

Trends in Lake Erie Colonial Waterbird Populations.

Craig E. Hebert¹ (Craig.Hebert@ec.gc.ca), D.V. Chip Weseloh², J. L. Shutt¹. Canadian Wildlife Service, National Wildlife Research Centre, Hull QC K1A 0H3 and 2CWS, Ontario Region, Downsview, ON M3H 5T4.

Populations of Lake Erie waterbirds have changed through time. Since the 1970s, the number of double-crested cormorants (*Phalacrocorax auritus*) breeding on the lake has increased greatly, particularly in the western basin. These birds and their offspring may pose a threat to unique island plant communities, e.g. West and East Sister Islands. Although data are limited, there is some indication that Canadian populations of herring gulls (*Larus argentatus*) have declined during the 1990s. Temporal changes in the herring gull diet have been detected through retrospective stable isotope analysis of archived eggs. These changes may be the result of declines in fish availability. Diet quality is an important factor regulating the success of Great Lakes herring gulls and changes in fish availability may affect colonial waterbird populations. The degree to which endocrine-disrupting contaminants may be affecting fish-eating birds is currently being assessed. Regular monitoring of colonial waterbirds will continue to provide important information regarding the dynamic Lake Erie ecosystem.