

Are we sampling lake trout effectively on Lake Huron?

A presentation made at the Mortality of Age-1
Lake Trout in the Great Lakes
October 2, 2008

Mark Ebener

Chippewa Ottawa Resource Authority

Summer Lake Whitefish Survey

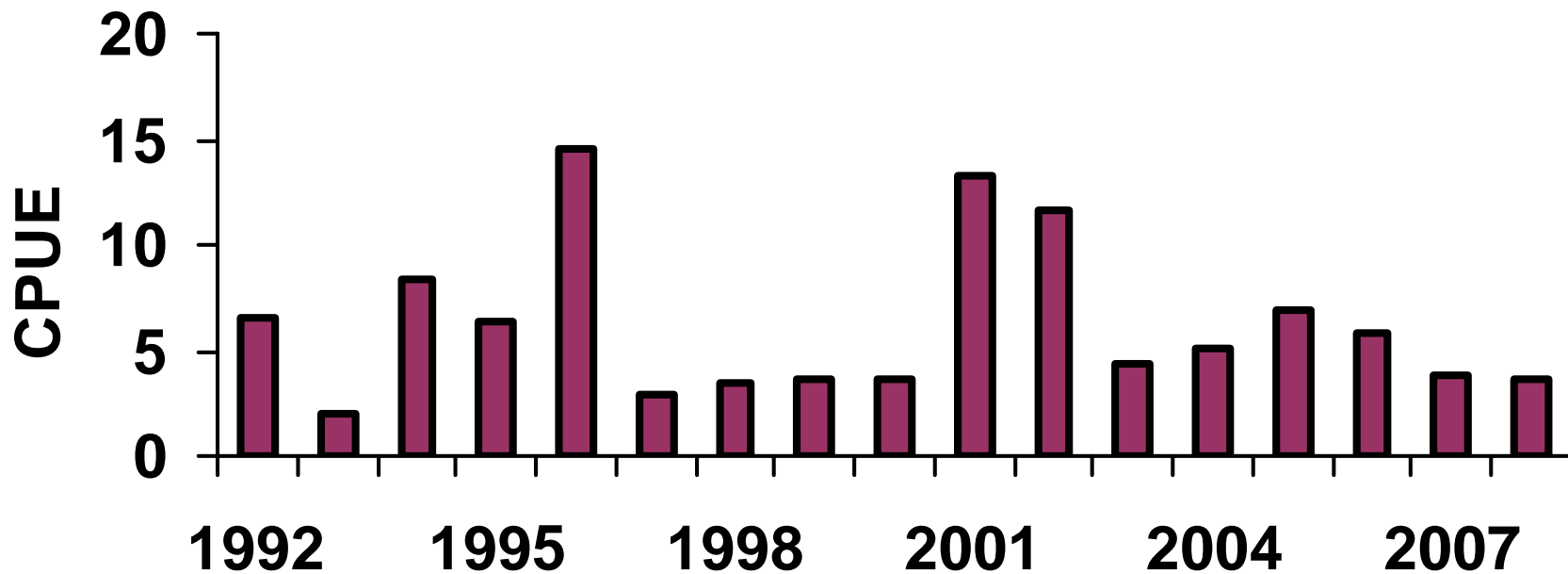
- **Started 2000**
- **Graded mesh gill nets 2-6 inch $\frac{1}{2}$ inch increments**
- **Use three ports; four sets per port**
- **Two depth strata of < 100 ft. and > 100 ft.**
- **Two random transects per port**
- **One 5,400 ft. set, changed to 2,700 ft. sets (2002)**
- **Lifts made June through August**

Spring Lake Trout Survey

- **Started 1992**
- **Graded mesh gill nets 2-6 inch $\frac{1}{2}$ inch increments**
- **One port; three sets**
- **Not stratified by depth; usually 50-150 ft**
- **One 5,400 ft. set, changed to 2,700 ft. sets in 2006**
- **Lifts made May-early June**

