

BARRIER FACT SHEET

www.greatlakeslessons.com

BARRIER FACT SHEET

These are the current types of barriers that are being used in the Great Lakes. They attempt to keep sea lampreys from migrating upstream to their spawning grounds.

FOR MORE INFORMATION ABOUT SEA LAMPREY CONTROL, SEE THE GREAT LAKES FISHERY COMMISSION WEB SITE: WWW.GLFC.ORG/SLFT.HTM



LOW HEAD BARRIER

Two to four feet high, this barrier is placed in a river and prevents lampreys from moving further upstream. A lip is used to keep lampreys from using their suction-cup mouths to climb over the barrier. A jumping pool near the barrier allows other fish to easily jump over the barrier.

ADJUSTABLE-CREST BARRIER

These barriers have adjustable, inflatable crests that are raised only during sea lamprey spawning season. The barrier is computer controlled and adjusts to the water level of the stream. It remains lowered on the river bottom except during lamprey spawning season. As a result, most fish can easily swim over the barrier.

VELOCITY BARRIER

Sea lampreys are poor swimmers that tire easily and need to attach to solid surfaces to rest. Velocity barriers create areas of rapidly moving water. Lampreys are not able to attach to surfaces next to these barriers. Fish can swim through these barriers.

ELECTRICAL BARRIER

DC current is run through these barriers at places where lampreys attempt to pass. The current stops the lamprey.

For more info see: www.glfc.org

BARRIER CARDS

BARRIER CARD

A lip on the **low-head barrier** is used to keep lampreys from using their suction-cup mouths to climb over the barrier.

LOSE A TURN.

BARRIER CARD

The **adjustable-crest barriers** have adjustable, inflatable crests that are raised only during sea lamprey season. You just made it.

**MOVE AHEAD
1 SPACE.**

BARRIER CARD

The **adjustable-crest barriers** remain lowered on the river bottom except during lamprey spawning season, and as a result most fish can easily swim over the barrier.

**MOVE BACK
1 SPACE.**

BARRIER CARD

Electrical barriers have DC current running through them at places where lampreys attempt to pass. The current stops the lamprey.

GO BACK TO "START."

BARRIER CARD

A jumping pool near the **low-head barrier** allows other fish to easily jump over the barrier.

**MOVE BACK
3 SPACES.**

BARRIER CARD

Velocity barriers create areas of rapidly moving water, with surfaces that make it impossible for lampreys to attach.

GO BACK TO "START."

BARRIER CARD

Velocity barriers don't prevent fish from swimming through them. Sea lampreys are poor swimmers that tire easily and cannot go through this barrier.

**MOVE BACK
2 SPACES.**

BARRIER CARD

The **adjustable-crest barriers** are computer controlled and adjust to the water level of the stream.

**STAY WHERE
YOU ARE.**

FOLD

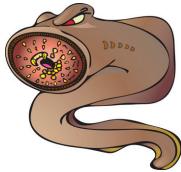
FOLD

LAMPREY CARDS

LAMPREY CARD

You reached the Great Lakes, which contain few natural predators for sea lampreys. Because there is limited danger of another species killing you, you are free to attach to as many fish as you like.

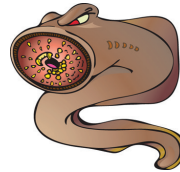
**MOVE AHEAD
3 SPACES.**



LAMPREY CARD

You found your way to Lake Huron where the sea lamprey population is estimated to be equal to that of the four other Great Lakes combined!

**MOVE AHEAD
3 SPACES.**



LAMPREY CARD

You successfully spawned with a female and beat out a sterilized male sea lamprey.

**MOVE AHEAD
1 SPACE.**



LAMPREY CARD

You have reached a barrier in a river that has not been well maintained due to high costs. You find a way through the barrier.

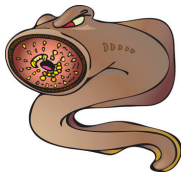
**MOVE AHEAD
2 SPACES.**



LAMPREY CARD

Scientists began treating Lake Erie with a chemical that kills sea lamprey larvae. However, you found the mouth of a small stream where these chemical methods cannot be used.

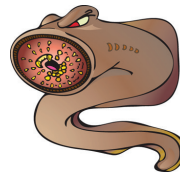
**MOVE AHEAD
1 SPACE.**



LAMPREY CARD

Because sea lampreys did not evolve with the native fish of the Great Lakes, your aggressive behavior gives you a strong advantage over your native fish prey.

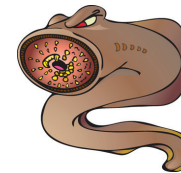
**MOVE AHEAD
2 SPACES.**



LAMPREY CARD

Local scientists have improved the water quality in a nearby lake. This has created a nice home for you and your sea lamprey family.

