

# Lake Superior Fisheries Management Plan Advisory Panel Meeting 5 February 6, 2018



# Agenda

Introduction/Overview

Review/approve previous meetings minutes

Complete Goal 2

Objectives

Goal 3

Objectives

Upcoming meetings

Work with stakeholders to identify and implement strategies that protect, support, and enhance the diversity, sustainability, and viability of state and tribal sport, commercial, and subsistence fishing.

# Objectives Goal 2

Objective 1: Restore/maintain self-sustaining lean and siscowet lake trout populations to levels that support sport, commercial, and subsistence fisheries.

Objective 2: Maintain self-sustaining lake whitefish population to levels that support sport, commercial, and subsistence fisheries.

Objective 3: Maintain self-sustaining lake herring populations to levels that support predator populations and commercial fisheries.

# Objectives Goal 2

Objective 3: Maintain self-sustaining lake herring populations to levels that support predator populations and commercial fisheries.

Continued data sharing, improve understanding of relationship between lake herring and lake whitefish, predator demand, stock assessment modelling

Other cisco species: Bloater, Kiyi, etc?

# Objectives Goal 2 – Cont.

Objective 4: Maintain/restore self-sustaining populations of native species that support fisheries.

December meeting primarily discussed Salmonids and we have general ideas of how to begin to draft the Plan. However, need input on Esocids, Percids, and Centrarchids. What do you want to see for these fisheries? From there, we can develop tactics to achieve.