Lake Trout CPUE

Drummond Island Refuge, 1992-2008

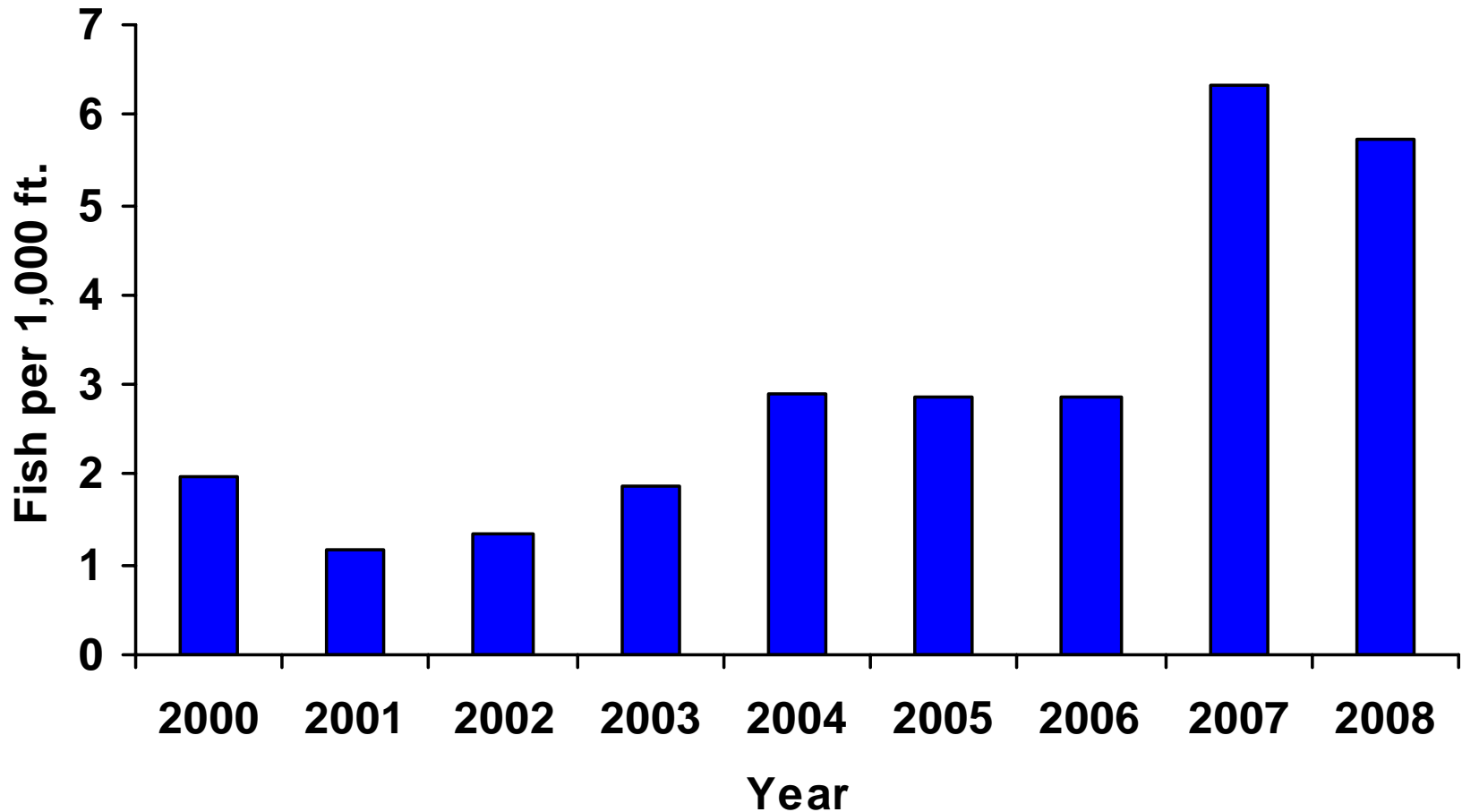


Fishing Effort Summery

Year	Lifts	Effort	Depth
2000	4	19,300	50-163
2001	9	48,600	67-122
2002	16	43,200	18-133
2003	16	43,200	30-169
2004	16	43,200	41-186
2005	16	43,200	28-200
2006	16	43,200	25-161
2007	18	48,600	38-177
2008	18	48,600	40-186

