quality and fish populations in the river. This was a collaborative project involving the First Nation, A/OFRC and the OMNR's Lake Erie Management Unit. Technicians from the First Nation assisted with the LEMU program on both the Thames River and Lake St. Clair. Field projects included larval walleye sampling, young-of-the-year fish seining, and fall trap netting. This initiative was successful in providing information to the First Nation through capacity building.

Curve Lake First Nation

Nearshore Community Index Netting (NSCIN): Buckhorn and Chemong Lakes

Fish habitat and the fish communities of the Kawartha Lakes are undergoing very significant changes. The arrival of zebra mussels has increased water clarity which in turn has resulted in huge increases in aquatic plant growth. At the same time bluegills and black crappie have invaded the lakes and their populations are now exploding. Curve Lake First Nation, the OMNR's Kawartha Lakes Fisheries Assessment Unit and the Centre collaborated to assess the nearshore fish communities of Buckhorn and Chemong lakes for the first of a two year project, to relate to results from previous ESTNs. As expected bass, sunfish and crappie numbers are high, while walleye abundance appears to be low.



Curve Lake

Fall Walleye Index Netting (FWIN): Buckhorn and Chemong Lakes

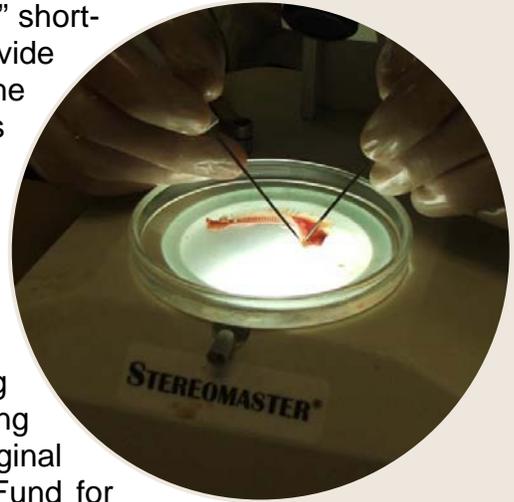
Gillnets were set at 36 locations on these lakes in the late fall capturing 3 walleye on Buckhorn Lake and 11 walleye on Chemong Lake. Walleye catches were down compared to previous FWIN projects. These walleye populations are made up almost entirely of old fish with very few young walleye to replace those that are being harvested. Walleye habitat is also decreasing on the lakes as water clarity improves. These populations are very stressed and are at risk of collapse.

Lake Superior Region

Biinjitiwaabik Zaaging Anishinaabek

Short-jaw Cisco Assessment: Lake Nipigon

The development of a recovery plan for the “threatened” short-jaw cisco is underway. This project was designed to provide estimates of abundance and distribution, as well as the impact of the existing commercial fishery on this species. Fourteen multi-mesh gill nets were set overnight in addition to 14 commercial (4.5”mesh) nets. Out of the 273 cisco that were captured, only 13(4%) came from the commercial nets. Laboratory work is still underway to positively identify the numerous cisco species captured. Contributions to this project came from a wide array of partners, including Kiashke Zaaging Anishinaabek, A/OFR, DFO, Nipissing University and Environment Canada programs: Aboriginal Capacity Building Fund and the Habitat Stewardship Fund for Species at Risk.



Kiashke Zaaging Anishinaabek

Northern Pike Assessment: Gull Bay, Lake Nipigon

The spring of 2005 marked the first year of an intensive northern pike assessment in Gull Bay, on Lake Nipigon. Gull Bay currently supports a subsistence fishery for northern pike and KZA is currently pursuing new initiatives that would offer enhanced angling opportunities to Lake Nipigon tourists. Thirty-nine trap nets were set in Gull Bay over a four week period in late May and early June, yielding a catch of 576 northern pike.

Kiashke Zaaging Anishinaabek

Fisheries Technician Training: Lake Nipigon

As an initiative in capacity building, a fisheries technician from KZA was employed to work on various assessment projects being conducted on Lake Nipigon.

Namaygoosisagagun

Fall Walleye Index Netting: Gnome and Tamarack Lake

These small warm water lakes are used by subsistence fishers, and increasingly by anglers. Early results show that the resident walleye populations in both lakes are considered average, when compared to provincial standards. Detailed analysis is underway, which will allow for further comparisons to other walleye lakes in the northwest region.



