

## A Pebble of a Christmas Bird Count by Geoffrey L. Holroyd

Only one Christmas Bird Count so far has ever had over 1000 participants: Edmonton, Alberta, Canada had 1288 participants in December 1987. Why did that count get so large and what were the benefits? And why should your count follow suit? Not only do the participants and the count benefit, but the benefits will spill over into bird conservation. One way to involve people in bird conservation is to give them hands on experience, and Christmas Bird Counts are an excellent way to get people started.

In 1900, when Frank Chapman proposed the first "Christmas bird-census" in an editorial of *Bird Lore*, the publication of the National Audubon Society, he was less concerned with winter bird data and more concerned with attitudes to conservation. He began his editorial "It is not many years ago that sportsmen were accustomed to meet on Christmas Day, 'choose sides,' and then, as representatives of the two bands resulting, hie them to the fields and woods on the cheerful mission of killing practically everything in fur or feathers that crossed their path--if they could." (Chapman 1900, p 192).

He was sure that no reputable sportsman's magazine was publishing an account of such a hunt, and was sure that random shooting of birds must stop and bird conservation must be front and centre. It was a small but significant step in bird conservation. In this century, Christmas Bird Counts are poised to take a great role in conservation.

The conservation challenges are even larger today than 100 years ago, as increasing demand on the world's resources reduce bird habitats daily. In North America, where we consume more resources per capita than anywhere else, our impact is felt globally. Who will solve the conservation problems? All of society must pay attention and be involved. Every individual, every organization, every industry, every government agency, every decision-maker must be part of the solution; they are already part of the problem.

One reason to conserve wildlife is their economic significance. In 1996, Canadians spent \$9.7 billion on non-consumptive nature related activities (DuWors and Villeneuve 2000). That money was spent in outdoor activities in natural areas, in wildlife viewing, and in other nature-related activities including nature related organization memberships, land conservation, and residential wildlife-related activities. These expenditures supported over 150,000 jobs in Canada. Figures for wildlife-related recreation in the US are about 10 times higher; that is expenditures of \$101 billion supporting over 1 million jobs (US Department of Interior 1997). Bird watching is one of the primary non-consumptive nature related activities. Thus bird watchers create a big economic impact that should justify conservation action.

However, John Livingston (1981) argued that no logical arguments will convince someone to save wildlife. One's conviction to conservation comes from personal experiences, not logic. Those experiences give us an appreciation for the natural world. A positive attitude toward the environment will be based on an appreciation for wildlife and the ecology of a part of our planet. Once we appreciate something, our positive attitude will motivate us to protect it and then take corrective action for conservation. Briefly stated: awareness leads to appreciation, which creates a positive attitude that can motivate us to take action. Many urban people have not had personal experience with wildlife, are removed from nature and are unaware of wildlife and their conservation. CBCs provide an opportunity for people to gain that first awareness of birds.

Examples of personal experiences affecting attitudes to wildlife are not hard to find. Jared Diamond (1992) cites his bird watching activities since age seven as giving him a deep appreciation for nature. David Quammen (1996) describes his youth and that of Michael Soule and their adventures with nature as the beginning of a lifetime of concern for our environment. Possibly, most famous are the autobiographical accounts of Gerald Durrell's youth exploring his natural world and subsequent concern for nature (e.g. Durrell 1956). These

stories are similar to my own start in biology and conservation as a teenage volunteer with Bird Studies Canada at Long Point, Ontario. How did you get started bird watching?

Conservation action needs increased awareness first. William Carr, in "Pebbles in Your Shoes," the history of the Arizona-Sonora Desert Museum, expressed the philosophy behind that outdoor museum as follows. "About the only time some people stop to catch even the briefest view of nature is when they may be sitting on a stump in the woods to remove pebbles from their shoes...Many years ago we built nature trails in the hope that stump sitters and pebble tossers would stop for a moment to enjoy the scene and perhaps learn something about the environment before leaving the area." (Carr 1982, forward). Christmas Bird Counts are one way of putting pebbles in people's shoes, of creating opportunities for people to take notice of nature, and for those who have noticed, of providing a cooperative atmosphere to promote conservation action.

