

# NWT/NUNAVUT BIRD CHECKLIST SURVEY

## NEWSLETTER

### APRIL 2001

*A program coordinated by the Canadian Wildlife Service since 1995*

## LOOKING BACK ON OUR BEST YEAR SO FAR



We are happy to report that we received a record number of checklists last year – over 450! Typically, we get about 300 checklists, and we welcome this dramatic increase and hope it will continue in years ahead. The increases came from all kinds of participants – Parks Canada continues to use the survey as a primary monitoring tool in the north and they submit substantial numbers of checklists. Several people made extended trips in the arctic last year and recorded their birds on daily lists (perfect!). The Otto Sverdrup Centennial Expedition over-wintered off southern Ellesmere Island and sent us many checklists from the region (including Checklists where no birds were seen during the survey period – also important). There were also many first-time Survey participants in 2000.

## NOTEWORTHY OBSERVATIONS FROM 2000

Each year we receive interesting observations. Some of the more unusual reports were:

- Harlequin Ducks on the Horton River and near the southeast side of Great Bear Lake
- Red-eyed Vireo and Eastern Kingbird at Bathurst Inlet Lodge
- Ruddy Duck in Yellowknife
- Common Mergansers overwintering on Tartan Rapids near Yellowknife
- White-crowned Sparrow in Sach's Harbour
- More American Robins in Iqaluit and a very early spring sighting on March 30<sup>th</sup> on the Dempster Highway at Frog Creek
- Black-billed Magpies at Blachford Lake Lodge and around Fort Providence
- Broad-winged Hawk nest near Fort Liard
- Say's Phoebe on the Horton River
- Stellar's Eider on South Hampton Island

## MANAGING OUR DATA

Having a good database is getting very important as the number of records increases. There are now more records in our database than people in the NWT! With financial assistance from Parks Canada and the Department of Indian and Northern Affairs, we redesigned the database this spring. We eliminated many headaches associated with the old program and can easily update all kinds of information in one step, such as addresses of observers, changed species names or corrections to location information.

The great news about having a new database is that it sets the stage for our move to the internet. Within the next 2-3 years, we anticipate having our data accessible on the web. Anyone will be able to use some pre-built queries to get data from specific locations in the north or about a specific species. This should greatly increase the use of all the data everyone has worked so hard to provide.

**UPDATE YOUR BOOKMARKS!** We will no longer be using the NWTChecklist.com address as a shortcut to our website. The new shortcut is listed on the back of this newsletter.



### And a Bright Future

We did an evaluation of the Checklist Survey and its database last year. Specifically, we wanted to use the first five years of the program to:

- Produce a basic summary of information in the database
- Determine if the database is biased in species or locations recorded, and make recommendations to correct biases
- Determine if data are sufficient to show species abundance across the range, and to show changes in abundance over time
- Determine if questions asked on the checklist form provide useable, necessary data.

### *Summary of Some Database Information (not including most of the data submitted in 2000)*

- The database contains 42,977 records (observations of a species) from 4,547 checklists and >1000 locations.
- Over 90% of sites were visited only once; only one site (Aulavik National Park) was visited every year between 1995 and 1999. Seven sites (Cambridge Bay, Cambridge Bay DEW line site, Mount Pelly, Fort Smith, Giant Mine townsite, Norman Wells and Iqaluit) were visited in four years between 1995 and 1999.
- Nearly all (99%) of checklists were filled out between April and September.
- Over ¾ of all bird species recorded for the NWT and Nunavut were recorded on checklists- 239 species. All regularly occurring shorebirds and seabirds were recorded in the database.
- Surfbird is the only species recorded on checklists that has not previously been noted for the NWT or Nunavut.
- Four species (Peregrine Falcon, American Robin, Bald Eagle, and Snow Bunting) were recorded in NWT and Nunavut for the first time during the “winter” months (November to March). However, it is not known if these are true over wintering records or abnormally late departure/early arrival dates.
- close to 30% of records during the breeding season were marked as confirmed or probable breeding.