Pays Plat

Short-jaw Cisco Assessment: Nipigon Bay, Lake Superior

The development of a recovery plan for the “threatened” short-jaw cisco is underway. This project was designed to provide estimates of abundance and distribution, as well as the impact of the existing commercial fishery on this species. Eleven multi-mesh gill nets were set overnight in addition to 11 commercial (4.5”mesh) nets. Out of the 11 cisco that were captured, none came from the commercial nets. Laboratory work is still underway to positively identify the numerous cisco species captured. Contributions to this project came from a wide array of partners, including Pays Plat, A/OFRC, DFO, Nipissing University and Environment Canada programs: Aboriginal Capacity Building Fund and the Habitat Stewardship Fund for Species at Risk.

Lake Huron Region

Dokis

Lake Surveys/Habitat Assessments

Harris, Hemlock 1, Hemlock 2, Migisa, Pike, Robin and Trout Lakes

The Dokis area of the French River is a popular destination for angling tourists and locals, who have contributed to increased pressure on these small lakes. These surveys provided baseline data for inclusion into the Dokis Natural Capital Protection Plan and will assist in the formation of a Fisheries Management Plan. The fish communities in many of these lakes have changed considerably since they were originally surveyed in the late 1950’s and early 1960’s.

Dokis

Fall Walleye Index Netting: Woodcock Lake

Woodcock Lake supports both a popular angling fishery and a small subsistence fishery. Road improvements providing easier access, created concerns within the community over the health of the resident walleye population. Results of this project have shown that these concerns appear to be well founded. Twelve net sets yielded a catch of 28 walleye (CUE=2.3), while a similar study in 1998 produced 84 walleye in twelve sets (CUE=7.0). The Centre is presently developing a list of management recommendations.



Magnetawan

Early Summer Trap Netting: Byng Inlet, Georgian Bay

Magnetawan First Nation utilizes the river walleye population as a subsistence food source and community members have noticed a decline in abundance over recent years.

A project was carried out in 1999 to assess the spawning population of walleye at the mouth of the Magnetawan River, however the results were inconclusive. The 2005 Early Summer Trap Netting results proved inconclusive as well.

Sagamok Anishnawbek

Lake Whitefish Assessment: Lake Huron

Sagamok has been involved with lake whitefish assessment on Lake Huron over the past three years and are interested in enhancing the existing data set. They would like to expand an existing commercial fishery if the results show that this can be sustained. Results are still pending.



Sagamok Anishnawbek

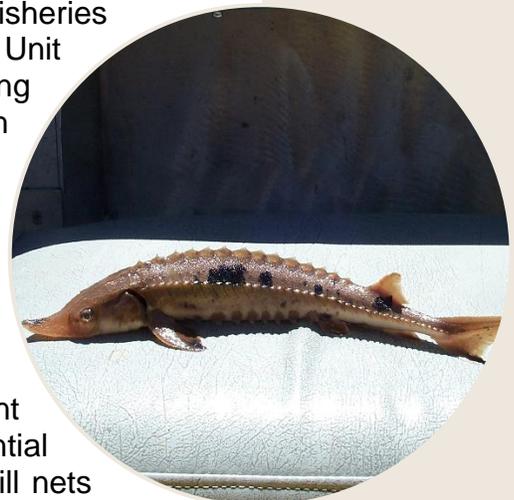
Fall Walleye Index Netting (FWIN): Little LaCloche Lake

Little LaCloche is a small, warm water lake located in close proximity to Sagamok's main community and can be accessed at its east end by off-reserve anglers. The lake has been subject to a number of walleye plantings over the years, but no assessments have been done to gage their success. Early results show "average" walleye abundance (8.1 fish/net), with further analysis to be completed.

Sagamok Anishnawbek

Lake Sturgeon Assessment: Spanish River

The A/OFRC provided funding for a Sagamok fisheries technician to work with the Lake Huron Management Unit on this assessment. Both juvenile and adult spawning populations were sampled throughout the lower Spanish River (Espanola dam to Lake Huron). Sagamok is undertaking a similar program in 2006, expanding into the upper portion of the Spanish River as well.