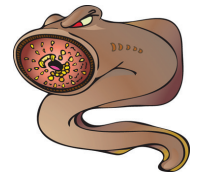
**MOVE AHEAD
2 SPACES**



LAMPREY CARD

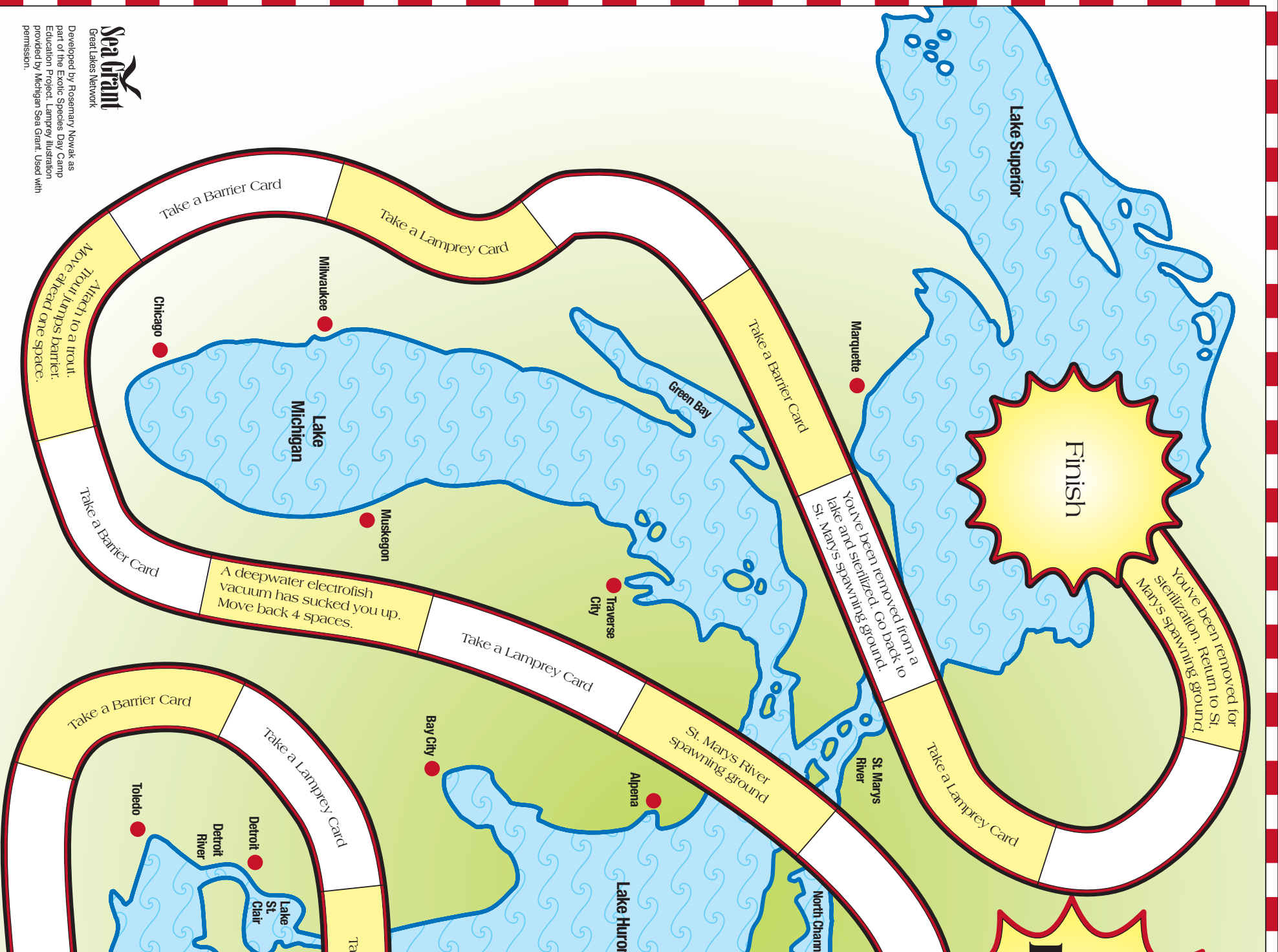
Whew! You just barely made it past the electrofish vacuum in your spawning ground.

**MOVE AHEAD
1 SPACE.**

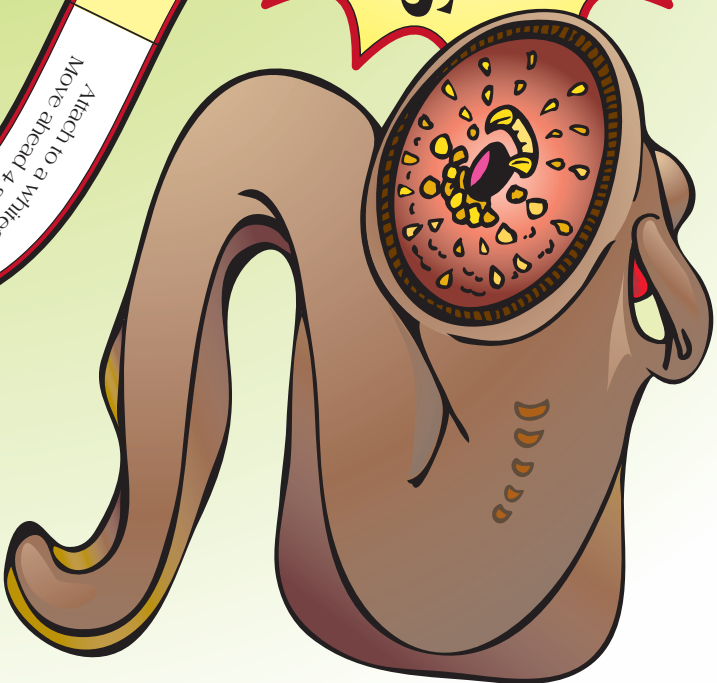


FOLD

FOLD



Beat the BARRIERS



Take a Lamprey Card

Attach to a whitefish.
Move ahead 4 squares.

Grab a ride on a trout.
Move ahead 3 spaces.

Take a Barrier Card

St. Lawrence River

Lake Huron

Lake Ontario

Niagara River

Welland Canal

St. Clair River

Lake St. Clair

Lake Erie

Cleveland

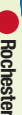
Toronto



Buffalo



Rochester



Erie Canal

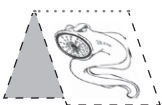
Start



Pulled out of Lake Erie while attached to a whitefish.
Go back to start.

Grab a ride on a trout.
Move ahead 3 spaces.

GAME PIECES



CUT

FOLD

CUT

FOLD

CUT

FOLD

CUT

FOLD

CUT

FOLD

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FOLD

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FOLD

CUT