Action and the decision making that must proceed it in our society are driven by image as much as substance. Photographs and TV coverage affect public sentiment. Mass marketing by multi-national companies influences our consumer habits. The CBC has the potential to be one balancing influence if it is marketed, locally, nationally and continentally. CBCs with high participation will give many people an opportunity to appreciate birds and bring a higher profile for the CBC and birds in the community. For over a decade, Edmonton has had the largest number of count participants, and many benefits have derived from the large attendance.

The story of the large Edmonton CBC began in early 1986 when Cam Finlay, Jim Butler, Mike Quinn, and I talked about the relatively low participation in the local Christmas Bird Counts. In some towns the CBCs were a major naturalist event. In the relatively small town of Banff, Alberta, where I started a count, the CBC attracted over 60 participants, more than on the Edmonton count in a metropolitan population of almost one million. As in Kingston, Ontario, where I had participated previously, the Banff CBC ended with a potluck supper. Millis, Massachusetts had just tallied 501 CBC participants. In the 1997 national survey of wildlife issues, 43% of Canadians expressed an interest in getting involved in wildlife conservation, and 22% made trips primarily to view wildlife (Filion et al. 1989). Ten percent said that they had great interest (35% have some interest) in joining a non-consumptive conservation group. Yet only 5% belonged to conservation groups. This survey indicates the great potential to recruit new people to conservation activities. Edmonton's CBC should involve more participants.

By mid 1986, 'Wildlife 87', the O Centennial of Wildlife Conservation in Canada, loomed on the horizon, and we were looking for political support for the conservation action that year. Increased involvement in the Edmonton CBC would get more people involved in Wildlife '87 and provide a marketing opportunity for bird conservation issues. By autumn, a small but dedicated group of conservationists decided to involve more people in the Edmonton CBC. We wanted to make the Count a major event in the city. In the previous year, only 40 hardy souls had braved the cold continental weather to count birds. Based upon the experience of smaller towns like Banff, we knew we could vastly increase that number. Over the next three years we expanded to a large CBC format. Edmonton has had high participation in its bird count since 1986 when 511 people participated. The participation peaked at 1288 in 1987, and has remained high, over 600 ever since. Here are some of the elements that we have included in our count.

The "Birds of Christmas" on Friday evening featured media personalities, authors, politicians, and sometimes musicians, with entertaining talks about birds and an identification session complete with bird specimens at the Provincial Museum of Alberta. Drs. Jim and Barbara Beck headed the "Owl Prowlers," who started at midnight on count day, after a training evening in the previous week, with tape recorders in hand and long johns on legs to find owls in the city's river valleys and wood-lots. The count circle is divided into 16 Zones, each with a Zone Captain. Each zone is split into areas that are searched for birds by organized teams of "Bush

Beaters." These teams are able to cover the river valley in the morning, spending more time to find the elusive woodpecker or finch often before noon.

No need for repeat visits in the afternoon. Feeder Watchers count birds in their backyards in each zone. The Feeder Watchers were recruited at the October "Seed'n'Feed" weekend hosted by the local John Janzen Nature Center. Brochures were given to bird seed purchasers at local nature supply stores and through (coupons) in the city's daily newspaper, The Edmonton Journal. One year, the competition's first prize was a week for two in Hawaii, donated by a local travel agent who received publicity through the competition. Each entrant was encouraged to sign-up as a feeder watcher. The Becks conducted a door-to-door campaign in their neighbourhood and signed up over 50 feeder watchers, many of whom are still reporting their count day's birds each CBC. The "Birds of Christmas" and the CBC wrap-up became social gathering that added to the festive season. The SWAT team (Special Winter Avian Team), two local birders with a cell phone, follows-up on rarities and checks unknown birds at feeders.

