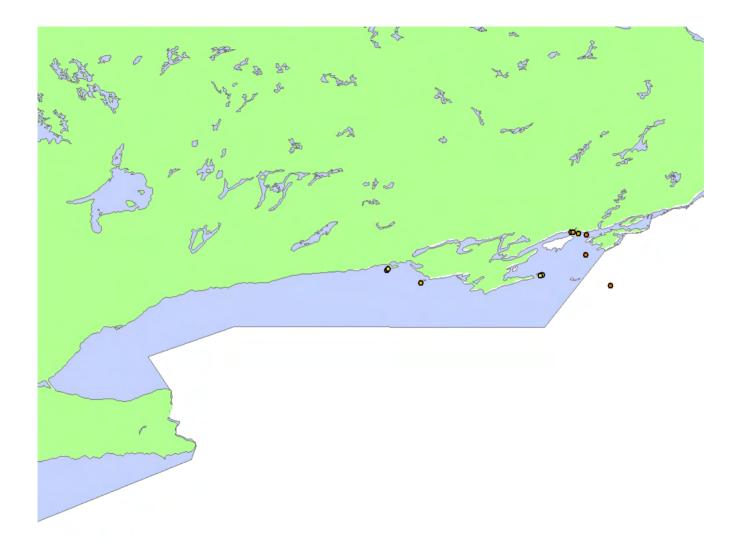
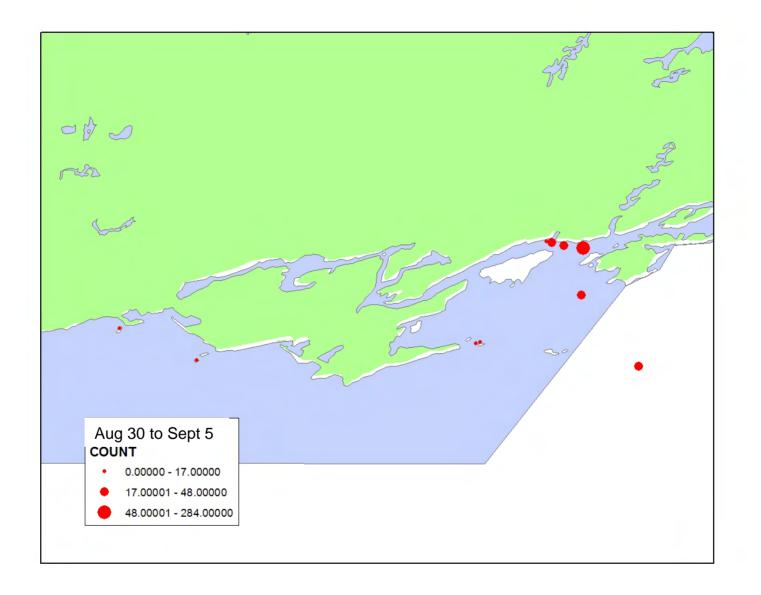
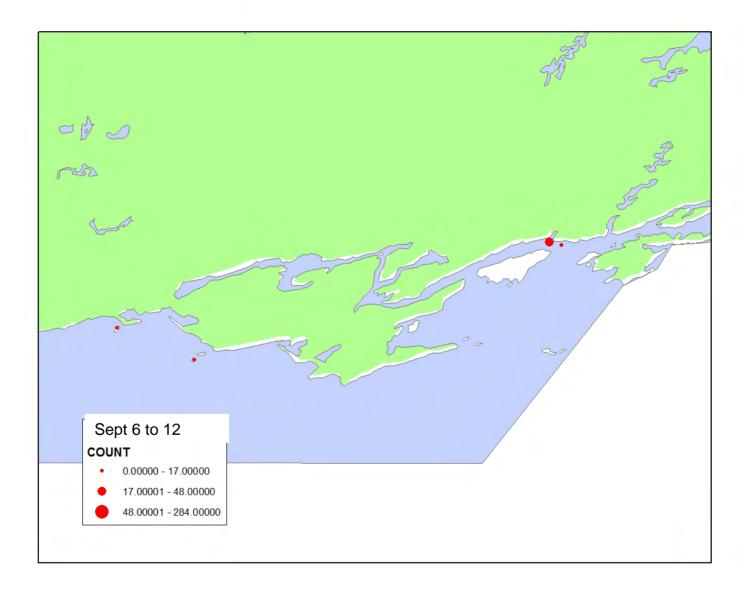
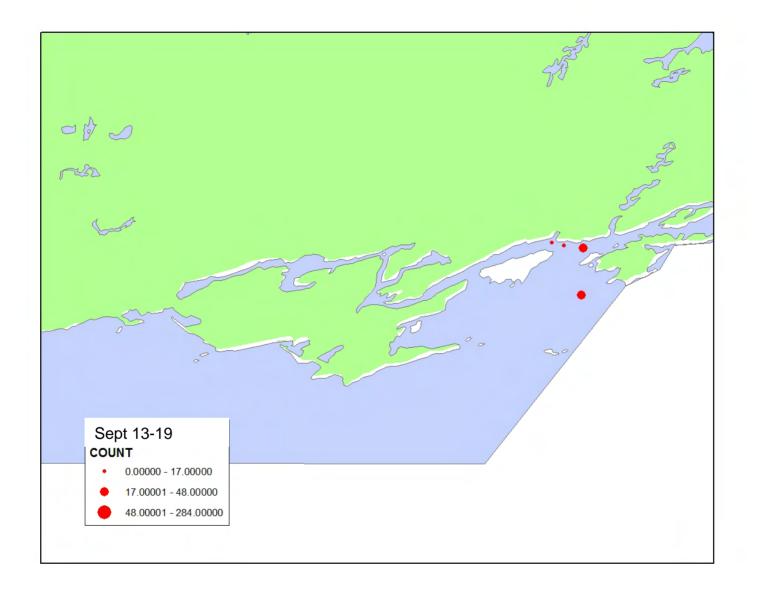
Summary of botulism E bird mortalities on Canadian Great Lakes in 2004

