

STATE OF THE STRAIT MONITORING FOR SOUND MANAGEMENT



A BINATIONAL CONFERENCE ON THE DETROIT RIVER ECOSYSTEM

Convened December 2004 by Great Lakes Institute for Environmental Research, University of Windsor, The Greater Detroit American Heritage River Initiative of Metropolitan Affairs Coalition, The Detroit River Canadian Cleanup, The Detroit River International Wildlife Refuge, The Detroit Water and Sewerage Department, and other organizations.

Cover photos: photos left and center (upper and lower): Recreational fishing in the Huron-Erie Corridor (lower center photo by Kurt Byers, Michigan Sea Grant Extension, courtesy of United States Environmental Protection Agency, Great Lakes National Program Office; other photos courtesy of OMNR); upper right: Scientist sampling water, benthic invertebrates and sediment in Lake Erie (photo courtesy of Environment Canada and University of Windsor); lower right: Longear sunfish (*Lepomis megalotis*) (photo courtesy of Nicolas Lapointe)

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2004 Conference Proceedings

Edited by:

Rachael Eedy, University of Windsor
John Hartig, U.S. Fish and Wildlife Service
Charlie Bristol, Bristol Technical Services, Inc.
Melanie Coulter, Detroit River Canadian Cleanup
Tracy Mabee, University of Windsor
Jan Ciborowski, University of Windsor

Based on a binational conference convened by
The Great Lakes Institute for Environmental Research, University of Windsor, Greater
Detroit American Heritage River Initiative of Metropolitan Affairs Coalition Detroit
River Canadian Cleanup, Detroit River International Wildlife Refuge, Detroit Water
and Sewerage Department, and other organizations.

Suggested citation: Eedy, R., J. Hartig, C. Bristol, M. Coulter, T. Mabee and J.
Ciborowski eds. (2005). *State of the Strait: Monitoring for Sound Management*. Great Lakes
Institute for Environmental Research, Occasional Publication No. 4, University of
Windsor, Windsor, Ontario.

6.9. CHRISTMAS BIRD COUNTS AND PROJECT FEEDERWATCH: CITIZENS IN ACTION

Sarah Rupert, Point Pelee National Park of Canada, Leamington, Ontario

Introduction

The Christmas Bird Count (CBC) is the longest running volunteer-based bird-counting program in the world. The National Audubon Society, partnering with Bird Studies Canada, administers the CBC program. More than 50,000 people participate in counts across North America, parts of Central and South America, and throughout the Caribbean and Pacific Islands. Last year, more than 63 million birds were counted.

The CBC began more than a century ago, and was a key part of the modern conservation movement. A traditional Christmas activity at that time was the “side hunt.” Teams competed to see who could shoot the most birds and small mammals in

one day. Scientist and writer Frank Chapman was greatly opposed to this activity and proposed instead to identify, count, and record all the birds that could be found. He was joined by 26 other conservationists scattered across 25 localities, and the CBC was born.

As the popularity of birdwatching has increased, so has the number of counts and participants. Volunteers drive this program—it could not be done without their assistance. A major swell in the number of Christmas counts and participants was noted in 1970, building to great numbers by the year 2000 (Figures 1 and 2). Last year, the CBC program saw a record high of 1,996 counts in North America, due in part to the number of counts in Canada.

In Ontario, more than 100 counts are conducted each year. Point Pelee National Park’s count is one of the longest running in the region. Point Pelee’s count began in 1920, running sporadically until 1949, when it became entrenched in the operations of the park and became an annual event. To date, this count has recorded 175 different species of birds and almost one million individuals.

