

Ontario Forest Bird Monitoring Program Newsletter

Volume 14, Issue 1, Spring 2004

Editor's Note

This past year has been a busy one for the program as we worked on updating previously missing or lost site information. Thank you to all the volunteers who took the time to respond to our fall information request.

In this edition of the newsletter you will find the results from the 2003 season, trend results from 17 years of data, and information on what program staff have been working on during the last year.

Mike Cadman, FBMP Coordinator

The Forest Bird Monitoring Program (FBMP) began in Ontario in 1987 to provide information on population trends and habitat associations of birds that breed in the forest interior. Sites consist of three to five stations in woodlands. Volunteers perform ten minute point counts at each station twice between late May and early July, at which time all birds are identified by song or sight.

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Results Highlights

ver the history of the program, there have been 232 participants who have surveyed a total of 375 sites (Figure 1 and Figure 2). In 2003, 63 volunteers surveyed a total of 92 sites. The number of volunteers and subsequently, the number of sites, has been decreasing in recent years with a notable decline from 2002 to 2003. The decline is likely in part due to the number of volunteers who are also participating in the Ontario Breeding Bird Atlas. For those of you who have taken time off from FBMP for the Atlas. just let us know when you're ready to survey your FBMP sites again and we'll be sure to send you your packages. (Note: you are considered "active" and we will continue to send your package if you have submitted data in the last three

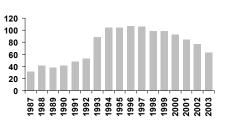


FIGURE 1: Number of FBMP participants since 1987

years.) If you've collected data from 2003 or any year and haven't submitted it yet, please do so as soon as possible. There have been cases where data was put aside to send "tomorrow" and never got sent (we recently received data from 1994 that was found in a dusty file somewhere!).

In 2003, 119 species were observed. The 10 most common species in terms of the number of sites where they were recorded are:

- · Red-eyed Vireo (87)
- · Blue Jay (80)
- · Ovenbird (79)
- · American Crow (75)
- · Black-capped Chickadee (73)
- · American Robin (70)
- · Veery (61)
- · Eastern Wood-Pewee (60)
- Great Crested Flycatcher (60)
- · Black-throated Green Warbler (56)

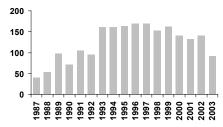


FIGURE 2: Number of sites surveyed since 1987

Trend Analysis Highlights

Overall trends from 1987 to 2003 were determined using the WILDSPACETM Decision Support System, a CWS data management tool.

Trends are similar to those found in the 1987-2002 period, with Blackburian, Magnolia and Nashville Warblers, Ovenbird, Rose-breasted Grosbeak, Winter Wren, Song Sparrow, and Redwinged Blackbird still showing significant declines. Joining them on the declining list this year are White-breasted Nuthatch and Downy Woodpecker. Species with significant increases remained the same as last year, with increases seen for Pine Warbler, Yellow Warbler, American Redstart,

Northern Cardinal, Yellow-bellied Sapsucker, American Goldfinch, Mourning Dove and Ruby-throated Hummingbird.







Fall 2003 Updates Process

A big thank you to all our volunteers, past and present, who took the time to respond to our fall 2003 information request. We received responses from 59 volunteers who provided us with updated information for 108 sites. This information is helping us to fill in the gaps that existed previously for many of the sites. If you have not yet provided updates, please send them in as soon as possible. This information will help to make the data more useful for upcoming analysis projects.

If your site map looks wrong or there are no station locations indicated, please consider taking GPS readings for your stations (if you have access to a GPS unit) or use a topographic map to indicate the station locations.

If you submitted new coordinates and would like to see what your site looks like on the map, just ask and we'd be happy to send you a new map.

Our fall update process also involved the creation of a Microsoft Access database. This database now has the capacity to store all our site, volunteer and observational data, along with the capability of undertaking some simple queries. The data analysis will still be done using the WILDSPACETM Decision Support System. Should you wish to see what information we have on your site,

just let us know and we'll be happy to send along the summary.

We indicated that we were going to be undertaking some landscape-level analysis this spring. Unfortunately, this timeline has been pushed back. We'll keep you informed through the newsletter about any such analyses that are completed using the FBMP data.

For those volunteers who indicated they have experienced hearing loss, we have not forgotten about you – we are in the process of trying to determine how best to guide you. We will be in touch soon.

Changes to the Data Summary Sheets

Lean already hear the sighs of exasperated volunteers when they read the word "changes". However, I am confident that these new changes are for the better and will make your life as a volunteer easier.