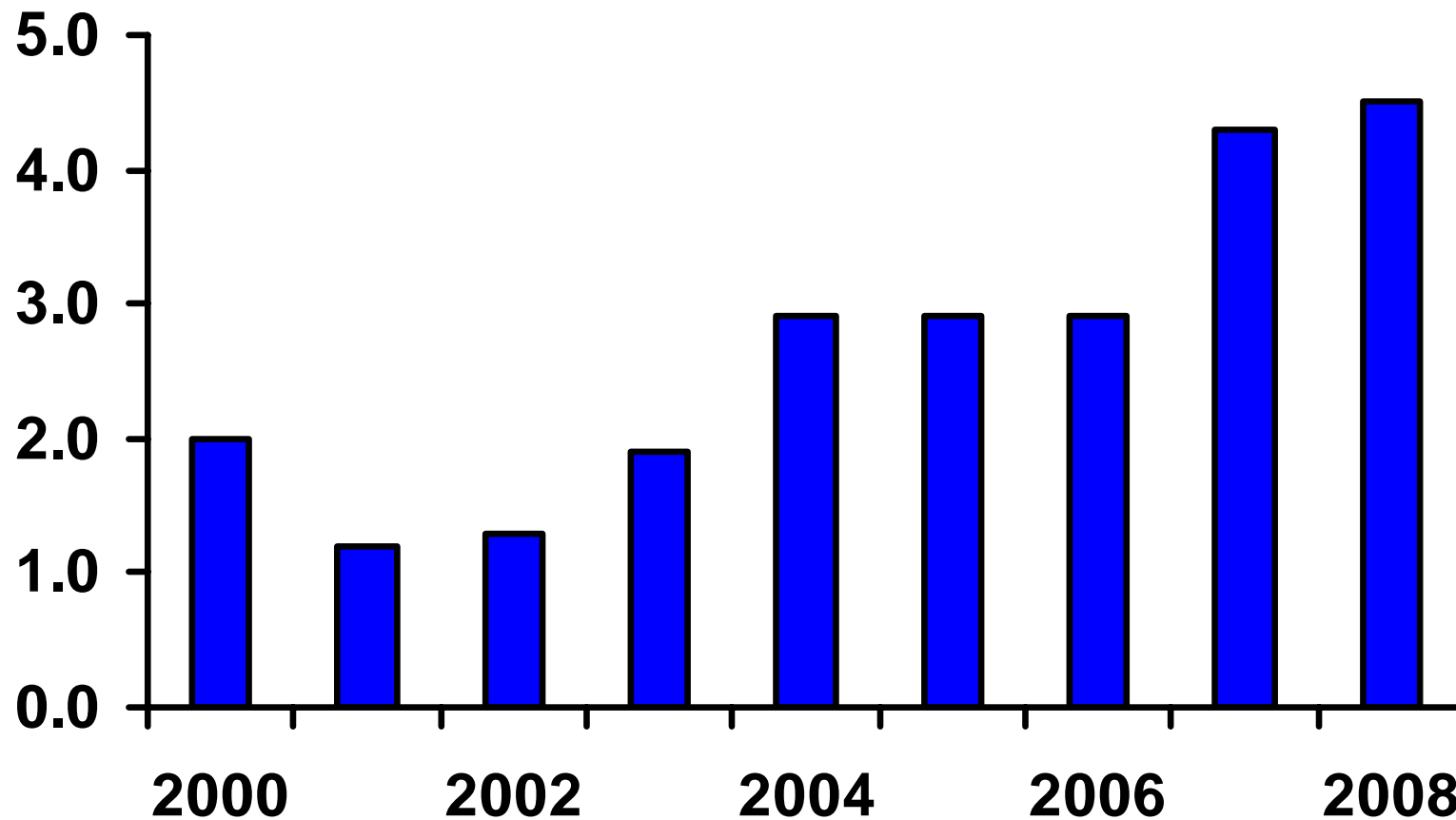
LAT CPUE MH-1 2000-2008

ITFAP Summer Graded Mesh Survey

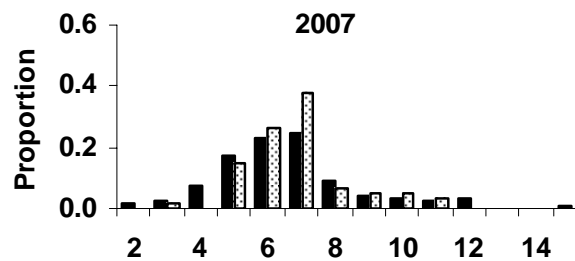
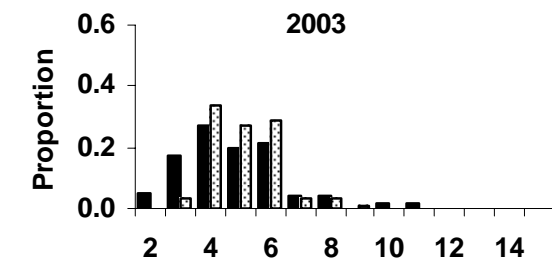
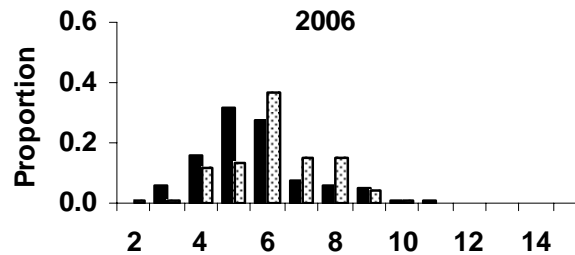
