

# **Role of Lake Sturgeon in First Nation Communities**

**CASE STUDY:**

**Namaygoosisagagun First Nation  
and Lake Sturgeon on Smoothrock Lake**

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# Overview

## Role of lake sturgeon in First Nation communities:

- Spiritual – mystical role in stories
- Social – gathering community members
- Economic
- Ecological
- Disconnect – changing role

“ecological/social/economic/spiritual role of lake sturgeon”



**“ecological/social/economic/spiritual role of lake sturgeon”**

# Spiritual Role

*“I know we’ve been given the lake sturgeon, by our GrandFathers, in order for our people to be able to feed themselves at the spring spawn, as a sure thing in times of lesser takes of gifts from the forest (like deer, moose, rabbit, partridge).”*

**Jack Restoule Dokis First Nation**

*“They say we came from sturgeon long ago and there are sturgeon ancestors but we don’t know it because it was lost over time”*

**Gilbert Panamick B.Z.A First Nation**

**“spiritual role of lake sturgeon”**

# “The origin of the sturgeon”

- From the **Deer Clan** of Nipissing First Nation.
- How lake sturgeon came to exist in Lake Nipissing.



“spiritual role of lake sturgeon”

# “The story of Manitou island”



*“The winter was harsh, the people staying on the Manitou Islands were hungry. A strange black sturgeon appeared and they had a feast.”*

“spiritual role of lake sturgeon”

# Social Role

- The **main role** of lake sturgeon.



*“It brought people together at the same spot along the Mississaugi River. We would camp out for a month (June) by the river and fish sturgeon. Everyone would bring their fiddles and there would be dancing and singing”*

**Mississauga First Nation Elders (80 – 85 years)**

**“social role of lake sturgeon”**

# Gathering of Community

*“When the sturgeon come up the river to spawn the community used to look forward to the GrandFathers bringing them this gift every year.”*

**Jack Restoule Dokis First Nation**

“It’s a special event to have lake sturgeon at a feast, by being traditional with friends and family”

“Smoked sturgeon is the best gift you can give to friends”.

**Harold and Agnes Michon BZA First Nation**

“social role of lake sturgeon”

# Important Food Source



“Nothing was wasted back then; the sturgeon was completely cooked, especially the head and eyes.”

**Mississauga First Nation Elders (80 – 85 years)**

“It was my main dish, eating lake sturgeon was a part of living”

**Wayne Onakanakis BZA First Nation**

“Sturgeon was one of the main fish that was harvested to be smoked and dried to help get through the long winters.”

**Charles Hardy Jr. BZA First Nation**

“social role of lake sturgeon”

# Ecological Role

*“We look for the monarch butterflies in late spring early summer and that tells us that the sturgeon are about to begin their run. The community would gather for the harvest.”*

**Jack Restoule Dokis First Nation**

*“When you hear the frogs in the springtime that means the sturgeon are moving up river”* **Sylvanis Onakanakis BZA First Nation**

# Traditional Resource

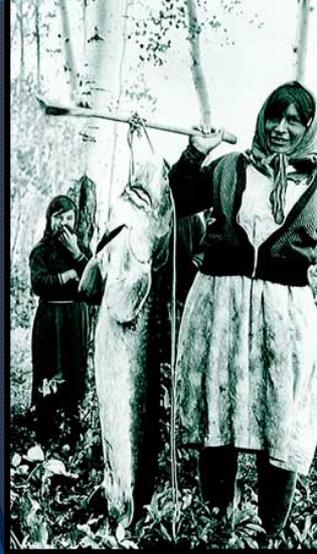
- Flesh for food

*“main source of fats right up to the twentieth century”* **Harold and Agnes Michon**  
**BZA First Nation**

- Oil for medicinal purposes

*“medicinal use for arthritis and rheumatism”* **Namaygoosisagagun First Nation**

- “isinglass” from the swim bladders for making glue and paint **(Scott and Crossman1998)**