# Objectives Goal 2 – Cont.

Esocids

# Objectives Goal 2 – Cont.

Percids

# Objectives Goal 2 – Cont.

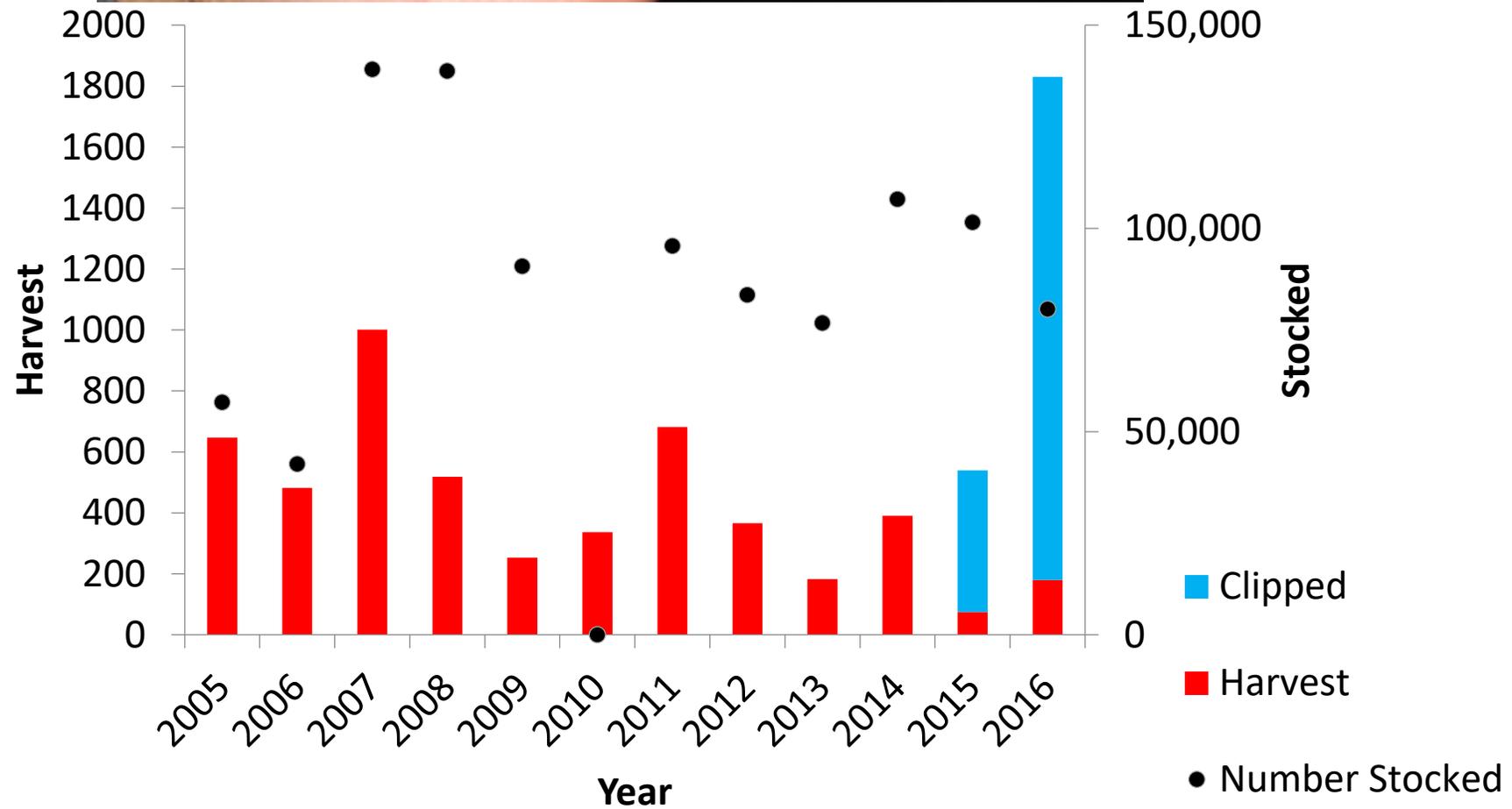
Centrarchids

# Objectives Goal 2 – Cont.

Other species?

# Objectives Goal 2 – Cont.

Objective 5: Maintain/restore self-sustaining populations of potadromous salmonids that support fisheries.

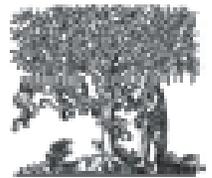


# Splake

- Spring Stocking has lead to increases in creel
