

A management strategy for Lake Ontario lake trout

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History

1971: Lamprey control

1973: Stocking

Extirpated



1986: Wild fry

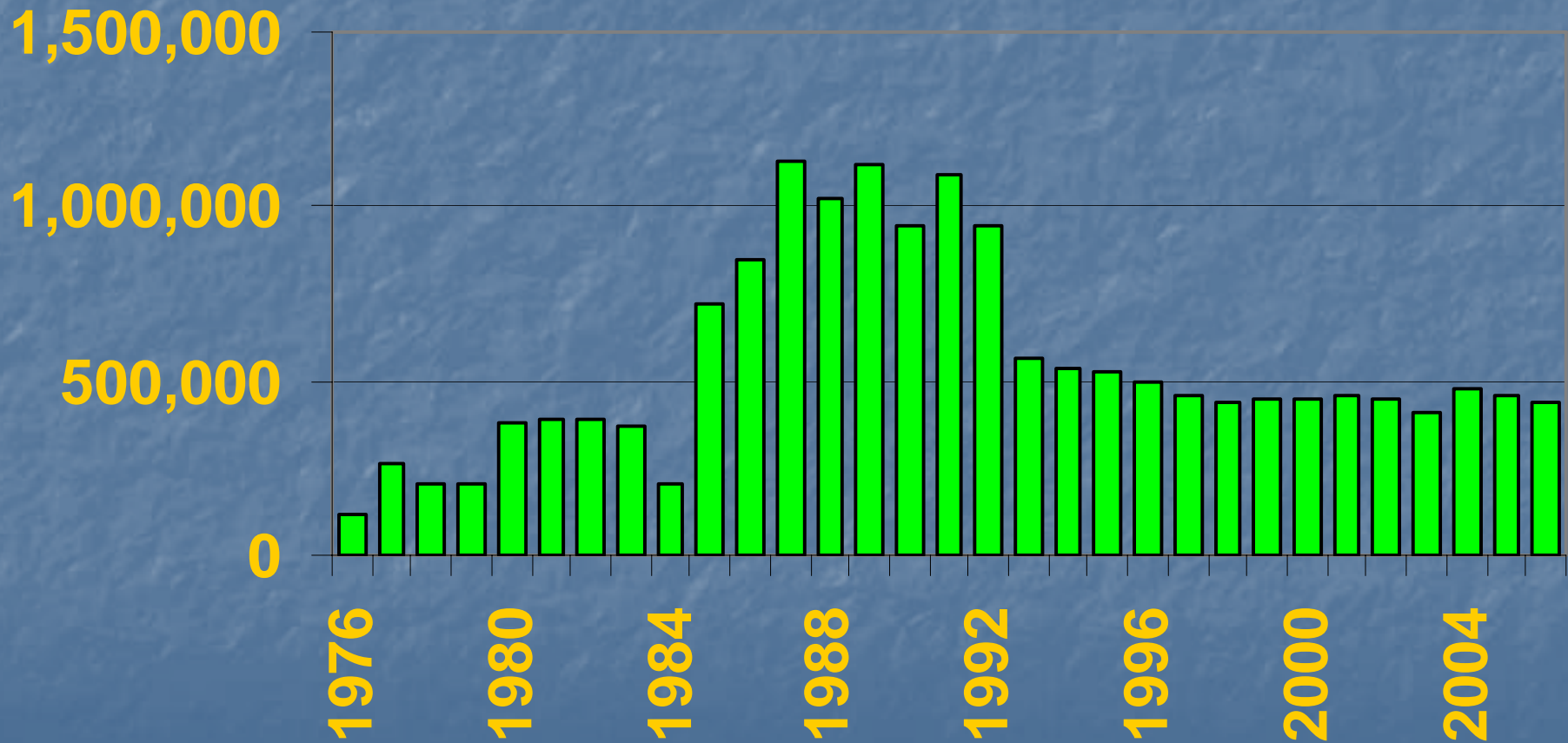
1993: Wild

juveniles

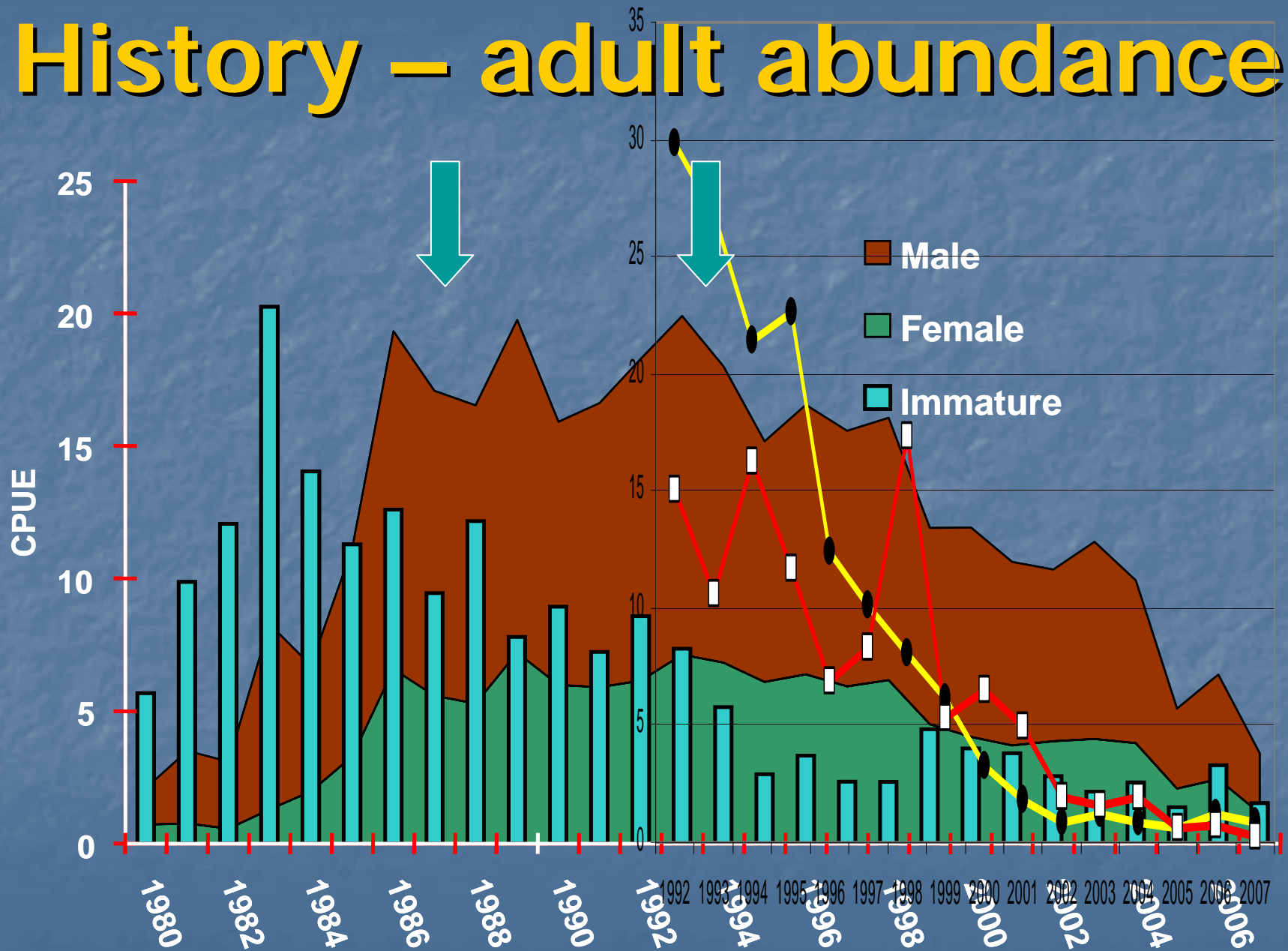
Wild adults
??