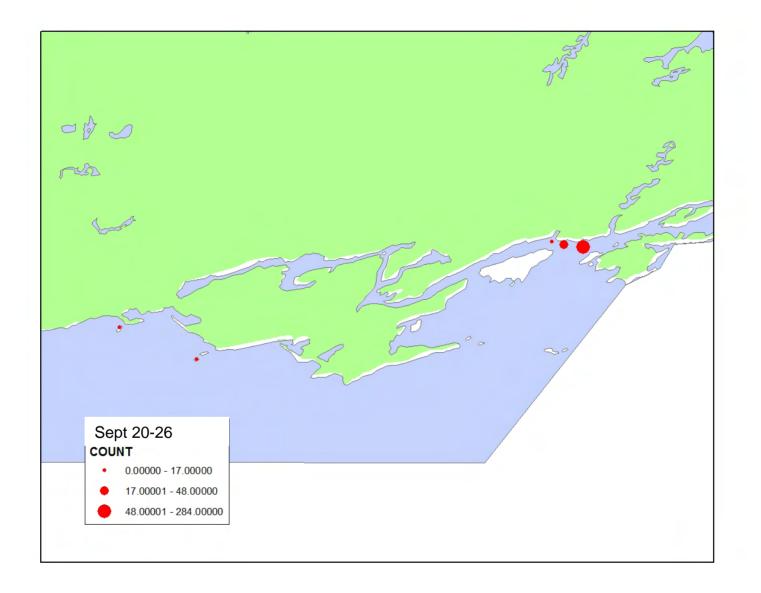
Prepared by Jeff Robinson Canadian Wildlife Service Ontario Region