- New evidence suggests may be interfering with BKT and LT

Journal of Great Lakes Research xxx (2016) xxx–xxx

---

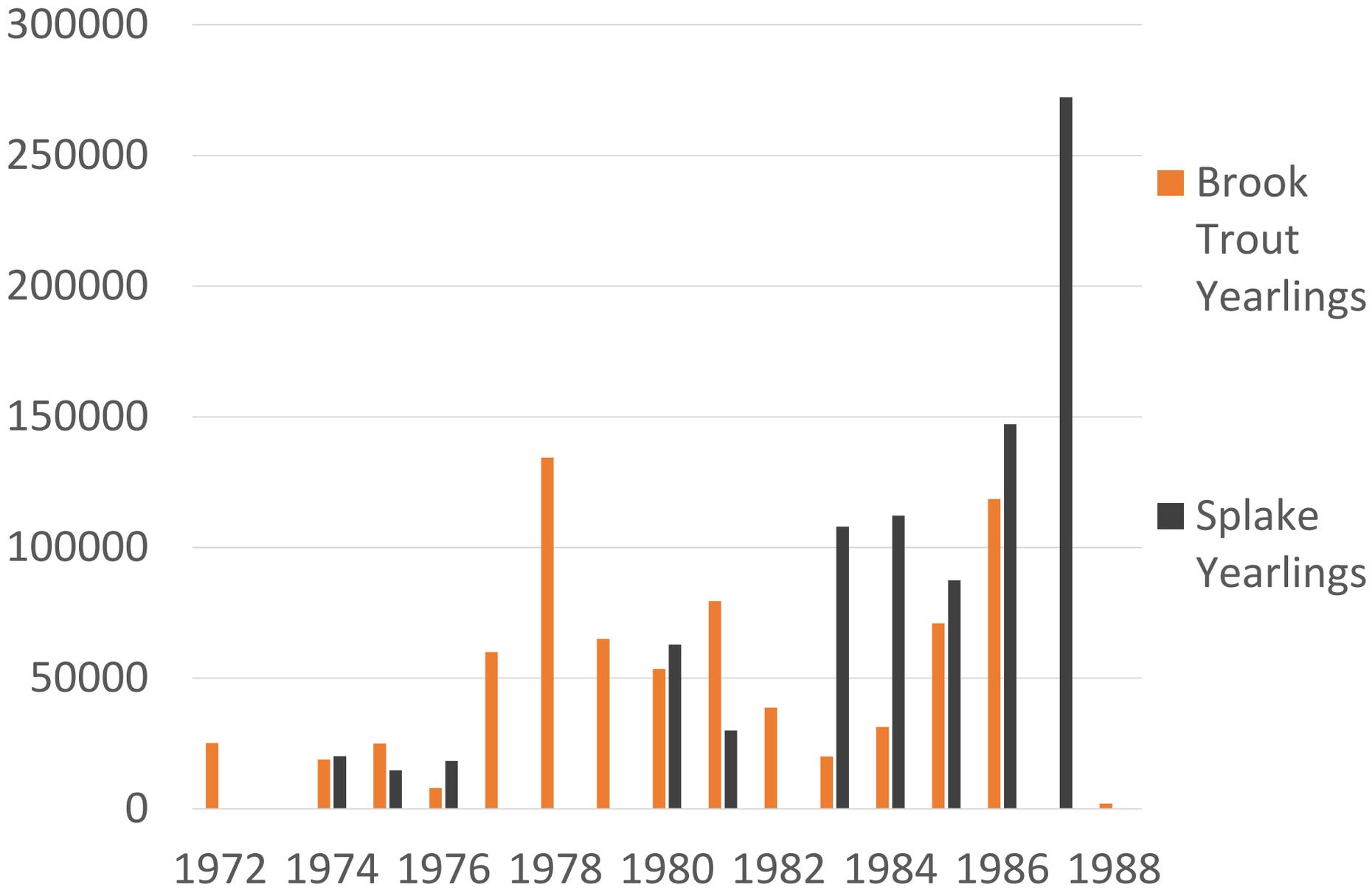
 <p>ELSEVIER</p>	<p>Contents lists available at ScienceDirect</p> <p><b>Journal of Great Lakes Research</b></p> <p>journal homepage: <a href="http://www.elsevier.com/locate/jglr">www.elsevier.com/locate/jglr</a></p>	 <p><b>IAGLR</b></p>
---	--	---