One highlight of count day is a Media Rally. The local TV, radio, and newspapers send reporters to cover the staged event in a public park in the snow, in front of a bird feeder. The Honorary Count Marshall is the featured personality. Alberta Wildlife Minister Don Sparrow, the first Honorary Count Marshall, joined us for a number of activities and promoted the count with the media on count day. Federal Minister of Environment Tom Macmillan joined in the fun in Prince Edward Island and declared that he and his daughter thoroughly enjoyed their bird count. He kicked-off the Wildlife '87 celebration with the CBC in December 1986. The increased political awareness from these events helped to improve politicians' appreciation of bird watchers- and our numbers. Subsequently, the Alberta Fish and Wildlife Division designated two biologists to work full time on a 'Watchable Wildlife' program, and many new natural areas were designated in Alberta. A birdwatchers' store, the Wildbird General Store, opened and still prospers.

A variety of other politicians have become more aware of our bird-watching activities through the Edmonton Christmas Bird Count. The past three mayors of Edmonton have supported us by signing challenges to the mayors of other Canadian provincial capitals to beat Edmonton's records, by seeing more species of birds, and by involving more people. Several mayors have responded to rejoice in the number of species they have seen, some beating Edmonton but all increasing their awareness of birds and bird watchers. One year the mayor of Quebec City reported that his city had begun a new count and he enjoyed his bird watching experience. The mayor of Victoria takes pleasure in describing in detail the long list of species that are seen on that count. It is no coincidence that the Edmonton city council supported the request to declare Whitemud Creek Ravine the city's first Natural Reserve dedicated to pedestrian access only.

The media took great interest. Local newspapers, TV, and radio carried many interviews with participants. The Edmonton Journal has featured front page stories on our count. Nationally Peter Gzowski has hosted a cross-Canada check-up of Christmas Bird Count results on CBC radio. The national newspaper, The Globe and Mail has frequently provided coverage. Local media coverage and participation have increased the public's awareness of bird watchers. I have found many service people such as taxi drivers and barbers have heard of the count.

The large Edmonton CBC resulted in increased awareness locally, provincially, and nationally. Action followed with protected areas and reassignment of staff to non-game programs. Membership in the two local bird/naturalist clubs doubled. The couple who won a one-day bird watching prize sold their urban house, moved to the country, and changed their life style after becoming entranced by the birds during that day. The bird watching event became a giant pebble for that couple. The Edmonton CBC accomplished all this and everyone still had fun-even more fun than before.

And the fun did not cause the data to suffer in quality. In fact, with larger effort comes larger sample size, and arguably an improvement to the data. The training sessions and a brochure in the annual mail-out increase the participants' identification skills. The SWAT team, cell phone in hand, verifies rarities. The larger data set allows comparisons of the relative contribution of the components of the CBC: field party-hours, feeder-hours, and owling hours. Our 'birds per party-hour' are more robust with the larger sample sizes. Although the number of birds observed increased dramatically with increased participation, the number of birds per party hour did not change greatly for the most common resident species. The on-going decline of Ruffed and Sharp-tailed grouse cycles due to urbanization of the surrounding agricultural and natural lands has continued to be documented. Conversely the number of Red and White-breasted nut-hatches per party hour continue to increase. The number of House Sparrows per party hour was less variable since 1986 than in the preceding decades, likely due to the larger sample effort.

A challenge of this century is the conservation of birds and their habitats. Conservation action will not happen without public involvement. The public will not get involved and support something that they know nothing about. The Christmas Bird Count can be one tool, A Pebble, in a conservationist's arsenal to promote birds and conservation to the public-and by extension to politicians. The Edmonton Christmas Bird Count took this challenge head on in the mid-1980's and enhanced local bird conservation in the process. We encourage other counts across the continent to follow the lead of Edmonton, Victoria, North Bay, Ottawa-Hull, and other Canadian cities that have made their Christmas bird count a social, and conservation awareness raising event.

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