**“economic role of lake sturgeon”**

# Economic Resource



<b>Oral traditional stories and teachings</b>			<b>Elders Born 1920</b>
<b>Prior to 1860</b>	<b>1860 - 1879</b>	<b>1879 -1900</b>	<b>1900 – Present</b>
Lake Sturgeon in	Targeted commercial fishery	Commercial fishery intensified	Fishery collapsed- low catches and commercial fishery closures
<b>Habitat loss: dams, development, pollution</b>			



“economic role of lake sturgeon”

# Evolving Community



*Each First Nation community is unique so the importance of the lake sturgeon in present day society differs depending on where you are*

**“Changing role of lake sturgeon”**

# Social Changes

*“All that we have on  
this land is a gift of the  
GrandFathers.”*

Jack Restoule

“The Elders from Mississauga  
First Nation don’t remember  
anyone fishing with nets, only  
spearing and snagging.”

Mississauga First Nation Elders



“Changing role of lake sturgeon”

# Economic Changes

*“ In the past, people survived on commercial fishing, sturgeon and walleye which the outfitters would buy off of them during the winter season.”*

*“Today there are only a few elders that still rely on the sturgeon as their diet and for medicinal purposes (arthritis and rheumatism).”*

Namaygoosisagagun First Nation Elders

# Generation Disconnect

*“That spring sturgeon harvest brought back the traditional ways in which our ancestors passed the teachings along. Today, it is becoming more and more a lost part of our culture as our people don’t rely as much on the gifts we have received from the creator”*

Jack Restoule Dokis First Nation

# Generation Disconnect

*“We always fished sturgeon long ago but it changed over the years, not as much anymore. Well the changes over years would be the people ourselves.”*

