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# Canadian Grass Carp Update





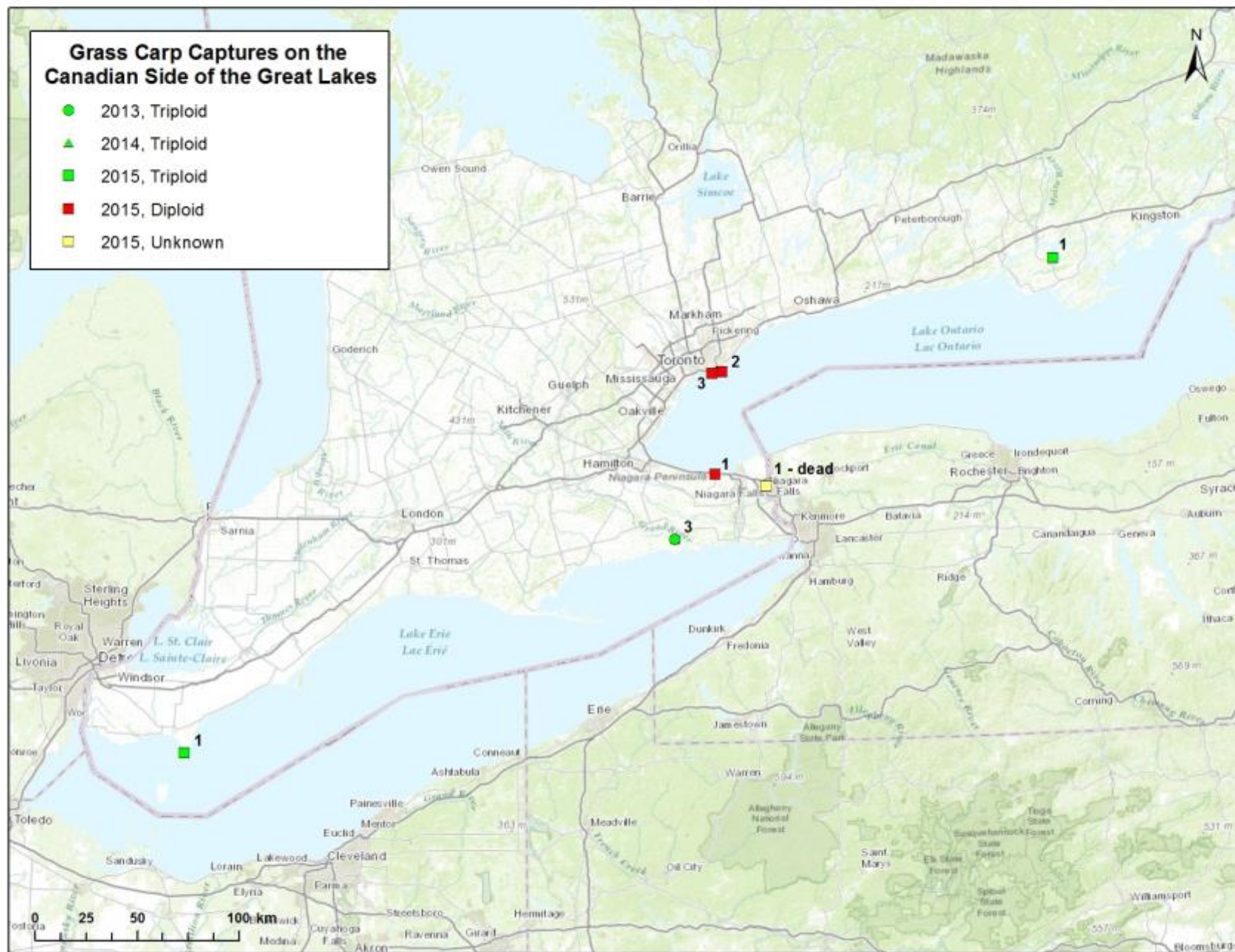
## The 2015 Tally

- Diploids – first ever recorded in Canada
  - 6 (5 males, 1 female)
- Triploids – 2 females
- Unknown – 1 (found dead)

➤ *9 individuals in lakes Erie and Ontario*

# Grass Carp Captures on the Canadian Side of the Great Lakes

- 2013, Triploid
- ▲ 2014, Triploid
- 2015, Triploid
- 2015, Diploid
- 2015, Unknown







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# Toronto Capture Locations





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# Tommy Thompson Park

October 2014



May 2015





## Incident Command System

- DFO/MNRF co-lead under AC protocol
- Incident Commander, Chiefs, Officers, Field Teams...
- Example for July Grass Carp:
  - 3 agency participation
  - Maximum of 7 boats and up to 20 staff onsite per day
  - Over 550 man hours of onsite activity conducted
  - ~19 hours of electrofishing; over 10km of trammel net deployed; 14 trap net sets; 11 fyke net sets
  - Significant public interest – Invading Species Hotline (28 reports)
  - Significant media coverage





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## Market, Illinois





## Lessons Learned

- Immediate knowledge of what to do
- Preparation is important – found real life small incidents more useful than table top
- Getting people to understand ICS reporting structure, not usual lines of briefing
- Can't plan for everything – must be flexible and move immediately into short-term Plan B, C, D.... And think about long-term corrections later
- Important to hold a "hotwash"





## Current Status

- Results from analyses coming in pieces over time
- Will take several months before all pieces are in to see big picture.
- Hope for some conclusive evidence to eliminate some hypotheses.





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## Grass Carp Risk Assessment

- Draft completed and peer reviewed (Canada)
- Include information only up to 2014 (ra's baseline year)
- Currently in US federal review
- Plan to hold a meeting of management agencies (federal, state, provincial) to discuss results. Jan-Mar 2016?





## Black

- Postponing at  
and....



## ment

s Carp delay



## Tommy Thompson Park, Toronto ON July 27, 2015

- Toronto & Region Conservation Authority, efish
- Weight: 14.7kg
- Total length: 1020mm
- Diploid male (no evidence of spawning behaviour or activity)
- 14 years (pectoral spine aging)





## Tommy Thompson Park, Toronto ON July 28, 2015

- DFO, trammel net
- Weight: 10.2kg
- Total length: 970mm
- Diploid male (no evidence of spawning behaviour or activity)
- 15 years (pectoral spine aging)







## Jordan Harbour, St. Catharine's ON August 26, 2015

- DFO; trammel net
- Weight: 16.68kg
- Total length: 1048mm
- Diploid male





## Toronto Islands, Toronto ON September 1, 2015

- Toronto & Region Conservation Authority; efish
- Weight: 10.640kg
- Total length: 910mm
- Diploid male – inactive gonads





## Toronto Islands, Toronto ON

### September 1, 2015

- Toronto & Region Conservation Authority; efish
- Weight: 16.556kg
- Total length: 1018mm
- Diploid female – eggs were noted to be green – indicated she did not spawn and was in the process of reabsorption of eggs back into body







## Toronto Islands, Toronto ON September 2, 2015

- DFO; efish
- Weight: 9.096kg
- Total length: 893mm
- Diploid male (no evidence of spawning behaviour or activity)





## Bay of Quinte, near Big Island ON September 14, 2015

- Commercial fisher; trap net
- Weight: 12.7kg
- Total length: 1037mm
- Triploid female





## Lake Erie, West Side of Point Pelee September 17, 2015

- Commercial fisher; trap net
- Weight: 10.614kg
- Total Length: 976mm
- Triploid female





## Lower Niagara River September 19, 2015

- Angler; found dead on bank
- Weight: 8.1kg
- Total length: 950mm\*



- \*approximate measure because fish frozen in a curve