1950 1960 1970 1980 1990 2000

History - stocking

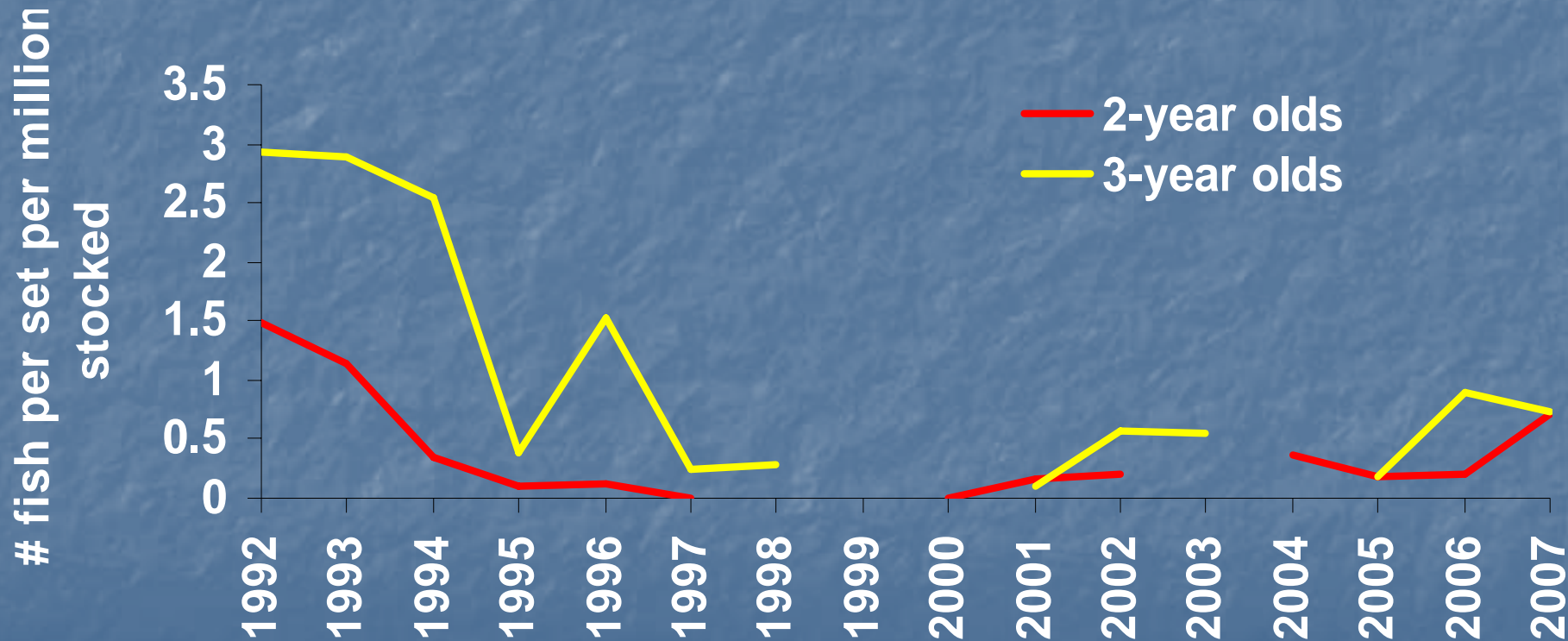


History – adult abundance



History – early survival

By year of capture



The Plan

restore adult population

improve production and
recruitment of wild fish

enhance lake trout prey base

Objective 1:

restore adult population

- ❑ Yearly stocking of 800,000 (U.S.) and 500,000 (Can.) spring yearling equivalents (300,000 increase in U.S.)
- ❑ Minimize stocking and early life mortality
 - stage and condition at stocking
 - stocking methods
 - stocking locations
 - strain composition
- ❑ Adequate survival of older fish

Optimizing stocking – hot leads:

CODED WIRE TAGS:

Complete tagging until 1997

Discontinued because

- \$\$\$\$
- satisfactory population
- adequate accumulated knowledge

Propose resuming complete tagging

- further stocking studies
- identification of wild fish

Objective 2:

improve production and recruitment of wild fish

- ☐ Stock near quality habitat
- ☐ Optimize chances of spawners utilizing suitable habitat
- ☐ Protect naturally produced fish
- ☐ Stock strains that make the highest contribution to the wild stock.