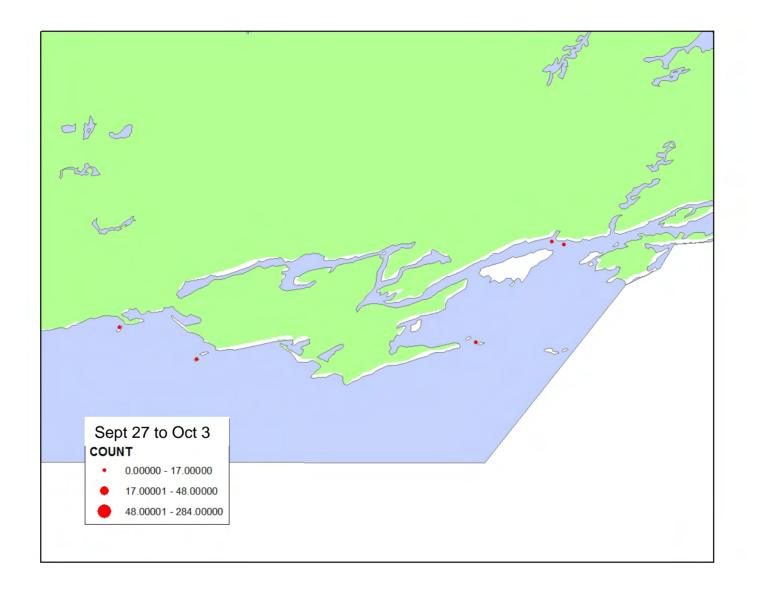


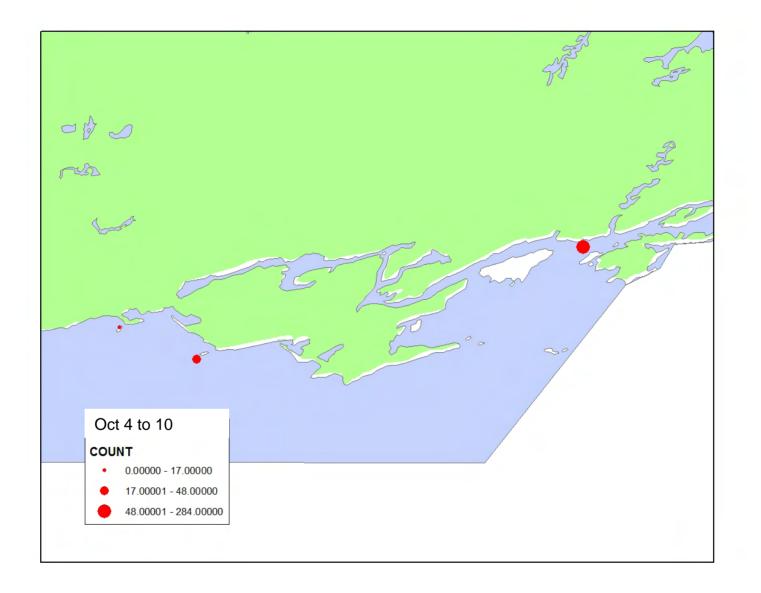


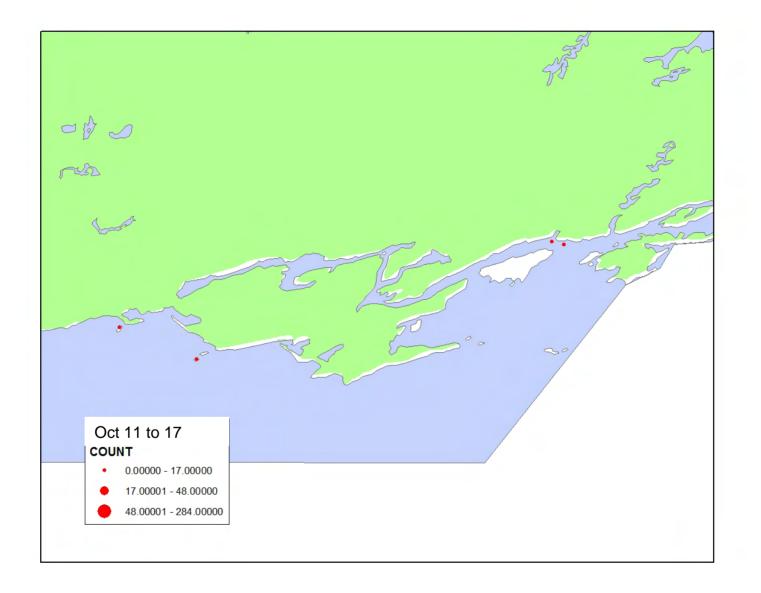


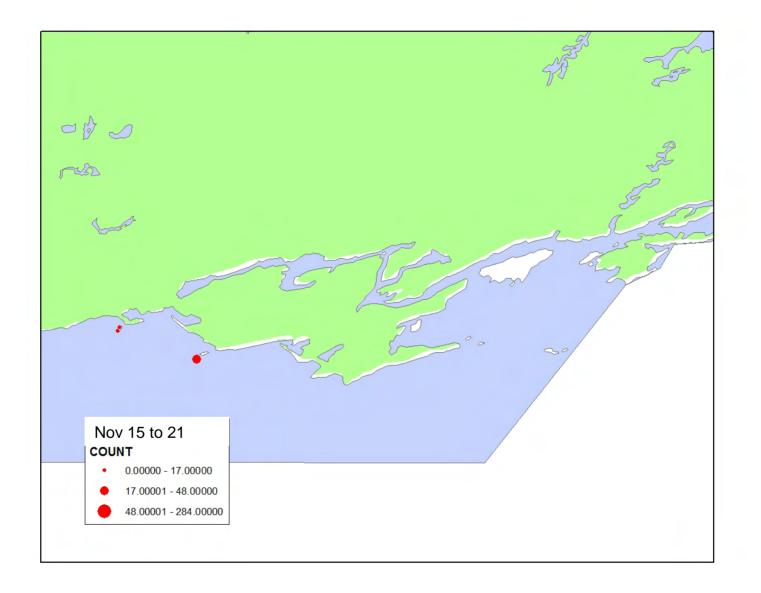












Dead bird counts at Presqu'ile Provincial Park, August 19-November 22, 2004

Common Loon	17
Red-necked Grebe	2
Grebe sp.	9
Great Blue Heron	1
Caspian Tern	2
Great Black-backed Gull	16
Herring Gull	57
Ring-billed Gull	19
Bonaparte's Gull	1
Double-crested Cormorant	127
White-winged Scoter	32
Lesser Scaup	24
Greater Scaup	6
Hooded Merganser	2
Red-breasted Merganser	56
Longtailed Duck	1
Other waterfowl	19
Shorebirds	5
Total	396

Dead bird counts at Sandbanks Provincial Park, September 30-November 18, 2004

Ring-billed Gull	126