Serpent River

Lake Sturgeon Assessment: Aird Bay, Lake Huron

Netting in the Serpent River in 2003 failed to document spawning activity although several good, potential spawning areas were identified. In 2004, large mesh gill nets

were set at 60 locations in the North Channel and Aird Bay. Serpent River fishers have reported that many small lake sturgeon are being incidentally caught, and released. The 2005 assessment utilized local fishers to collect additional lake sturgeon data. A total of 36 lake sturgeon were biologically sampled and released.

Wahnapiatae

Spring Littoral Index Netting (SLIN): Lake Wanapitei

Over the past few years, concern regarding the health of the fishery on Lake Wanapitei has increased because of noticeable pressures such as, non – native angling, shoreline development and fluctuating water levels due to a hydroelectric dam. A total of 90 sets were completed in ten days of sampling, resulting in a catch of 10 lake trout. The analysis of results from such a small number of fish is not conclusive. The Centre is recommending the use of alternative techniques in assessing the Lake Wanapitei lake trout population.



Whitefish Lake

Lake Surveys

Field crews examined water quality, fish habitat and the fish communities on three small lakes located in the territory of Whitefish Lake First Nation. The community is now in the early stages of developing a management plan for their lakes.

Whitefish Lake

Fall Walleye Index Netting (FWIN): Blackwater and Round Lakes

Blackwater and Round lakes are small, warm water lakes that are easily accessible from surrounding logging roads. Catch rates on both lakes were considered low (1.0 fish/net and 2.1 fish/net respectively), indicating that the walleye populations are stressed or unstable.