Objective 3:

enhance lake trout prey base

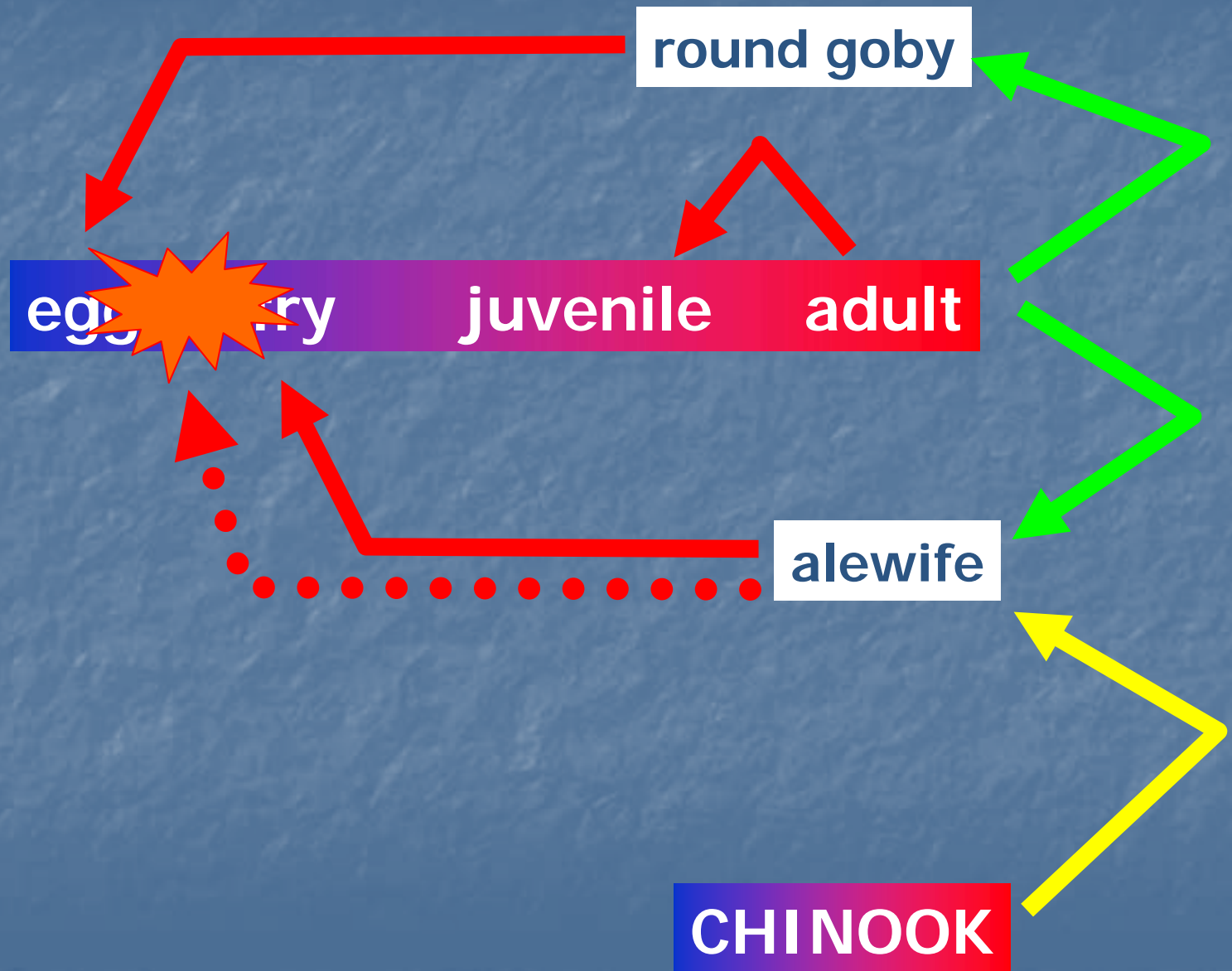
- ☐ deepwater cisco

- ☐ lake herring

- what about round goby?