Background

While verifying the incoming data last year, there were a high proportion of transcription errors. It was no fun for me to constantly make changes and send out Data Modification Forms. Equally, I'm sure it was not fun for volunteers to, at times, struggle to make sure observations made it into the right row and column and then receive that Data Modification Form in the mail.

Many errors were attributable to the design of the Data Summary Sheet. Observations were recorded one line too high or too low or were off by a column in either direction. This problem prompted the survey that went out in the fall. The responses gave us a good idea as to how easy/hard the volunteers found

the form to use, as well as some idea of how the form could be modified. From all this, it was determined that a new form was need and we went about designing something completely new.

The New Forms

The new forms are customized for each site and station so that only the list of species that have been recently found at each station are included. This reduces the number of irrelevant species that were previously contained on every form. Space is provided to include any additional species that are not on the list. The forms are now set up a little bit differently. Instead of having all of the stations across the top, each station is contained within a separate set of rows (Figure 3). The hope is that this will reduce the errors caused by having to read across multiple columns to enter the data.

Another slight change comes with the changes to about a dozen species' codes. The changes make it easier for data

entry as these codes conform to the codes used by WILDSPACETM, which is where all of the data are stored and analyzed. A full listing of the species codes and names is included with each of the volunteer packages. Should you find yourself using the "old" codes in the field, please find its equivalent "new" code for use on the Data Summary Sheet, then correct the field form before sending it in.

As always, feedback regarding these new forms is most appreciated as we attempt to make the lives of both volunteers and staff a little easier.





Atlas update

The Ontario Breeding Bird Atlas is entering its fourth year of data collection. Things are going well, with over 87,000 hours of field work logged to date; but there is still much to do to meet the project's coverage goals in the remaining two years. You can view Atlas species maps at www.birdsontario.org.

While the Atlas data is not yet complete, comparing the data from the first (1981-1985) and second (2001-2005) projects already reveals some patterns that parallel trends found in the FBMP data. For example, the Atlas is showing that the Northern Cardinal and Mourning Dove are expanding northward, while the Yellow-bellied Sapsucker is expanding southward from the Canadian Shield. All these three species are showing an increasing trend on FBMP sites.

The Atlas is showing increases in many woodland birds south of the Canadian

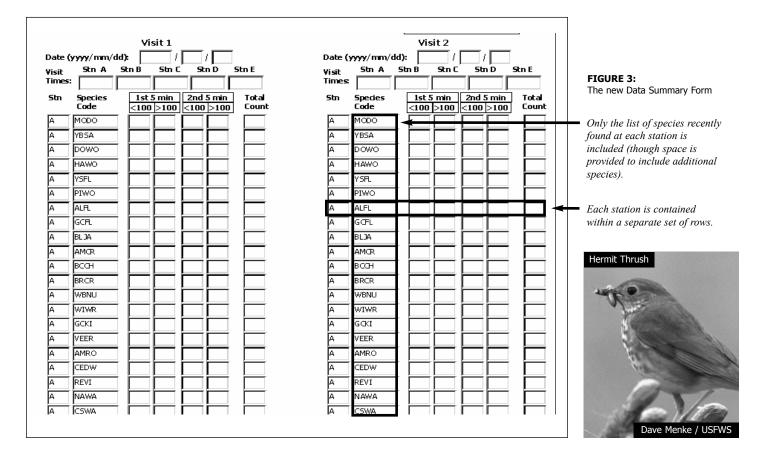
Shield. Black-throated Green, Yellow-rumped, Pine, and Magnolia warblers are all showing notable expansions south of the Canadian Shield, as are the Redbreasted Nuthatch, Sharp-shinned Hawk, Blue-headed Vireo and, to a lesser extent, Golden-crowned Kinglet and Purple Finch. These birds are all primarily dependent on coniferous habitat. The prevalent hypothesis at this time is that the maturation of the conifer plantations in southern Ontario is providing additional habitat for these species and they are taking advantage of it.

At the same time, a considerable amount of land that was formerly farmed in southern Ontario has returned to forest through natural succession, and the increase in forest cover in many areas is providing new habitat for other woodland species such as Black-throated Blue and Chestnut-sided Warblers, Cooper's Hawk, Hermit Thrush and, as mentioned above, the Yellow-bellied Sapsucker. All of these species have also

expanded their range and populations south of the Canadian Shield, according to the Atlas data.

