

# Michigan Fisheries: The Big Picture



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# Fisheries Management

- Stocking

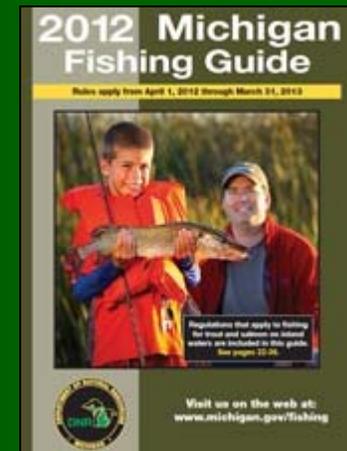
- restore populations (sturgeon)
- create fishing opportunities
  - lack of spawning habitat
- adjust predator:prey ratios



D. Kenyon

- Regulations

- prevent overexploitation
- prevent spread of undesirable species
- enforce principles of fair chase
- reduce hooking mortality





# Fisheries Management

- Habitat Protection and Improvement
  - habitat altered due to dams, dredging, historic logging activity, erosion, shoreline armoring, etc.





# Fisheries Management

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Projects:  
dam removals  
bank stabilization  
tree drops



# Fisheries Management

- Outreach and Education
  - Salmon in the Classroom
  - How and where to fish
  - Shoreline management advice
  - Aquatic invasive species control



**Keep Our  
Waters  
Great!**



**Don't Dump Your Bait!**

*Fish diseases like Viral Hemorrhagic Septicemia (VHS)  
can be transferred in your bait bucket!*



# Lake Michigan Fishery

## Forage Base 2011

*Acoustic (open water) survey (Warner et al. 2012)*

- Total prey fish biomass lowest in time series
- Weak year class of alewife in 2011
- Bloater biomass lowest on record

*Bottom trawl survey (Madenjian et al. 2012)*

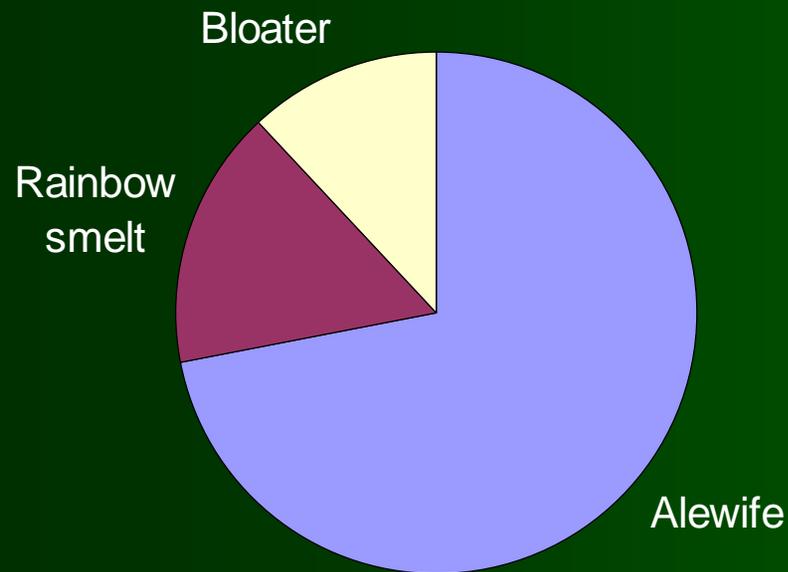
- Total prey fish biomass lowest in time series
- Only prey species doing well = slimy sculpin