Bonaparte's Gull	10
White-winged Scoter	564
Double Crested Cormorant	80
Red-necked Grebe	104
Horned Grebe	52
Common Loon	52
Shorebirds	16
Other Birds	160
Unknown	52
Long-tailed Duck	38
Total	1254

Other Lake Ontario sites reporting bird mortalities in fall of 2004

Double crested cormorant	915
Greater Black Backed Gull	158
Herring Gull	97
Ring Billed Gull	94
Long Tailed Duck	763
Surf Scoter	1
White winged scoter	16
Common Loon	8
Other	48
Total	2100

Dead bird counts from Lake Erie in November, 2004

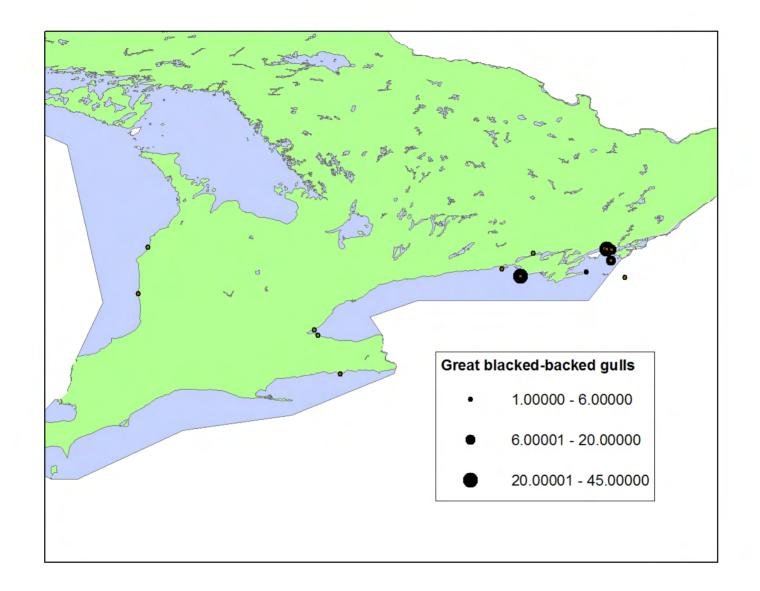
Long Tailed Duck	86
Common Loon	36
Double Crested Cormorants	10
Herring Gull	4
Greater Black Backed Gull	3
Ring billed Gull	3
Bonapartes Gull	1
Total	143