We haven't yet analyzed the latest FBMP data for the area south of the Shield, to see if the trends found in the Atlas data are reflected in the FBMP. Given that FBMP sites are primarily mature forest, we might not expect to see increases on those sites. But perhaps the overall increase in the amount of woodland habitat is providing a landscape generally more suitable for forest birds, and that will be reflected in increases in those species on FBMP sites.

For now, it's fun to speculate but soon we will be able to analyze the Atlas data in conjunction with data from the FBMP and other projects, such as the Breeding Bird Survey and Marsh Monitoring Programs, to give a much better understanding of the dynamics of forest bird populations in Ontario. Stay tuned.





Our Amazing Volunteers

Congratulations to all the volunteers who have completed 10 years of participation. In 2003, congratulations go out to:

David Cattrall, Chris Earley, Chris Ellingwood, Daniel Entz and James Martin.

You will each receive a limited edition FBMP pen and a certificate of recognition.

Volunteers with 5+ years of experience with the FBMP

| Years of Participation | Volunteers |
|---------------------------|---|
| 17 | Dennis Barry, Virgil Martin, Ron Tasker |
| 16 | Kathryn Lindsay, Rick Ludkin, Margaret McLaren, Chris Sanders, Ron Weir |
| 15 | Jacques Bouvier, Bruce Falls, Bill McIlveen, Ron Scovell, Cynthia Suhay |
| 14 | Chris Bell, Bruce Duncan, Al Harris, Dan Strickland |
| 13 | Jon McCracken, Ron Tozer |
| 12 | Peter Blancher, Ted Cheskey, Paul Hector |
| 11 | David Bree, George Bryant, Fred Caloren, Nick Escott, Manson Fleguel, Joe Johnson, Doug Martin, Lynn Paibomesai, Don Scanlan, Don Shanahan, Jim Spruce, Chris Wedeles, Bill Wilson, Jim Wilson |
| 10 | David Cattrall, Chris Earley, Chris Ellingwood, Daniel Entz, Helen Inch, James Martin, Jean Niskanen, Sandra Parsons, Reinder Westerhoff |
| 9 | Sue Greenwood, Helen Hutchinson, Karl Konze, Dave Martin, Deryl Nethercott, Gary Nielsen, Al Sandilands |
| 8 | Mike Cadman, Rob Crawford, Bonnie Devillers, Joan Donnelly, James Forrest, Sarah Mainguy, Pete Read, Ron Ridout, Andy Steinberg, Peter Stinnissen |
| 7 | Sylvia Biribauer, Ray Blower, Mike Bouman, Gary Clay, Joanne Dewey, Connie Downes, Tony Edwards, Don Fillman, Stew Hamill, Judith Kennedy, Richard Knapton, Larry Martyn, Irene McIlveen, Craig Potter, Paul Pratt, Ted Presant, Lynne Richardson, Ilmar Talvila, Dan Welsh, Mark Wiercinski, John Woodcock |
| 6 | Madeline Austen, Richard Blacquiere, John Cartwright, Bill Crins, Mary Gartshore, Ross James, John McLaughlin, Erwin Meissner, Kathy Parker, Nick Quickert, Bob Sachs, Don Stuckey, Janice Sukhiani, Steve Wendt, Charlie Whitelaw, Audrey Wilson |
| 5 | Alfred Adamo, John Blaney, Terry Bradt, Rob Cheskey, Tom Cosburn, Richard Frank, David Hawke, Mike Lepage, Ken McIlwrick, Annette Mess, Chris Michener, Richard Moore, Bill Murphy, Bob Whittam |



FBMP Data Submitted to the Ontario Breeding Bird Atlas

There were several inquiries last fall as to whether or not the FBMP data was going to be submitted to the Ontario Breeding Bird Atlas. The answer to that question is "yes." All data from 2001 and 2002 have been submitted. Point count data for those who used the new method in 2002 were submitted along with all nest, pair and territorial records. Data from 2003 will be submitted this fall.

For volunteers who had already submitted their data to the Atlas, don't worry. A process is in place to track what data is submitted by whom in order to avoid duplicated records.

This publication is available online at the following URL: www.on.ec.gc.ca/wildlife. All publications are available in both HTML and PDF formats.