Project FeederWatch is a relatively new program in comparison to the CBC. It was started in 1976 by the Long Point Bird Observatory and was called the Ontario Feeder Bird Survey. In ten years, the program had garnered such valuable information that those involved realized a continent-wide program was needed to accurately monitor large-scale movements of birds. This program is now run as a cooperative research project of the

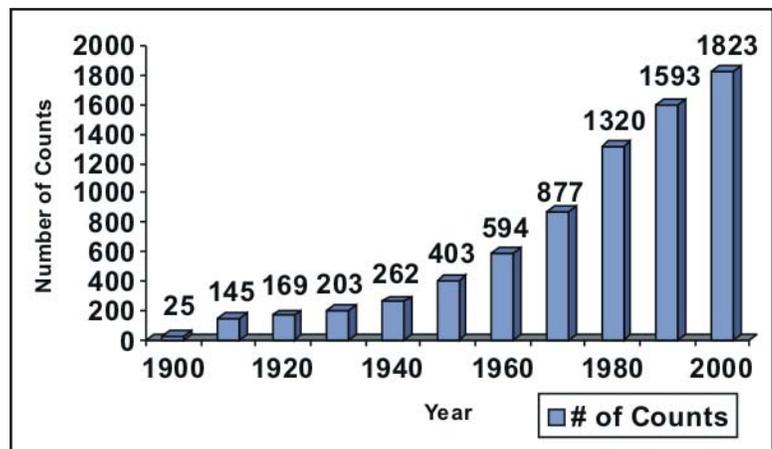


Figure 1. Number of CBCs from 1900-2000 in North America.

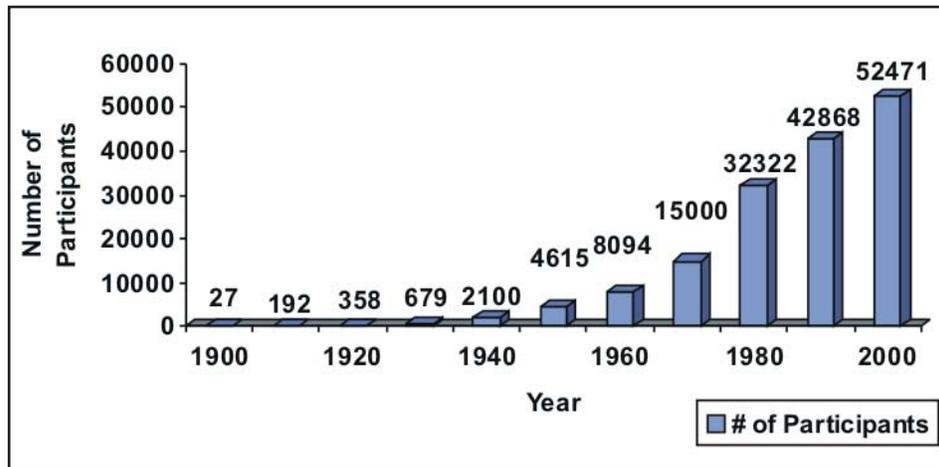


Figure 2. Number of Participants from 1900-2000 in North America.

Cornell Laboratory of Ornithology, Bird Studies Canada, the National Audubon Society (U.S.) and the Canadian Nature Federation.

In its first year as a continent-wide program, the number of participants jumped to 4,000. It now is around 15,000 and includes participants observing feeders at institutions, nature centres, schools, and private homes.

Objectives and Methods

Christmas Bird Count

The primary objective of the CBC is “to monitor the status and distribution of early-winter bird populations across the Western Hemisphere” (National Audubon Society 2004). The Point Pelee CBC monitors numbers, diversity, and trends within the winter bird population in the park to evaluate the effects of restoration efforts.

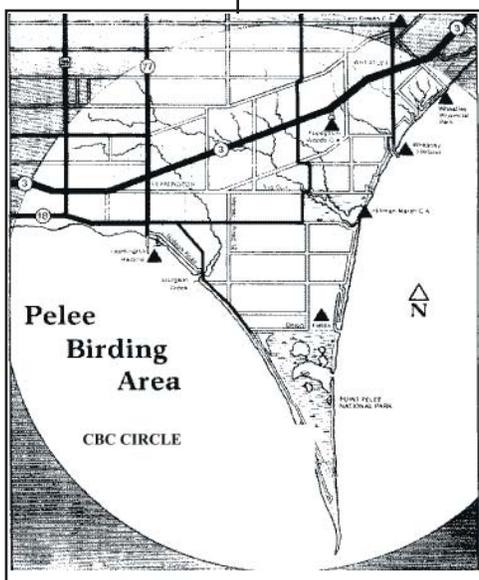


Figure 3. Point Pelee Christmas Bird Count area.