118 of these were counted on November 18 and 21 from Point Abino and Long Beach in the eastern basin

Date	Location	Species	Numbers
August 25	Kincardine	Ring-billed Gull	1
October 1-4	Point Clark	Common Loon	some
October 6	Sauble Beach	Common Loon	10
	Port Albert	Common Loon	3
October 10	Bruce Beach	Common Loon	10
		Double Crested Cormorant	2
October 11	Port Albert	Common Loon	3
		Common Merganser	1
		Red Breasted Merganser	1
October 11	Point Clark	Common Loon	20
October 11	Lurgan Beach	Common Loon	16
		Double Crested Cormorant	3
October 11	Inverhuron Provincial Park	Common Loon	5
October 15	Point Clark	Common Loon	65
October 20	Point Clark	Common Loon	4
October 22	Kincardine	Red Necked Grebe	1
October 25	Bruce Beach	Common Loon	17
		carp, suckers, drum and other waterfowl also reported but not counted	
October 25	Southampton	Common Loon	1
October 28	Goderich	Long Tailed Duck	1
		Pied-Billed Grebe	1
		Common Loon	4
October 31	Port Elgin	Common Loon	1
		Red Throated Loon	1

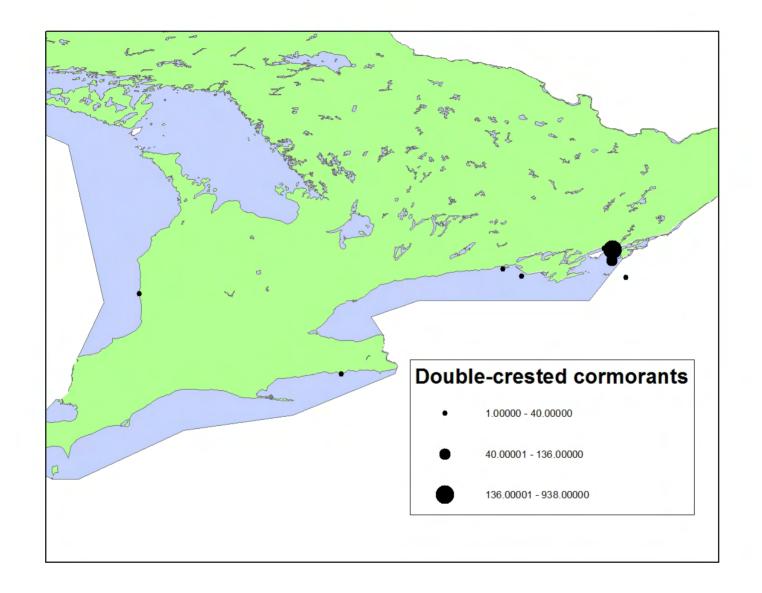
Totals Reported from Lake Huron 2004

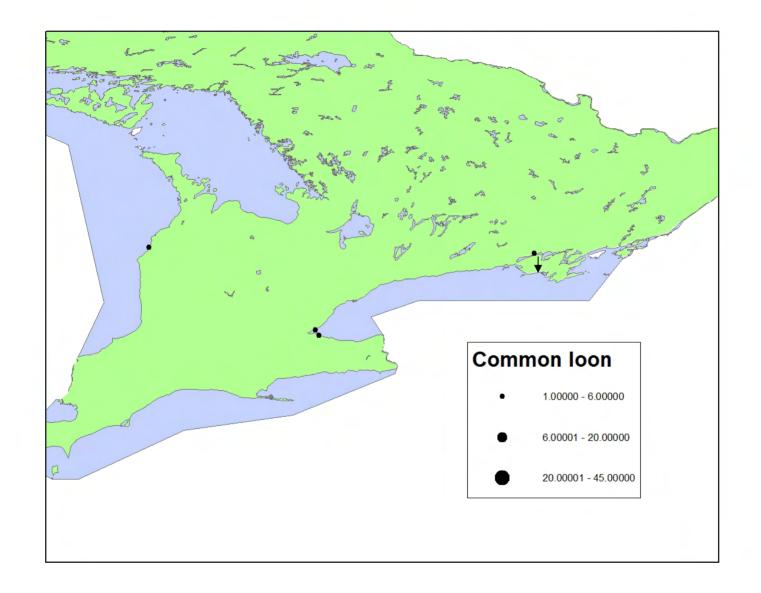
- 149 Common Loons,
- 1 Common Loon found that was banded on Isle Royale in Lake Superior(carcass was not recovered)