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Species trends on FBMP sites, 1987-2003

Table shows the results for species occurring on 15 or more sites

| Species | Target ¹ | Number of Sites ² | Trend (%) | Sig.3 | LCI ⁴ | UCI ⁴ |
|------------------------------|---------------------|------------------------------|--------------|-------|------------------|------------------|
| Alder Flycatcher | NT | 15 | 12.7 | | -6.3 | 35.4 |
| American Crow | NT | 187 | 2.5 | | -1.8 | 7 |
| American Goldfinch | NT | 121 | 7.9 | ** | 3.2 | 12.7 |
| American Redstart | T | 120 | 5.1 | ** | 2.2 | 8.1 |
| American Robin | NT | 220 | 1.4 | | -2.3 | 5.2 |
| Baltimore Oriole | NT | 90 | 1.6 | | -5.8 | 9.5 |
| Black-and-white Warbler | T | 111 | -0.4 | | -6.2 | 5.8 |
| Black-billed Cuckoo | T | 45 | 2.4 | | -4.7 | 10 |
| Blackburnian Warbler | T | 79 | -5 | ** | -8.6 | -1.3 |
| Black-capped Chickadee | T | 204 | -1.5 | | -5.1 | 2.3 |
| Black-throated Blue Warbler | T | 82 | 1.8 | | -2.6 | 6.4 |
| Black-throated Green Warbler | T | 130 | -1.3 | | -3.2 | 0.6 |
| Blue Jay | T | 224 | -0.3 | | -4.2 | 3.7 |
| Blue-gray Gnatcatcher | T | 23 | 11.1 | | -2.5 | 26.6 |
| Blue-headed Vireo | T | 52 | 1.7 | | -7 | 11.2 |
| Broad-winged Hawk | NT | 17 | 5 | | -12.2 | 25.6 |
| Brown Creeper | T | 86 | -3.8 | | -9.6 | 2.3 |
| Brown-headed Cowbird | NT | 109 | 2.7 | | -1.1 | 6.7 |
| Canada Warbler | T | 39 | -3.5 | | -10.8 | 4.3 |
| Cedar Waxwing | NT | 109 | -0.4 | | -10.9 | 11.2 |
| Cerulean Warbler | T | 17 | 2.2 | | -11.9 | 18.6 |
| Chestnut-sided Warbler | NT | 72 | -0.6 | | -8.4 | 7.9 |
| Chipping Sparrow | NT | 80 | -0.4 | | -5.4 | 4.8 |
| Common Grackle | NT | 96 | -3.4 | | -10.4 | 4.3 |
| Common Raven | T | 55 | -4.2 | | -10 | 2 |
| Common Yellowthroat | T | 85 | -1.9 | | -8.4 | 5.1 |
| Dark-eyed Junco | T | 21 | -3.3 | | -23.4 | 21.9 |
| Downy Woodpecker | T | 137 | -3.9 | * | -8.2 | 0.7 |
| Eastern Kingbird | NT | 15 | 8.1 | | -1.1 | 18.1 |
| Eastern Phoebe | T | 29 | 3 | | -10.5 | 18.6 |
| Eastern Towhee | T | 31 | 4.3 | | -5 | 14.6 |
| Eastern Wood-Pewee | T | 191 | -1.9 | | -5 | 1.4 |
| Evening Grosbeak | T | 34 | 0.9 | | -14.1 | 18.4 |
| Golden-crowned Kinglet | T | 36 | -5.7 | | -14.8 | 4.2 |
| Gray Catbird | T | 49 | 5.6 | | -2.9 | 14.7 |
| Great Crested Flycatcher | T | 199 | 1.1 | | -0.3 | 2.6 |
| Hairy Woodpecker | T | 126 | -1.1 | | -7.4 | 5.6 |
| Hermit Thrush | T | 105 | 0.9 | | -5.4 | 7.5 |
| House Wren | NT | 54 | -3.8 | | -8.7 | 1.3 |
| Indigo Bunting | NT | 57 | -3.8 | | -11.7 | 4.9 |
| Least Flycatcher | T | 90 | -2.7 | | -7.1 | 1.8 |
| Magnolia Warbler | T | 65 | -3.5 | * | -7.4 | 0.6 |
| Mourning Dove | NT | 102 | 9.2 | ** | 0.3 | 18.9 |
| Mourning Warbler | NT | 40 | -0.1 | | -11.5 | 12.9 |
| Nashville Warbler | NT | 108 | -5.7 | ** | -9.8 | -1.4 |
| Northern Cardinal | T | 71 | 5.2 | ** | 1.2 | 9.3 |

^{1.} NT = Non-target species, T = Target species

(Continued on other side)

^{2.} Total number of sites used in the analysis

^{3. **:} p < 0.05; *: 0.05 < p < 0.10

^{4.} LCI = Lower Confidence Interval (%); UCI = Upper Confidence Interval (%)



Species trends continued...