**James Hardy BZA First Nation First Nation**

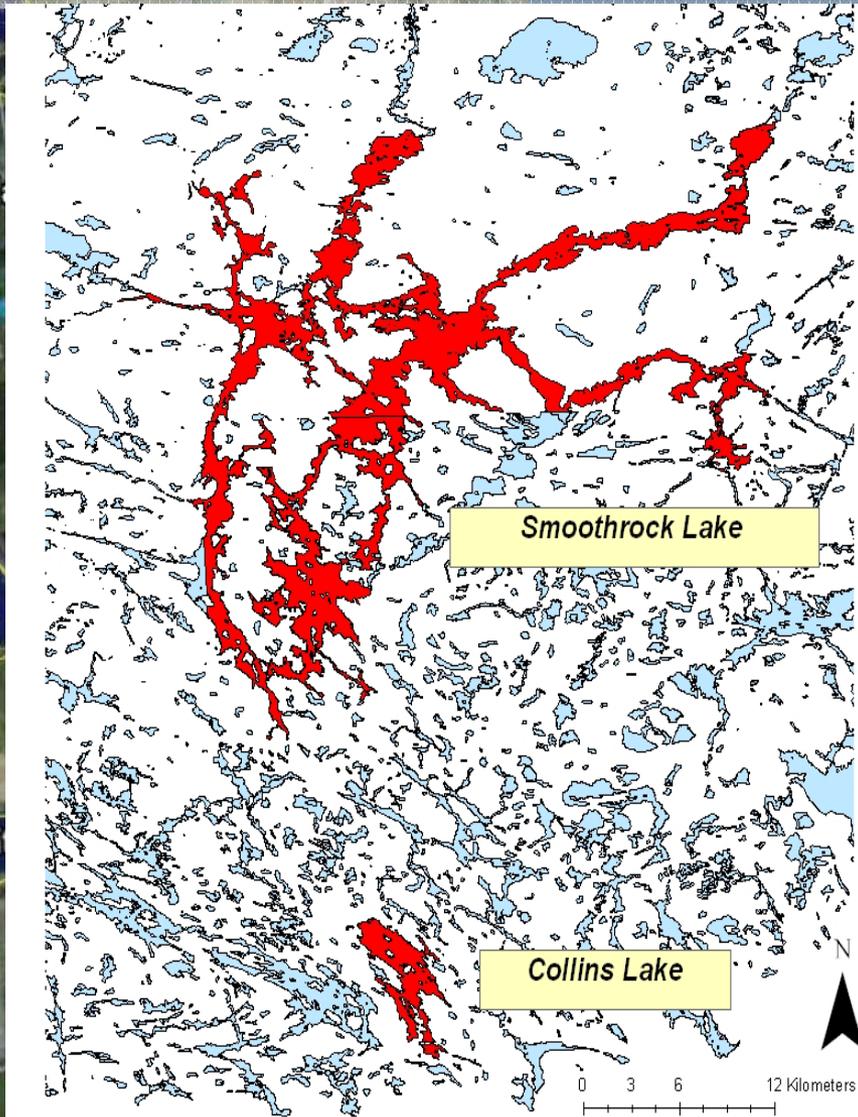


# Case Study:

Lake Sturgeon Spawning  
Assessment 2006 – 2008  
Smoothrock Lake, Ontario

Namaygoosisagagun First Nation

# Namaygoosisagagun First Nation



# Namaygoosisagagun First Nation



# Smoothrock Lake



Significant areas for the people of  
Namaygoosisagagun First Nation  
on Smoothrock Lake

# Smoothrock Lake

- Not viable commercial fishery.
- Natural tributaries.
- Minimally affected provides interesting comparison with more negatively affected populations.



# Connectivity



Namaygoosisagagun connected to lake sturgeon because of two elders that continue the tradition of fishing for lake sturgeon.

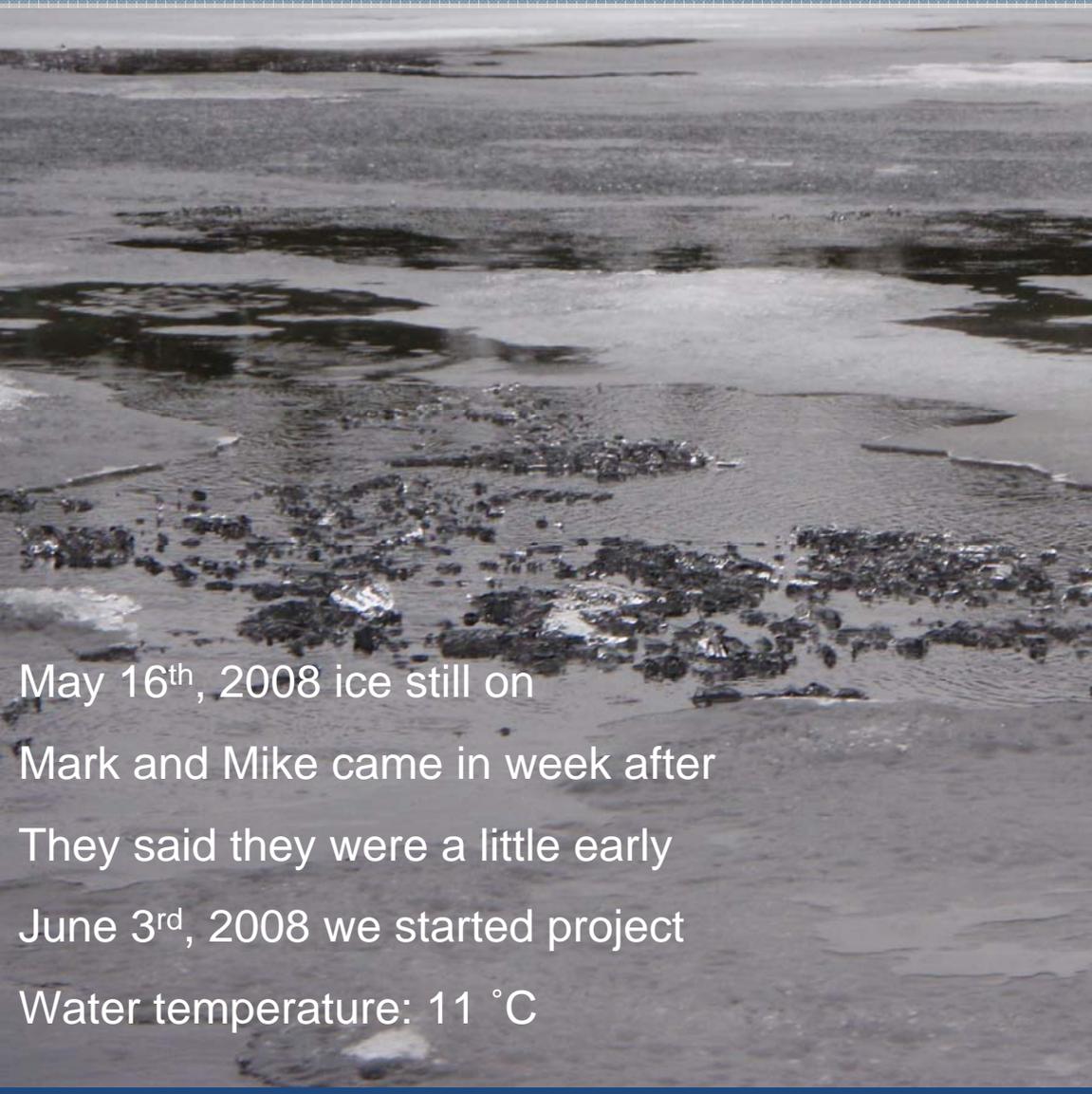
Mike and Mark portage in with help from a younger teenager (who I am sure had a hard time keeping up with these two).