The CBC is conducted in the same way each year. The CBC covers a 24-km radius circle with the centre located just north of the northern park boundary (Figure 3). It includes areas both inside and outside of the park, as well as a portion of Lake Erie on either side of the peninsula.

The area is further divided into nine subsections that are the same from year to year. The CBC is conducted on the first Monday of the count period (December 14–January 5) and lasts 24 hours. Groups are assigned to count all of the individuals of all species within their designated area. To avoid double counting, group leaders clearly define what areas are being counted by which sub-groups.

If routes are retraced during the course of the day, only new species are counted on the way back. Consistency is also achieved through placing group leaders in the same areas each year and pairing less experienced observers with more experienced observers. Any rare or unusual species are documented by the observers in as much detail as

possible and then forwarded to the Regional Editor for consideration. All count results are submitted through the Web, reviewed by the Regional Editor, and maintained as a publicly accessible database for future use.

In addition to bird data, weather conditions, ice conditions, snow depth, effort (measured in hours spent and kilometres traversed), food crops available for birds, and other interesting or relevant information are recorded.

Project FeederWatch

The purpose of Project FeederWatch is to “track broad-scale movements of winter bird populations and long-term trends in winter bird populations and distribution” (Cornell Laboratory of Ornithology 2004). Project FeederWatch takes place over the entire winter season, so it provides information about bird movements and other changes that cannot be detected from the one day Christmas Bird Counts. Project FeederWatch is conducted annually from November to April to consider birds during all parts of the winter season. Anyone with an interest in birds can participate. Feeder watchers establish their count site at the beginning of the season and limit all of their counts to that area. A written description of the site is submitted for analysis. Two-week count periods are set through the entire season, and observers count the birds at their feeders on two consecutive days during each of these two-week periods. All species and the maximum number of individuals seen at once are recorded. The amount of time spent watching the feeders can vary, and zero bird days are also recorded. Weather conditions are recorded as well as the health of certain species. Observations of bird health have been particularly useful in tracking the spread of disease amongst finch species. Participants have the option of submitting their results by mail or the web and these results are used by ornithologists to determine trends.

Point Pelee National Park has been officially involved with Project FeederWatch for close to a decade. Not only have the program produced valuable information, but it has also become an important part of winter interpretive programs.

Summary of Results

The CBC data gathered at Point Pelee National Park and across the continent has provided important information regarding winter bird populations. It has allowed the tracking of the range expansion of species like the house finch (*Carpodacus mexicanus*) as well as the decline in numbers of other species like the habitat-sensitive red-shouldered hawk (*Buteo lineatus*). Data collected during CBCs have been used as part of the ongoing Parks Canada monitoring program in the Greater Park Ecosystem, which includes all of Essex County and western portions of Chatham-Kent. Christmas Bird Count data were also instrumental in the designation of the Detroit River as an Important Bird Area.

Conclusions and Recommendations

In addition to providing valuable scientific information, CBC and Project FeederWatch actively involve regular citizens in the process of data collection. Involving and engaging people in these activities can lead to greater stewardship and provide an opportunity for people to learn about the environmental challenges we face in this area. While public participation in the CBC is high in Essex County, participation in Project FeederWatch

in this area is still low. In the future, we hope to recruit more local volunteers for Project FeederWatch and increase awareness of this program.

References

Cornell Laboratory of Ornithology. (2004). *BirdSource*, <<http://www.birds.cornell.edu/pfw>>.

Cornell Laboratory of Ornithology. (2004). *Project Feederwatch*, <<http://birds.cornell.edu/pfw/Overview/Whatispfw.htm>>.

National Audubon Society. (2004). *Christmas Bird Count*, <<http://www.audubon.org/bird/cbc>>.

Rupert, S. (2004). *Regional Summary – Ontario*. Bird Studies Canada and the National Audubon Society.