Table shows the results for species occurring on 15 or more sites

| Northern Flicker Northern Waterthrush Ovenbird Pileated Woodpecker Pine Warbler Purple Finch Red-bellied Woodpecker Red-breasted Nuthatch Red-eyed Vireo | T T T T T T T T T T T NT | 129 87 226 118 59 50 26 | (%) 0.7 0.5 -2.5 -1 5.9 -0.6 9.3 | ** | -9 -6 -4.7 -5.2 -0.3 -10.1 | 11.5 7.5 -0.3 3.5 12.5 |
|--|---------------------------------|---|---|----|---|------------------------------------|
| Ovenbird Pileated Woodpecker Pine Warbler Purple Finch Red-bellied Woodpecker Red-breasted Nuthatch | T T T T T T T | 226 118 59 50 26 101 | -2.5 -1 5.9 -0.6 9.3 | | -4.7 -5.2 -0.3 -10.1 | -0.3 3.5 12.5 |
| Pileated Woodpecker Pine Warbler Purple Finch Red-bellied Woodpecker Red-breasted Nuthatch | T T T T T | 118 59 50 26 101 | -1 5.9 -0.6 9.3 | | -5.2 -0.3 -10.1 | 3.5 12.5 |
| Pine Warbler Purple Finch Red-bellied Woodpecker Red-breasted Nuthatch | T T T T T | 59 50 26 101 | 5.9 -0.6 9.3 | * | -0.3 -10.1 | 12.5 |
| Purple Finch Red-bellied Woodpecker Red-breasted Nuthatch | T T T T | 50 26 101 | -0.6 9.3 | * | -10.1 | |
| Red-bellied Woodpecker Red-breasted Nuthatch | T T T | 26 101 | 9.3 | | | 10 |
| Red-breasted Nuthatch | T T | 101 | | | 11.2 | |
| | T | | 2.4 | | -11.3 | 34.6 |
| Red-eved Vireo | | *** | 2.4 | | -9.4 | 15.7 |
| itea eyea viice | NT | 238 | 1.4 | | -0.3 | 3.1 |
| Red-shouldered Hawk | | 19 | -5.7 | | -17.3 | 7.5 |
| Red-winged Blackbird | NT | 64 | -7 | ** | -12.1 | -1.6 |
| Rose-breasted Grosbeak | T | 162 | -2.9 | ** | -4.7 | -1 |
| Ruby-throated Hummingbird | NT | 34 | 10.7 | ** | 2.1 | 19.9 |
| Ruffed Grouse | T | 73 | -4.7 | | -14.9 | 6.7 |
| Scarlet Tanager | T | 142 | 0.8 | | -4.8 | 6.7 |
| Song Sparrow | NT | 74 | -7.1 | ** | -13.6 | -0.1 |
| Swainson's Thrush | T | 59 | -3.2 | | -7 | 0.7 |
| Swamp Sparrow | NT | 24 | 1.9 | | -6.9 | 11.6 |
| Tree Swallow | NT | 20 | -6.3 | | -15 | 3.3 |
| Veery | T | 174 | -0.1 | | -1.6 | 1.5 |
| Warbling Vireo | NT | 33 | -4.6 | | -12.5 | 4 |
| White-breasted Nuthatch | T | 131 | -3.3 | ** | -6 | -0.5 |
| White-throated Sparrow | NT | 104 | -2.5 | | -7.8 | 3.1 |
| Winter Wren | T | 115 | -6.3 | ** | -9.1 | -3.4 |
| Wood Thrush | T | 143 | -1.6 | | -4.7 | 1.6 |
| Yellow Warbler | NT | 44 | 5 | ** | 1 | 9.1 |
| Yellow-bellied Flycatcher | T | 17 | -0.3 | | -22.2 | 27.8 |
| Yellow-bellied Sapsucker | T | 110 | 6 | ** | 3.4 | 8.6 |
| Yellow-billed Cuckoo | T | 34 | -6.5 | | -14.5 | 2.3 |
| Yellow-rumped Warbler | T | 99 | 0.4 | | -4.9 | 5.9 |
| Yellow-throated Vireo | T | 22 | -2.1 | | -17.8 | 16.7 |

- 1. NT = Non-target species, T = Target species
- 2. Total number of sites used in the analysis
- 3. **: p < 0.05; *: 0.05 < p < 0.10
- 4. LCI = Lower Confidence Interval (%); UCI = Upper Confidence Interval (%)