# Traditional Ecological Knowledge



2006 Lake Sturgeon Spawning Assessment – Mike and Mark showing George different fishing locations and lake sturgeon spawning locations (and rocks!)

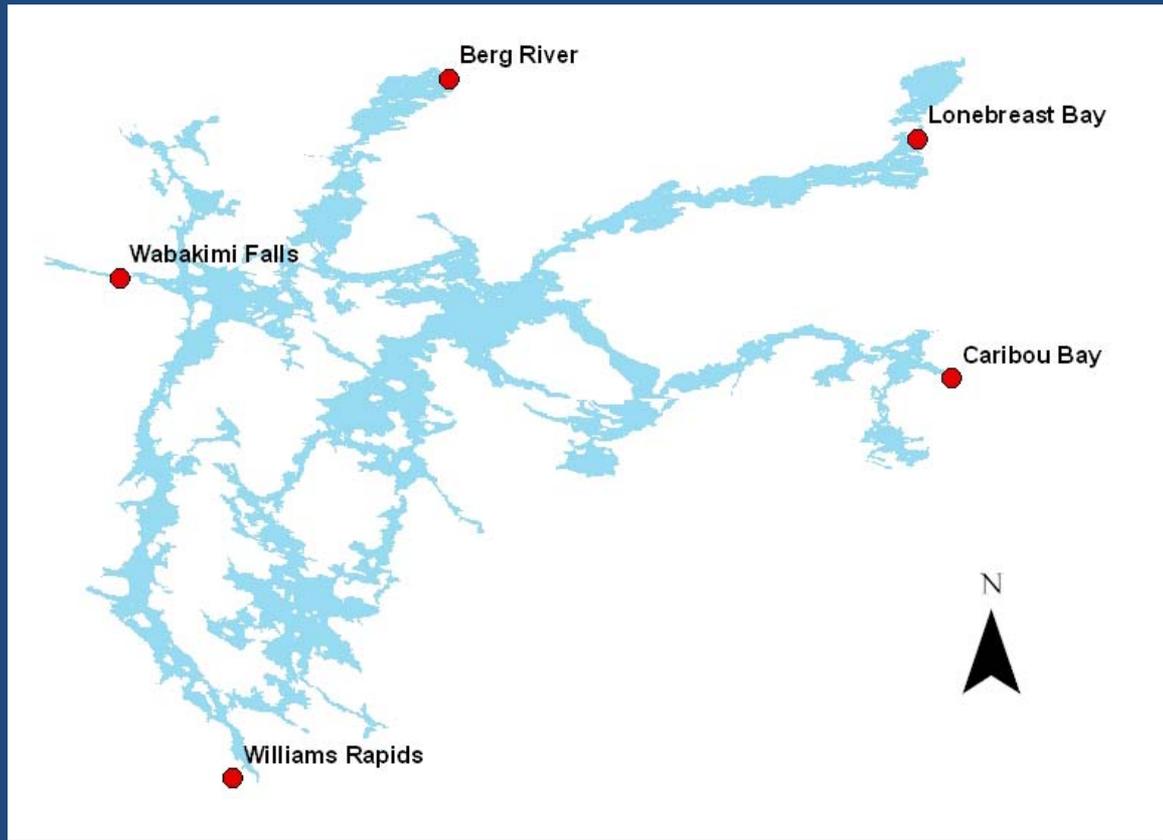
# Without TEK!