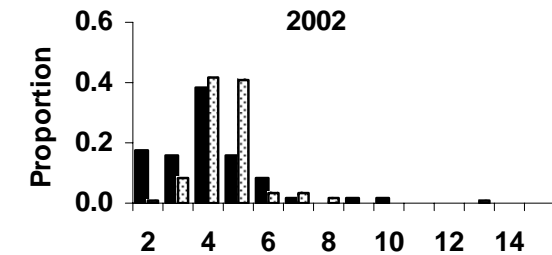
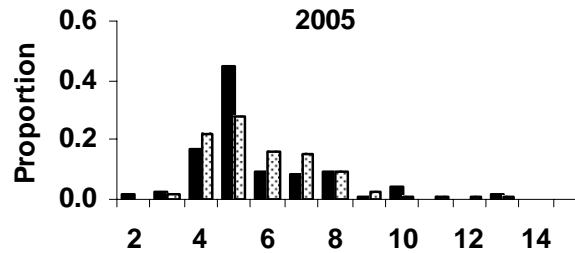
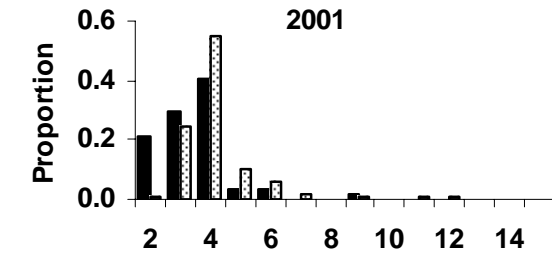
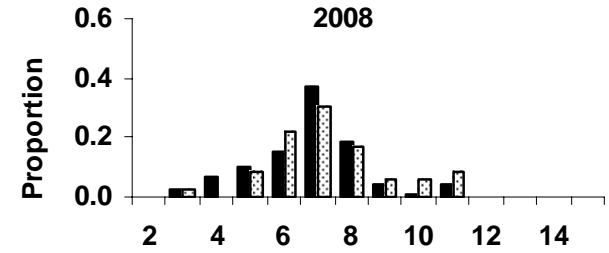
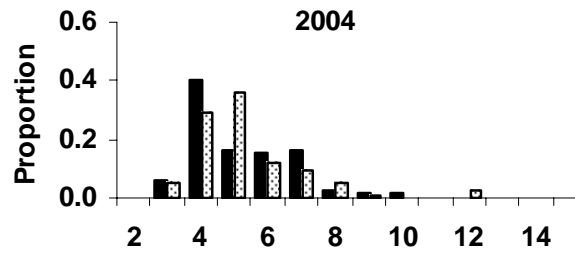
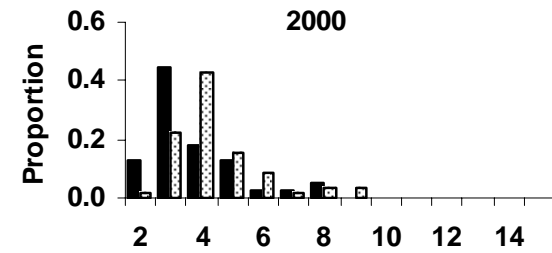