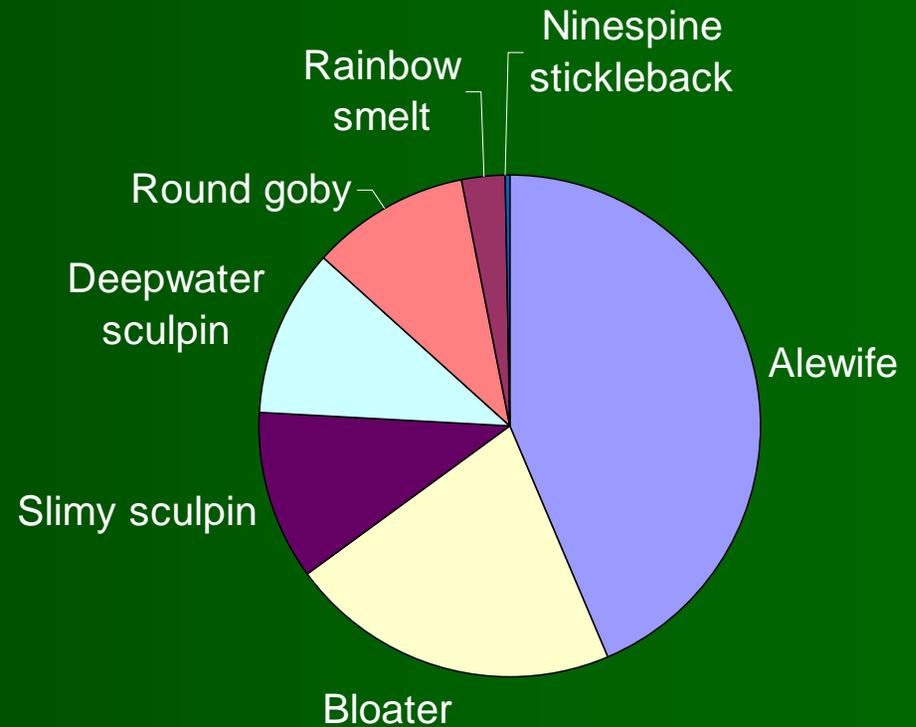
# Lake Michigan Fishery

## ACOUSTIC



12% native

## BOTTOM TRAWL



43% native



# Lake Michigan Fishery

## Chinook Salmon (*Claramunt et al. 2012*)

- Variable survival, fishing effort, & natural reproduction
- Stocking reductions in 1999 and 2006
- Need to adjust stocking to avoid forage crash
- 50% reduction lakewide; 67% reduction in MI

Figure 1. Chinook salmon stocking and harvest

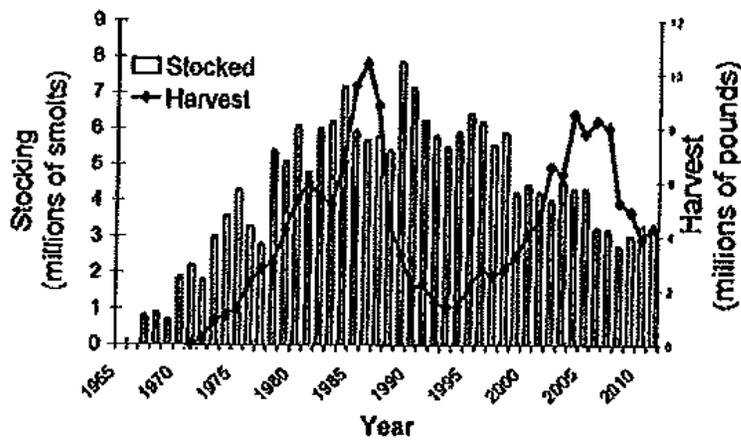
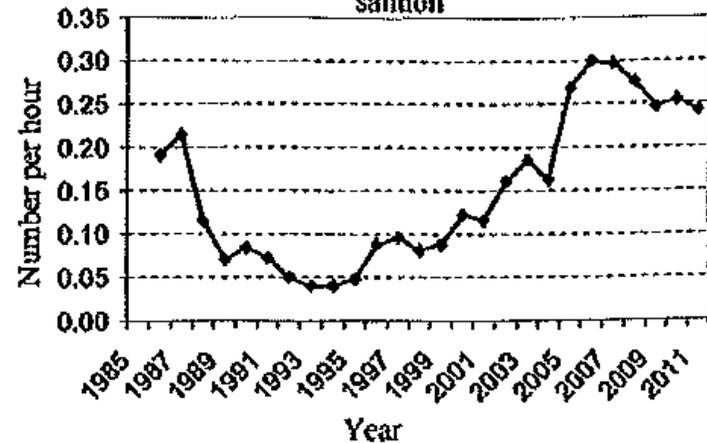


Figure 2. Fishery (charter) catch rates for Chinook salmon



# Thank You



*Great Lakes, Great Times, Great Outdoors*

[www.michigan.gov/dnr](http://www.michigan.gov/dnr)