May 16<sup>th</sup>, 2008 ice still on  
Mark and Mike came in week after  
They said they were a little early  
June 3<sup>rd</sup>, 2008 we started project  
Water temperature: 11 °C

# Spawning Survey Method

- Multifilament nylon gillnets
- 5 different areas
- Temp. 9 - 12°C
- Biological sampling

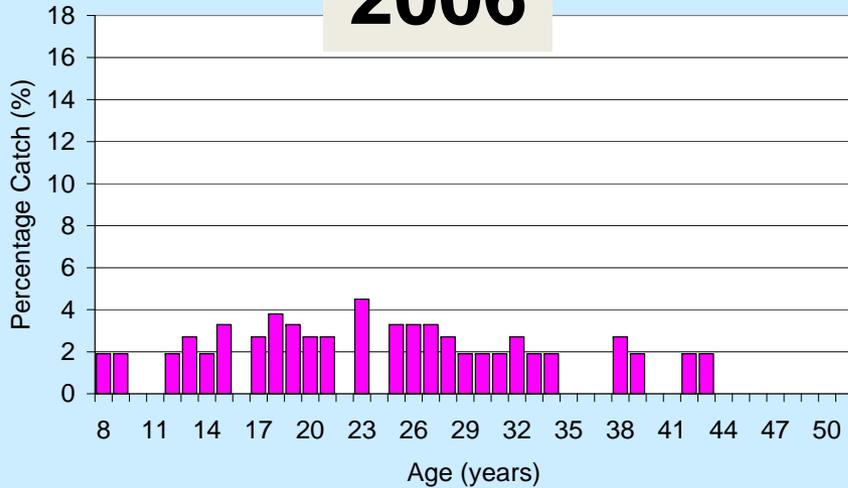


# Catch Results

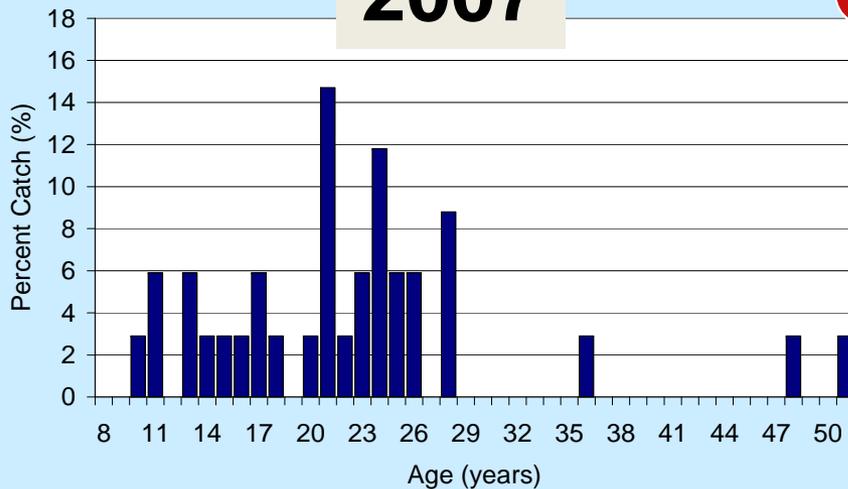
Lake Sturgeon Characteristics (sexes combined)	2006	2007	2008
No. Lake Sturgeon	54	35	57
Mean Age (years)	24	22.5	20.5
Mean Total Length	1189 mm (47 inches)	1247 mm (49 inches)	1190 mm (47 inches)
Mean Round Weight	11309 g (25 lbs)	13914 g (31 lbs)	11798 g (26 lbs)