LAT CPUE Summer Survey MH-1

Multifilament only

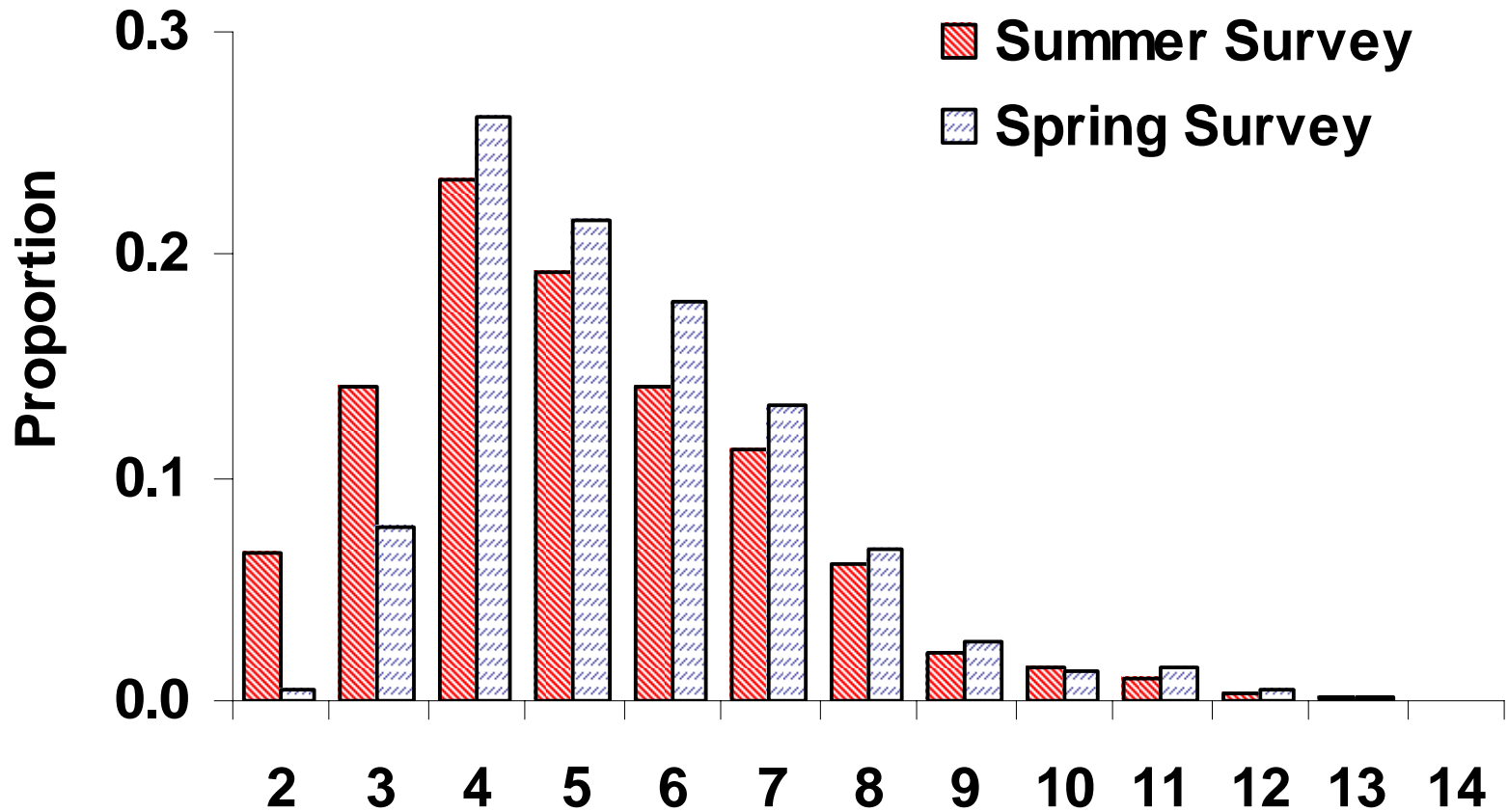


Age Composition Spring & Summer Survey MH-1

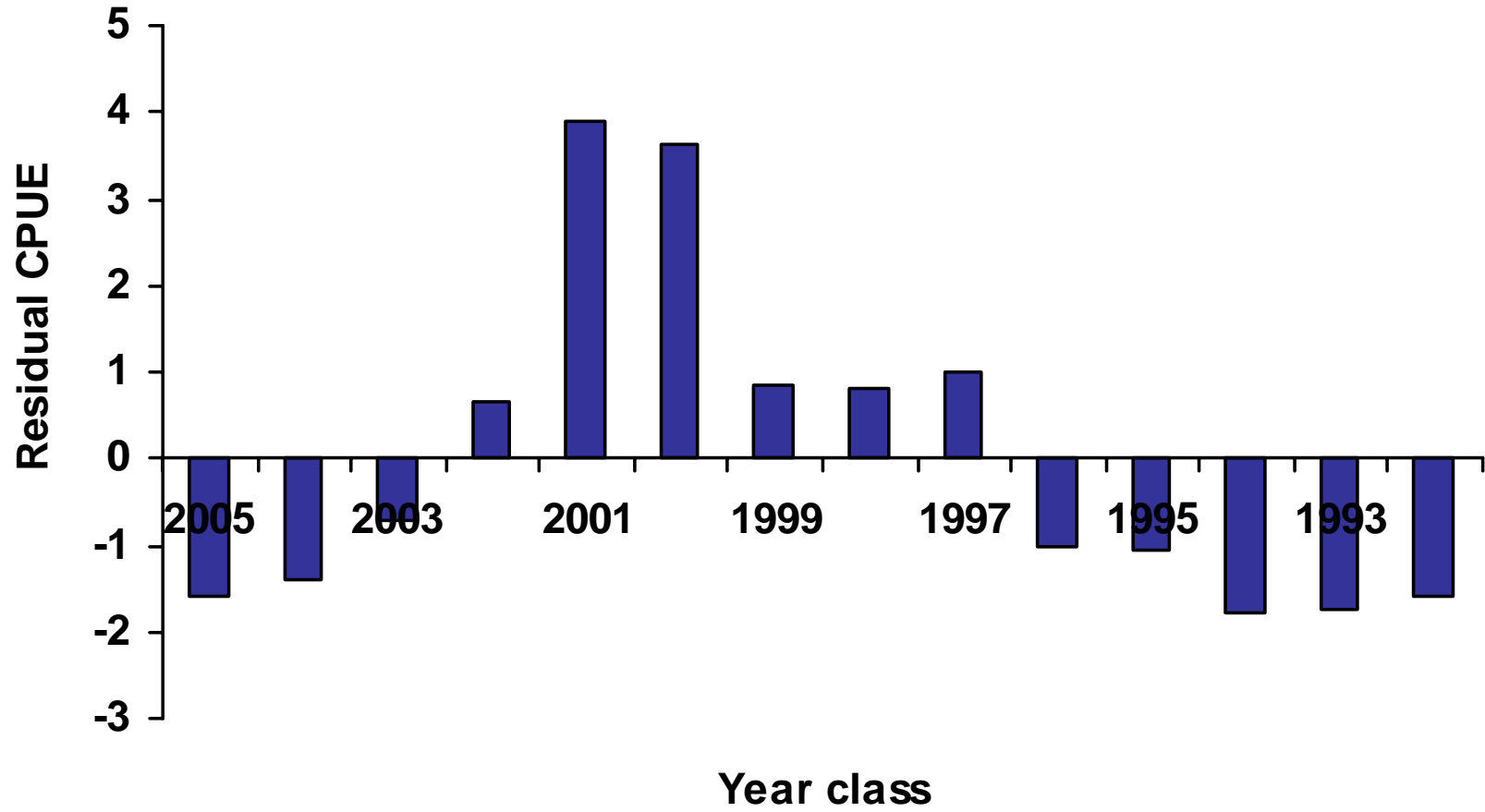


Mean Age Composition

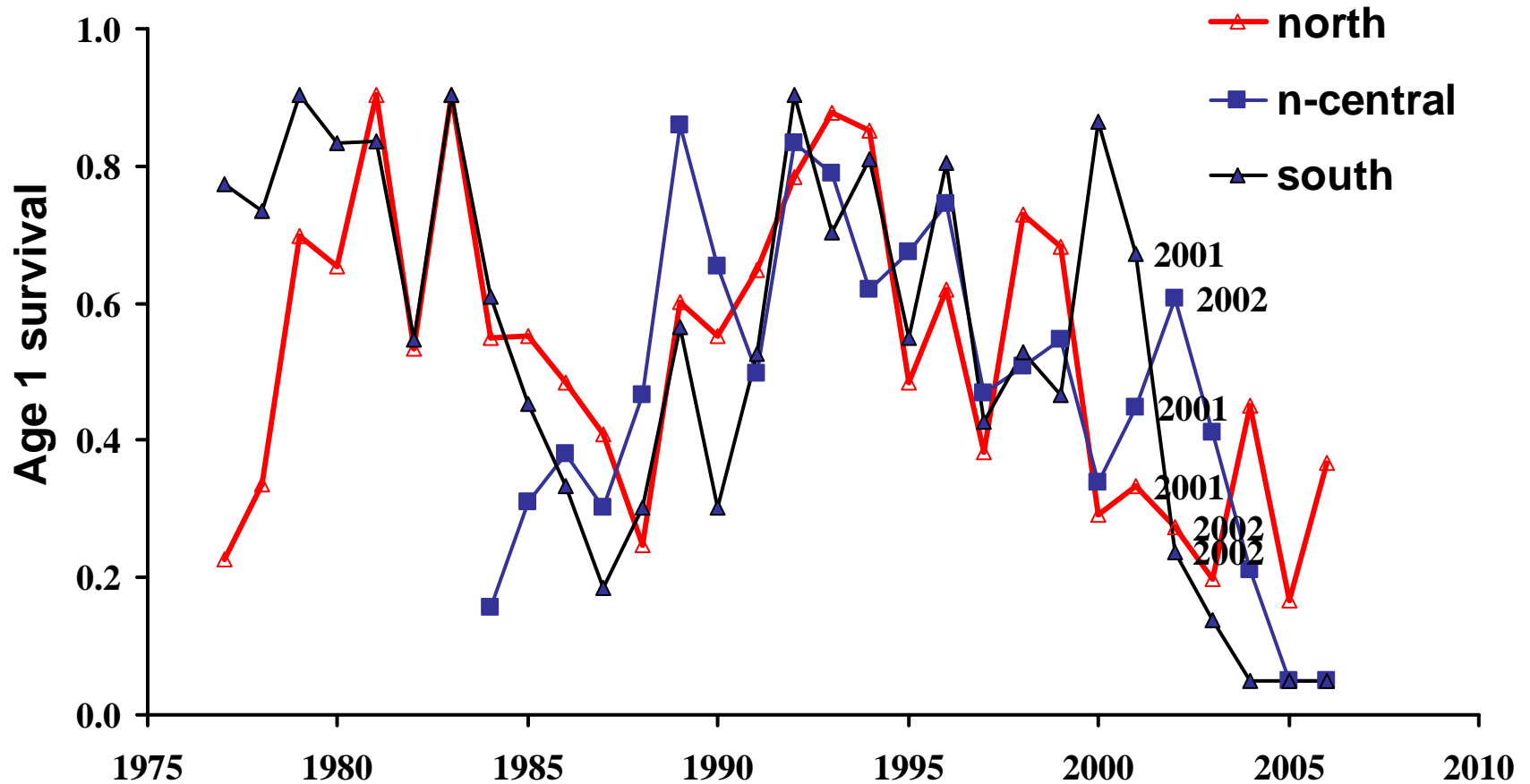