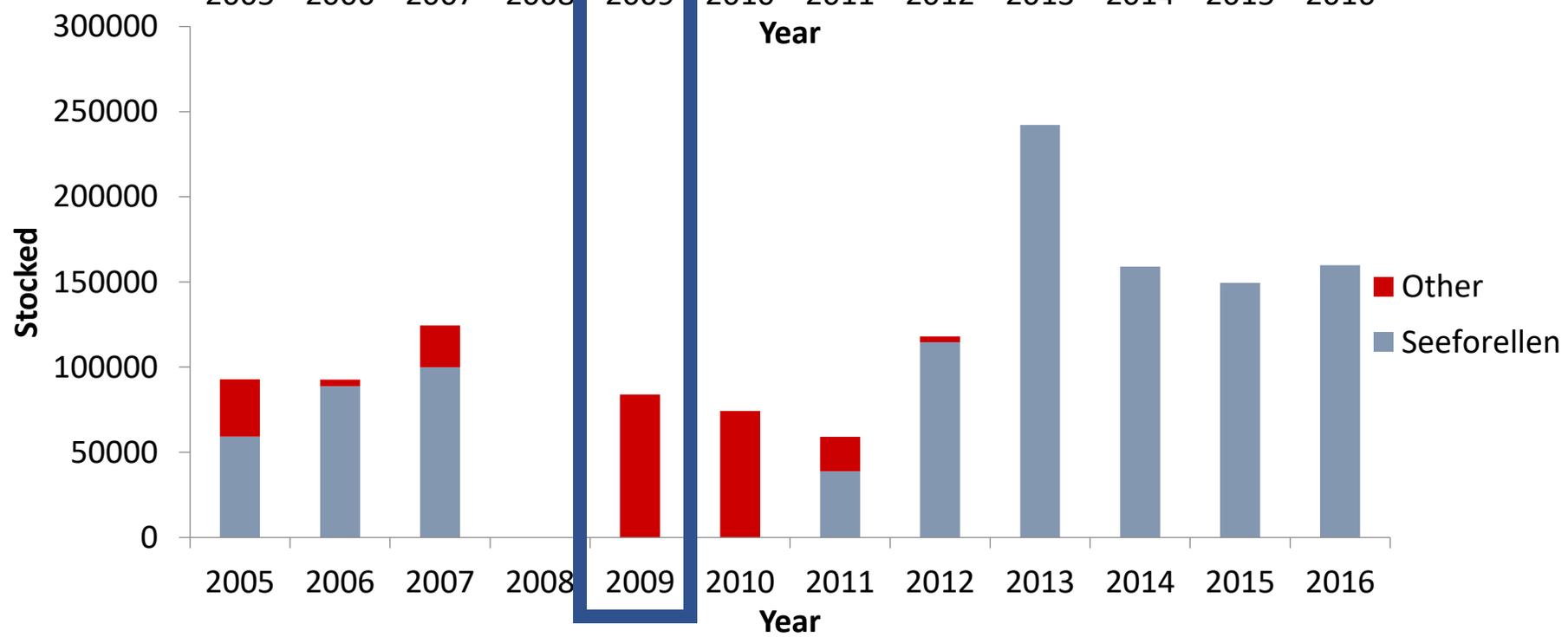
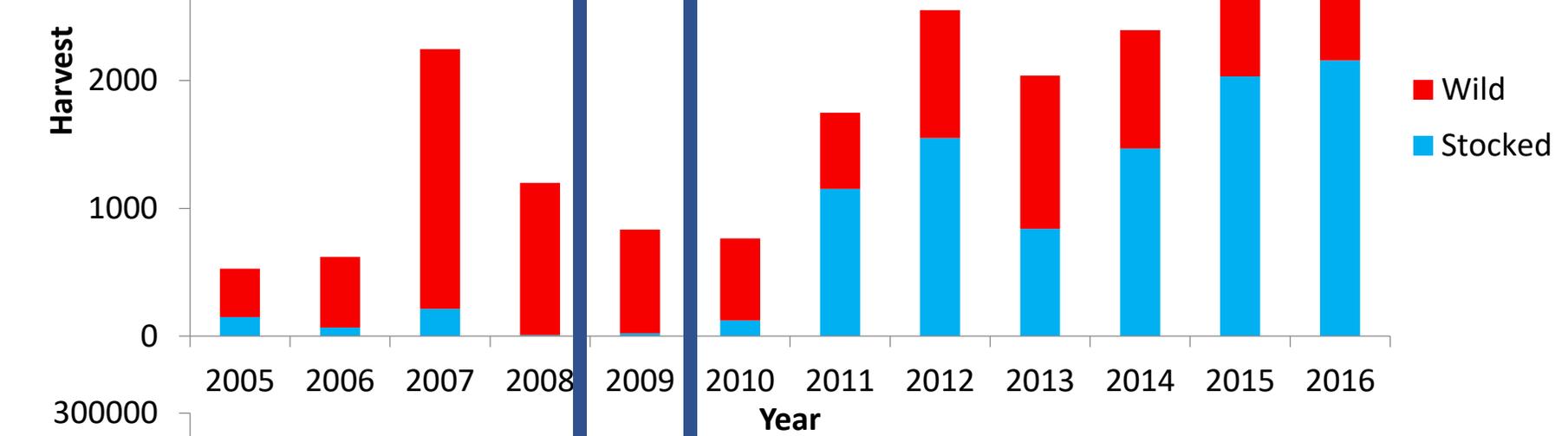
---