### *Strengths of the Survey*

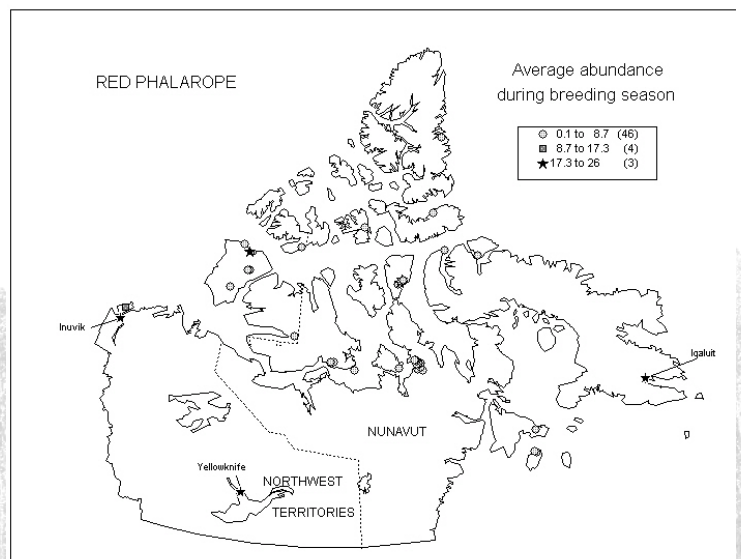
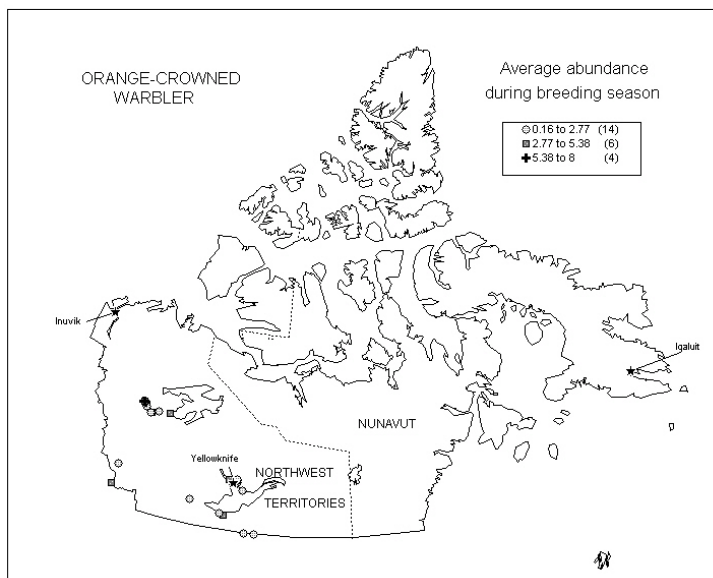
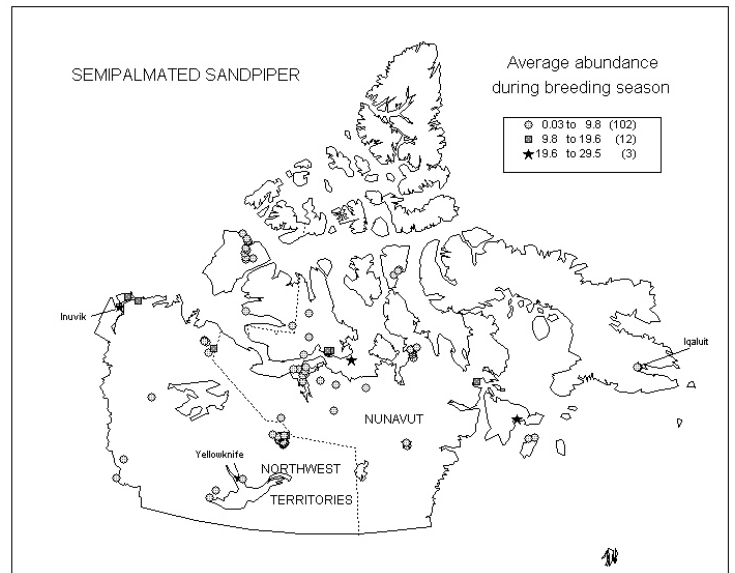
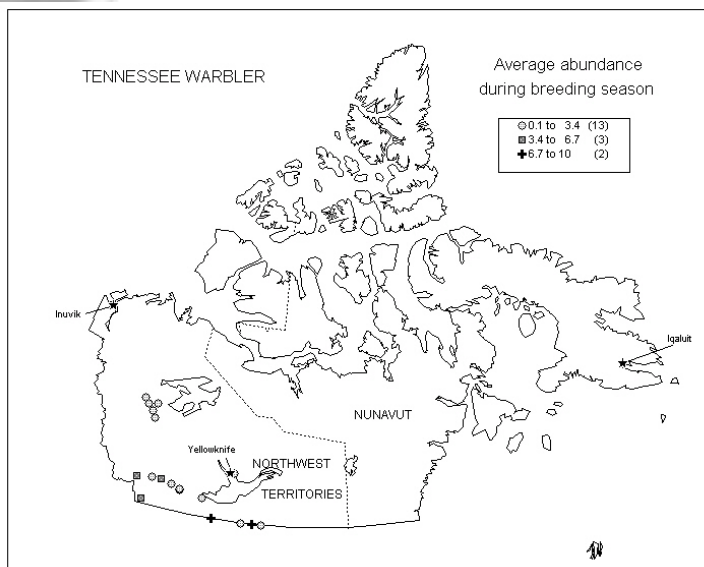
- Overall, the Survey is working very well for collecting information on birds from a sparsely populated area.
- We have good coverage of most NWT/Nunavut species, especially those that occur regularly. Data generally reflects the known range of most species (see maps on adjacent page)
- Generally, there is good geographical coverage of species, particularly above tree line. Spring and summer are the best-surveyed months.
- The database is picking up some interesting records during the “winter” months- either abnormally early arrival or late departure dates, or new wintering records.
- Most species are recorded in numbers that approximate either their known abundance or their breeding habits (e.g. high numbers of colonial nesters recorded). There were, however, surprisingly high numbers of Ivory Gulls and Short-eared Owls recorded. We need to examine the data further to determine why these species were recorded out of proportion to their perceived abundance and/or detectability.
- Most of our observers rated themselves as highly skilled in the self-evaluation portion of the checklist. This is likely true as most people tend to underrate their skills when this question is posed to them.
- The majority of observers are government employees, or learned of the Survey through a government employee.
- Most checklists recorded all birds seen at a site, and 80% of observers recorded habitat. The majority of surveys were done in wet and dry tundra and rocky habitats.
- Multiple numbers of visits to a site will increase the number of species recorded for that site- even additional visits up to 12 (highest number of repeat visits recorded) added new species.
- There is enough data to start doing statistical analyses.
- Apart from satellite imagery, the Survey is the only way to get information about snow and ice cover conditions for most of the NWT and Nunavut.