Spring vs Summer Survey MH-1



LAT Year Class Variation MH-1

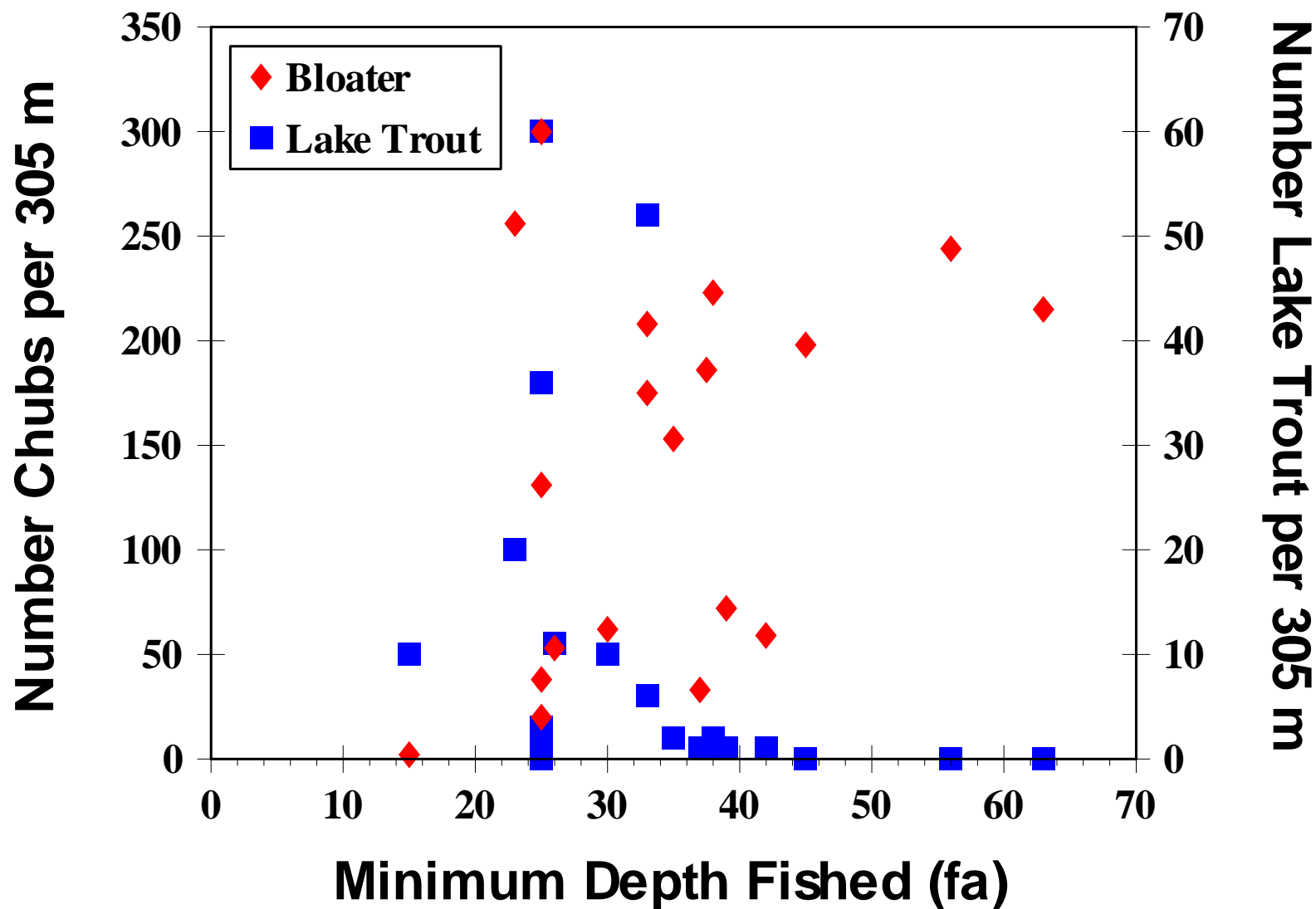


Estimates Age-1 Survival Lake Huron



Hash marked area represents year classes not fully part of fisheries

Lake Trout & Bloater CPUE by Depth MH-1 1992-1995



Lake Trout & Bloater Catch 2007

- Prior to 1999 could catch 100-150 lbs of chubs & some LAT
- To assess chub abundance made two 2,750 ft. sets in July 2007 @ Detour

<u>Set #</u>	<u>Depth range</u>	<u>Chubs</u>	<u>Lake trout</u>
1	245 to 278 ft.	0	13
2	318 to 340 ft.	0	6

2007 Catch of Lake Trout @ Detour

7 Ad-cwt marked LAT

- 4 STW 2003 year class
- 3 STW 2004 year class

<u>Length interval</u>	<u>N</u>
200-299 mm	1
300-399 mm	14
400-499 mm	1
500-599 mm	1
600-699 mm	1