Notes

**Genetic and phenotypic evidence for splake presence in brook trout and lake trout spawning habitats**

Mackenzie Feringa <sup>a,b,\*</sup>, Casey Huckins <sup>c</sup>, William Mattes <sup>d</sup>, Edward Baker <sup>e</sup>, Troy Zorn <sup>e</sup>,  
John Littlefield <sup>c</sup>, Kim Scribner <sup>a,b</sup>





Enhanced science and monitoring to better understand ecology of Lake Superior fish populations and communities.

# Objectives Goal 3

Develop linkages across salmonid life stages in streams (e.g., stock-recruitment dynamics) and determine drivers of variability in key life history traits.

- Brown Trout
- Coho Salmon
- Rainbow Trout
- Brook Trout

# Objectives Goal 3 cont.

Characterize cool-water fish populations, including population size, size and age structure, and recruitment dynamics.

- Walleye
- Smallmouth Bass
- Lake Sturgeon
- Northern Pike
- Yellow Perch
- Muskellunge
- Other?

# Objectives Goal 3 cont.

Food web interactions in tributaries and nearshore embayments.

Who eats who?

Who competes with who?

# Objectives Goal 3 cont.

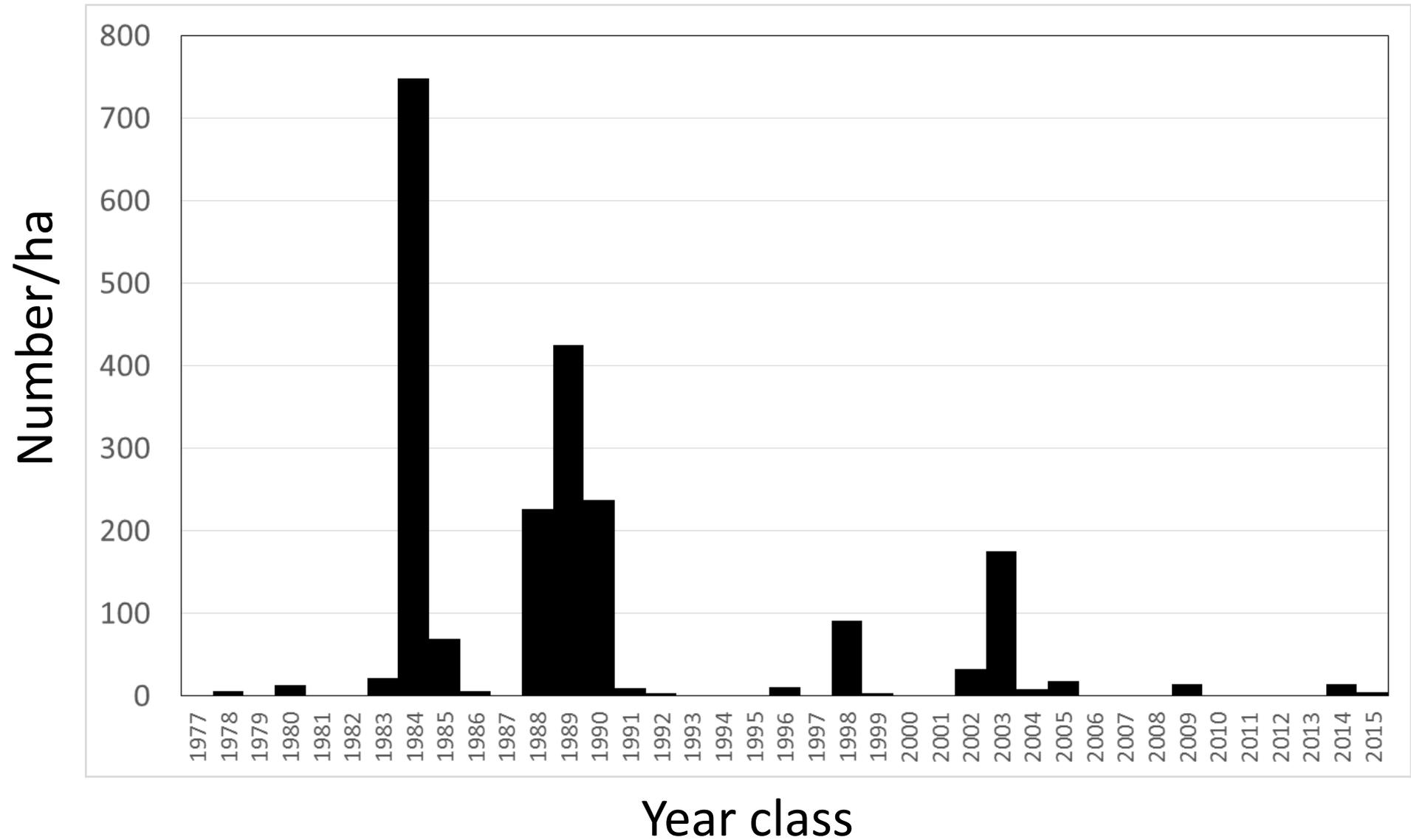
Determine effect of harvest on population dynamics of key sport fish

Evaluate efficiency of stocking as a tool to enhance sportfish populations

- Splake vs Brook Trout
- Walleye
- Lake Trout

Coordinate with scientific community to explore key drivers of lake herring recruitment and population dynamics

# Recruitment index based on annual bottom trawl survey



# Upcoming meetings

Mar 5, 2018

# Next steps: March 5 Meeting

- Visit website for more information:
  - Search for “Lake Superior Fisheries Management” on WDNR website to find link for “Lake Superior Fisheries Management Plan”
- Collect initial comments via:
  - Mail Brad Ray, 141 S. Third Street, Bayfield, WI 54814
  - Email ([dnrlakesuperiorplan@wisconsin.gov](mailto:dnrlakesuperiorplan@wisconsin.gov))