## Shortcomings of the Survey

- There are seasonal and geographical gaps in coverage that need to be filled.
- Most sites are visited only once during a season, and few sites are visited in consecutive years.
- There are a number of technical problems with the database, making information management difficult.
- The questions on the Checklist form regarding predators and prey seem confusing and are rarely filled out correctly.

## Recommendations for future years

- We need to increase coverage in underrepresented areas, habitats and seasons. We need better coverage for the forest habitats in NWT, for the Arctic Islands, much of Baffin Island, the northeast Keewatin, and the region directly east of Great Slave Lake. The fall and winter months (September to April) are poorly covered by the Survey.
- We need to develop a network of sites that are visited every year (in addition to sites that are visited opportunistically) if we want to get trend information.
- We need to fix technical problems with the database (now completed).
- We will continue to collect snow and ice cover information and may compare satellite images with the collected information to determine the accuracy of Checklist-generated weather data.
- We will improve the questions regarding predator and prey abundance.



## 2000 BIRDERS HALL OF FAME

We think it is very important to let everyone who submitted checklists know we are very appreciative. To help show our appreciation, here is the list of people who submitted data since our last newsletter. Only primary observers are listed, and please accept our sincerest apologies if names are misspelled or if we missed someone who sent in data.



Jamie Bastedo  
Mike Beauregard  
Patricia Bladwin  
Krista Bobey  
Gabe Boros  
Christian Bucher  
Rosemary Buck  
Linda Burr  
Suzanne Carriere  
Lynne Dickson  
Gary Donaldson  
Evan Edinger  
Jaida Edwards  
Barry Elanik  
Alan Fehr  
Betsy Fikejs  
Billard Gilbert  
Eugene Green  
Bill Gundlach  
Wade Hanna

Todd Heakes  
Brad Heath  
Jim Heather  
Jocelyn Hudon  
Vicky Johnston  
Dana Kellett  
Warner  
Stefan Kindberg  
Brian Koonoo  
Pierre Landry  
Andrew Lawrence  
Scott MacButch  
Craig Machtans  
Mark Mallory  
Micheline Manseau  
Ian McDonald  
John McKay  
Peter Middleton  
Elizabeth Pahkala  
Damian Panayi  
Mark Peck

Roger Pilling  
Susan Polischuk  
Jennie Rausch  
Bob Reid  
Jim Richards  
Rand Rudland  
Vicki  
Sahanatien  
Angus Simpson  
Cyndi Smith  
Steve Smith  
Guldborg Sovik  
Jeff Sowiak  
Izuru Toki  
Steve Travis  
Karen Truman  
Leslie Wakelyn  
Gregg Walker  
Bob Weeden  
Dave Wilderspin  
Gustave Yaki  
Brian Zawadzski



### QUESTIONS? SUGGESTIONS? PLEASE CONTACT US!

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