WHAT IS SALMON IN THE CLASSROOM? (SIC)

• Experiential learning experience
• 3rd grade through 12th grade
• Raise, care for and release Chinook salmon
• Eggs in fall until spring “smolt” release
• Release of the young fish in a local watershed that feeds one of the Great Lakes.
• Curriculum support, professional development credits and peer support

www.michigan.gov/sic
GROWTH OF THE PROGRAM

SIC Number of Schools

- 2018
- 2017
- 2016
- 2015
- 2014
- 2013
- 2012
- 2011

www.michigan.gov/sic
WHAT DO YOU KNOW ABOUT SALMON?

www.michigan.gov/sic
THE GREATEST FISH TALE EVER TOLD

www.michigan.gov/sic
BUT IT DOESN’T START IN MICHIGAN...

www.michigan.gov/sic
NATURE KNOWS BEST

www.michigan.gov/sic
THE WELLAND CANAL CIRCA 1825

www.michigan.gov/sic
BIGGER CANAL = BIGGER SHIPS

www.michigan.gov/sic
INVASION OF THE BODY SNATCHERS

www.michigan.gov/sic
THE SEA LAMPREY LIFE CYCLE

www.michigan.gov/sic
SEA LAMPREY ➡
LAKE TROUT ➠

Figure 1.—Total catches of lake trout in Lakes Huron, Michigan, and Superior from 1885 to 1960. Letters H, M, and S indicate the year of first appearance of the sea lamprey in each lake.
AND YOU THOUGHT IT WOULDN’T GET WORSE...

THE RISE & FALL OF THE INVASIVE ALEWIFE

www.michigan.gov/sic
STEP ONE:
CONTROL THE SEA LAMPREY

www.michigan.gov/sic
CAN YOU SAY ANADRAMOUS?

HOW ABOUT POTADRAMOUS?

www.michigan.gov/sic
A SYSTEM IN FLUX

Sea Lamprey

Lake Trout

Alewife

Alewife & Sea Lamprey

Salmon

Lake Trout

Salmon

Alewife

www.michigan.gov/sic
COHO FEVER

www.michigan.gov/sic
BRING ON THE CHINOOK

www.michigan.gov/sic
FISH ON!

Salmon in the Classroom

www.michigan.gov/sic
TELLING THE STORY OF FISHERIES MANAGEMENT

www.michigan.gov/sic
BUT THE STORY DOESN’T END THERE...

www.michigan.gov/sic
Alewife crash on Lake Michigan raises concerns for salmon fishing
*Milwaukee Sentinel*

Salmon population plummeting in Lake Michigan, *Detroit Free Press*

What is happening to the salmon? *Petosky News*

Lake Michigan's salmon populations still fluctuate
*Duluth News Tribune*

[Image of a salmon]

[Website address: www.michigan.gov/sic]
INVASIVE MUSSELS DISRUPT LAKE MICHIGAN FOOD CHAIN
NATURE FINDS A WAY

Salmon in the Classroom

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SO......

WHAT DOES ALL THAT HAVE TO DO WITH SALMON IN THE CLASSROOM?

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PROGRAM OVERVIEW

Application
Sponsors
Tank Setup
Teacher Professional Development & Egg Pickup
Classroom Activities
Rearing
Release

www.michigan.gov/sic
APPLICATION PERIOD

January 1 – April 15

- Program Support Factors
- Student Participation
- Natural Resource Education Commitment

www.michigan.gov/sic
MANDATORY PROFESSIONAL DEVELOPMENT

Mid-November
4 locations

SCECHs!

www.michigan.gov/sic
FISH FOOD

• Distributed at egg pick up
• Biologist approved
• Various sizes to cover the year
• Includes:
  – Fish feeding guide
  – Feeding schedule

www.michigan.gov/sic
TEACHER SUPPORT

- Coordinator via email or phone
- Facebook closed group
- Manual and Curriculum Guide
- Teacher Resource Kit
- Salmon Sense Newsletter
- SIC Website  michigan.gov/sic
- How To Videos

www.michigan.gov/sic
Research Revolution

Grade Levels

Objectives

Activity 1: Tagging Fish

Activity 2: Aging Fish

Background

Salmon in the Classroom

www.michigan.gov/sic

INTERNAL ANATOMY
### SCIENCE & MATH

<table>
<thead>
<tr>
<th>Age</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1</td>
<td>1%</td>
<td>28%</td>
</tr>
<tr>
<td>Age 2</td>
<td>27%</td>
<td>55%</td>
</tr>
<tr>
<td>Age 3</td>
<td>70%</td>
<td>16%</td>
</tr>
<tr>
<td>Age 4</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

www.michigan.gov/sic
HISTORY

Lake Ontario

United States

Canada

Lake Erie

Welland Canal

Niagara Falls

Locks 1, 2, 3, 4, 5, 6, 7

Welland Canal Office
St. Catharines. Nov. 30, 1829.
ART

www.michigan.gov/sic
www.michigan.gov/sic
GONE FISHIN!

www.michigan.gov/sic
FUNDING AND PARTNERSHIPS

Preuss Pets

Grand Haven Offshore Challenge

www.michigan.gov/sic
ANY FISHY QUESTIONS?
PAUSE FOR A COMMERCIAL BREAK...
Scholarships available!
SCECHs and Ferris S.U. credits.

www.michigan.gov/ANR
Project WILD and Project Learning Tree professional development programs for educators provide expertise in:

- Hands-on experiences
- Inquiry-based field investigation
- NGSS and cross curricular integration
- FUN!

michigan.gov/michiganprojectwild
Staffed visitor centers with nature exhibits and trails, education programs and field trips.

www.michigan.gov/DNRvisitorcenters
Winter outdoor programming is popular to many Michigan educators. But others see it as a time to take advantage of professional development. Whether you are looking for a 45-minute update on Michigan wildlife at MSTA this March in Lansing or a week-long immersion into natural resource management this summer, this Essential Educator is for you. We've even included a bonus: professional development just across the border. Enjoy the last grip of winter!
THANKS FOR COMING!

TRACY PAGE
AQUATIC EDUCATION COORDINATOR
PAGET3@MICHIGAN.GOV

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