Round goby

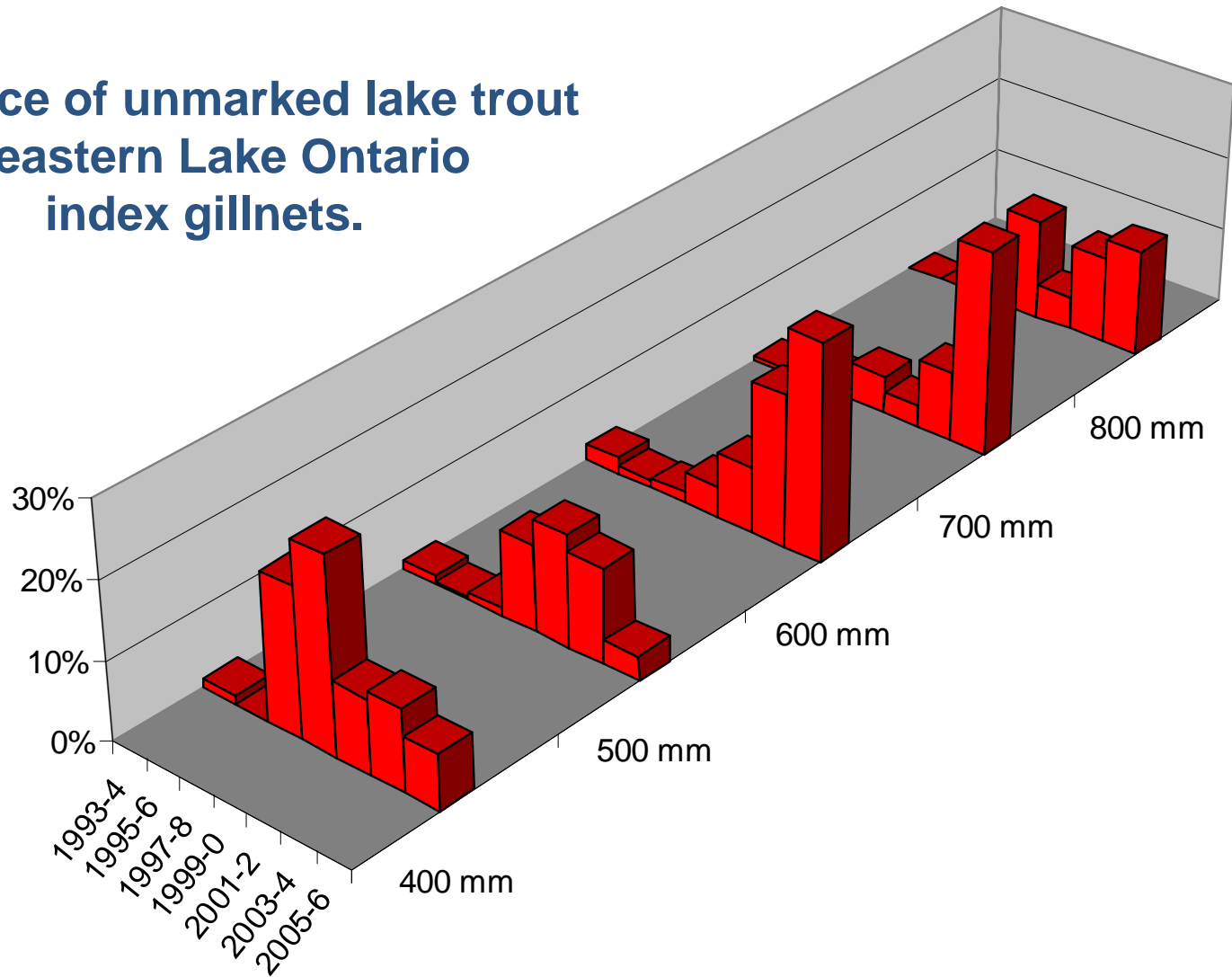
- ❑ gobies eat (lots of?) lake trout eggs
- ❑ adult lake trout eat (lots of?) gobies



Hoperful signs

- ❑ natural reproduction persists
 - detection of wild juveniles
 - incidence of unmarked fish
- ❑ round gobies

Incidence of unmarked lake trout in eastern Lake Ontario index gillnets.



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The End