- 5 Double Crested Cormorants

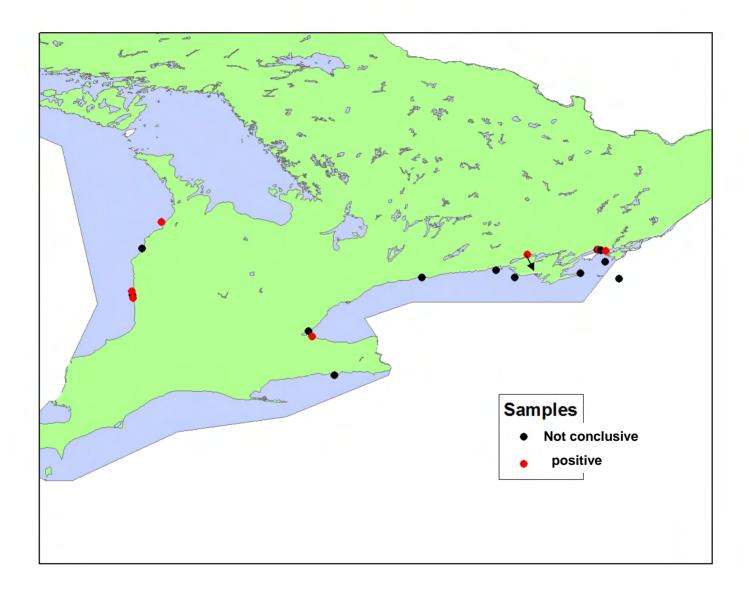


Ontario Lakes roll-up

- Lake Ontario 3650
- Lake Erie 143
- Lake Huron 171
- Total 3924







July 2004 results for C. botulinum in benthos near Port Alma, Lake Erie

- 3 of 8 mussel samples positive
- 2 of 8 sediment samples positive(an additional sample was toxic but did not give a positive)
- 0 of 8 water samples

• Problem that samples were lost by courier and were decomposed when they arrived

November 2004 results for C. botulinum in benthos near Port Alma, Lake Erie

<u>I.D.</u>	Sample type	<u>Result</u>
W1	Water	negative
W2	Water	negative
W3	Water	negative
ZC05H	Biota	toxic
ZC05H	Interstitial water	BoNT/E
ZC05H	Sediments	toxic
ZC10H	Biota	BoNT/E
ZC10H	Interstitial water	toxic
ZC10H	Sediments	negative
ZC15S	Biota	negative
ZC15S	Interstitial water	toxic
ZC15S	Sediments	BoNT/E

Acknowledgements

- Ontario Ministry of Natural Resources, Lake Units for Huron, Erie and Ontario as well as staff at area offices
- Canadian Co-operative Wildlife Health Centre, University of Guelph
- Environment Canada co-workers
- John Austin, Health Canada
- Rich Moccia and Adam Yule, University of Guelph