# Age Distribution

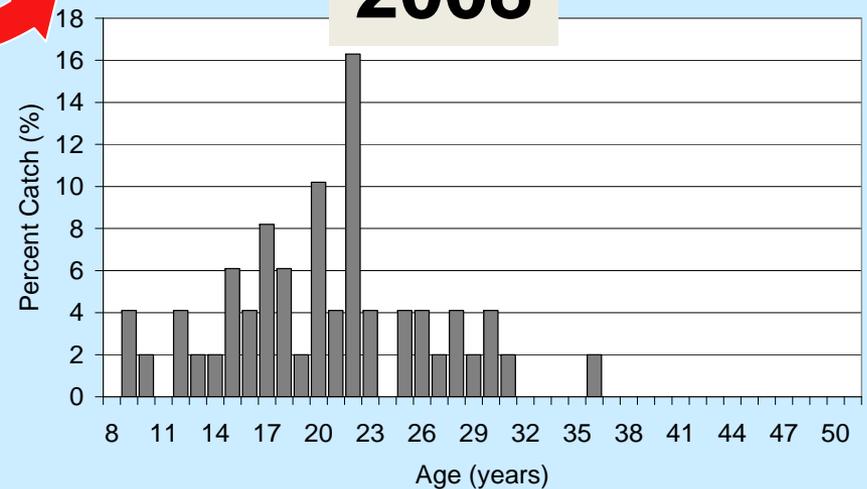
**2006**



**2007**

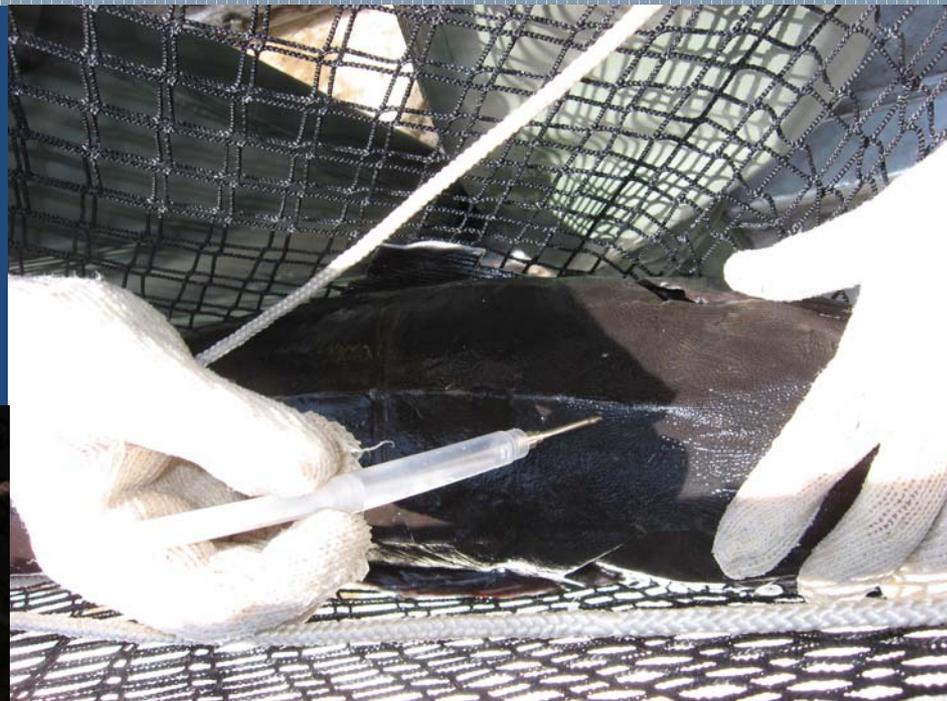


**2008**



# Recaptures in 2008

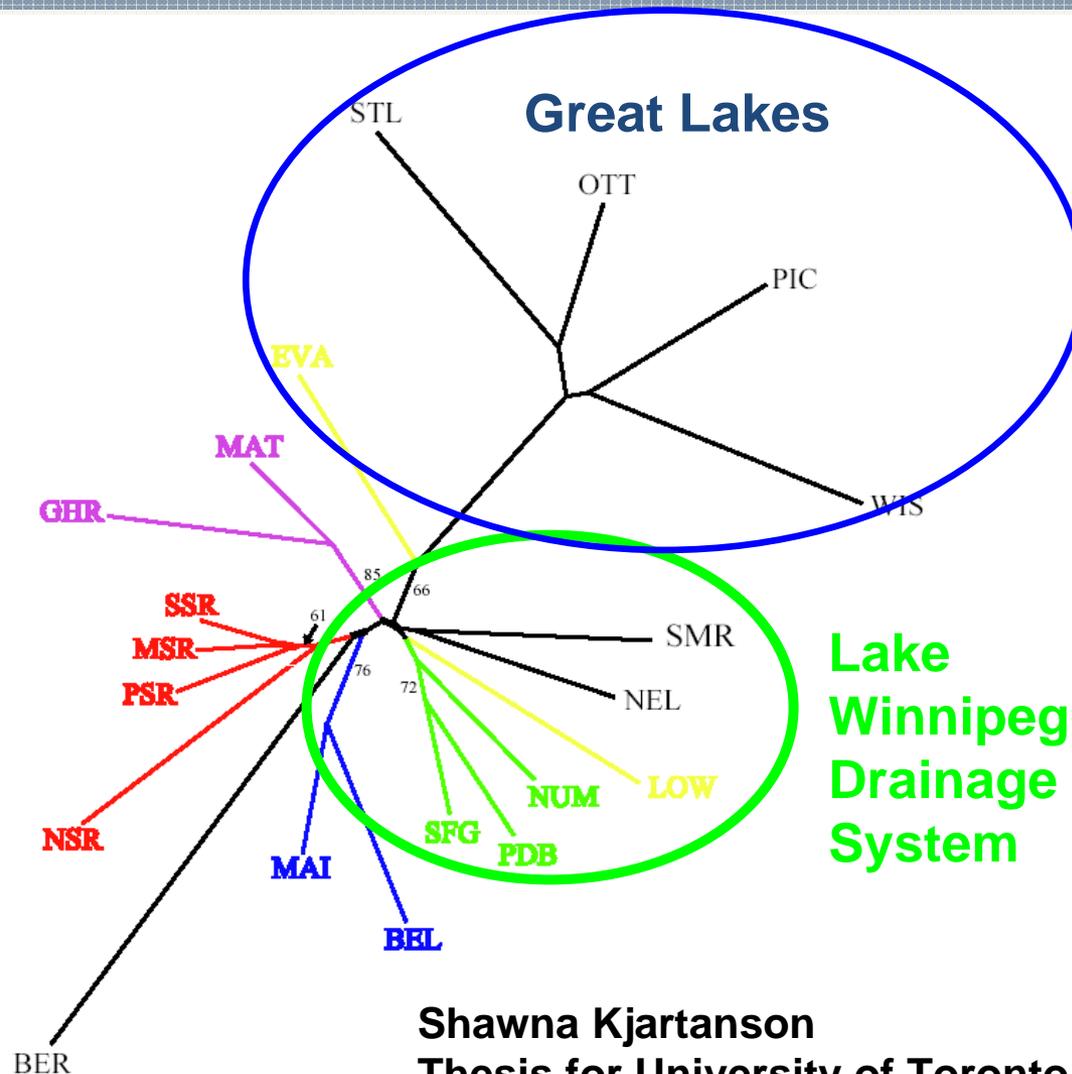
Lake sturgeon  
recaptures  
in 2008:



9 fish first caught in 2006

7 fish first caught in 2007

# Lake sturgeon genetics



Shawna Kjartanson  
Thesis for University of Toronto  
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# Their Opinion Matters



# Thank You

A special Thank You to all the individuals who conducted the interviews:

Alesia Boyer – Mississauga #8 First Nation

Charles Hardy – Biinjitiwaabik Zaaging Anishinaabek

Amanda Commanda – Serpent River First Nation

Perry McLeod Shabogesic – Nipissing First Nation

Jack Restoule – Dokis First Nation

John Okeese – Namaygoosisagagun First Nation

Dan Couchie – Ojibways of Pic River First Nation