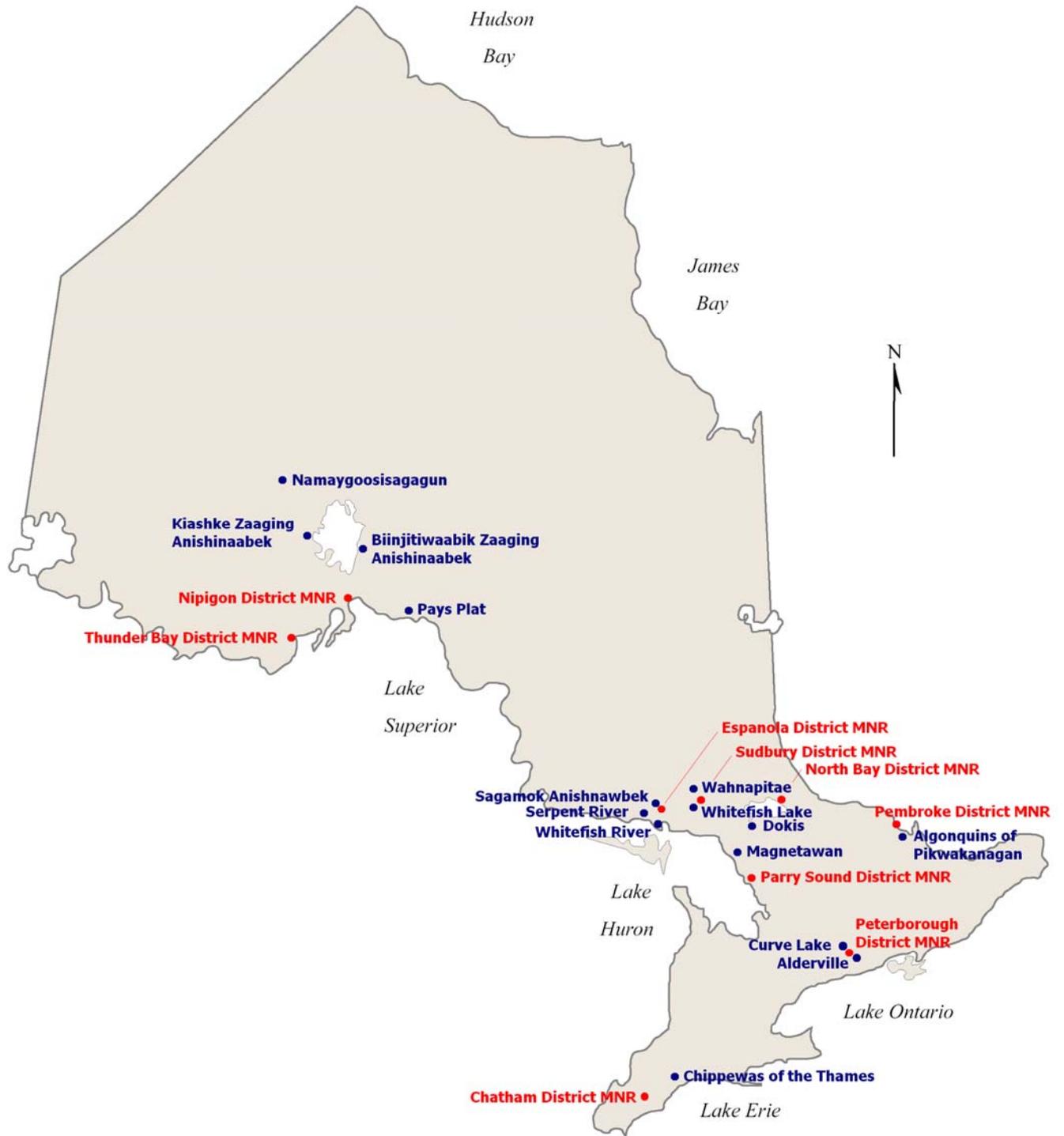
Whitefish River

Walleye Tagging: Whitefish River

The community of Whitefish River is concerned about the decline of walleye in the river that has taken place over the past decade. Following up on assessment work they completed in 2000 and 2001, fisheries technicians again trap netted and tagged walleye at the mouth of the Whitefish River. Catches were far smaller than in previous years however no conclusions can be made as to the cause. The Centre will attempt to repeat this project in 2006.

First Nation Field Project Locations 2005/06

Also Shown: Local District Ministry of Natural Resources Offices



Communications

The Centre produced a newsletter early in 2006, highlighting the shortjaw cisco project on Lake's Nipigon and Superior. Distribution is scheduled for late March of this year.

Presentations were given to the Ontario Chapter of the American Fisheries Society and the Lake Nipigon Technical Committee. Centre staff presented the results of past projects in a number of meetings hosted by client First Nations. In addition to maintaining our website, the A/OFRC has presented the results of past work in a number of different formats. A/OFRC reports are available upon request.

Carmichael, K.	2005	Algonquins of Pikwakanagan Double-crested Cormorant Project: Spring 2005
Carmichael, K.	2005	Summary of 2005 Aquaculture Tour: North Channel of Lake Huron Cage Aquaculture
Carmichael, K.	2005	Lake Wanapitei Fall Walleye Index Netting 2004
Pritchard, G.	2005	Curve Lake Fisheries Update – Community Newsletter: Nearshore Community Index Netting - 2005
Pritchard, G.	2005	Curve Lake Fisheries Update – Community Newsletter: Winter Angler Survey
Pritchard, G.	2005	West Bay Lake Nipissing NSCIN Update
Pritchard, G.	2005	Lake survey posters: Whitefish Lake First Nation
Pritchard, G.	2005	Magnetawan River ESTN-Update
A/OFRC	2006	Fisheries News: The Shortjaw Cisco under the Microscope
Carmichael, K.	2006	Lake Huron Lake Whitefish Report 2003
Carmichael, K.	2006	Community Poster: Lake Huron Lake Whitefish
Carmichael, K.	2006	Lake Wanapitei Spring Littoral Index Netting (SLIN) Technical Report - Spring 2005
Carmichael, K.	2006	Cedar Lake End of Spring Trap Netting Study, 2004 & 2005
Carmichael, K.	2006	Woodcock Lake Fall Walleye Index Netting 2005
Seyler, J.	2006	Lake Whitefish (<i>Coregonus clupeaformis</i>) Index Netting: Lake Superior (2003, 2004)

Credits

Photo Credits

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Map Credit

Ontario Outline Map

Modified from: Ontario2 [c:\public\core\inhouse\ontario2.cdr]. (no date). Ontario: Brock University Map Library. Available: Brock University Map Library Controlled Access <http://www.brocku.ca/maplibrary/images/ontario2.pdf>. (Accessed June 27, 2006).

Appendix

Audited Financial Statements for the
Year Ended March 31st, 2005

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