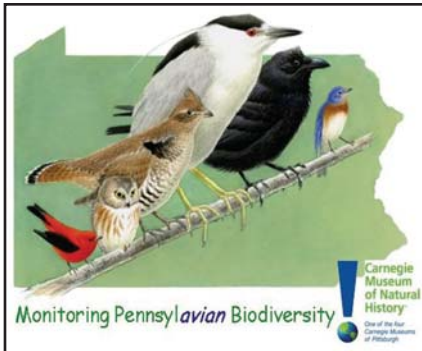


The Pennsylvanian Avian Monitor

Spring 2009

News of the 2nd Pennsylvania Breeding Bird Atlas

Volume 5, Number 1



Thanks to all our 2nd PBBA Volunteers!

by Bob Mulvihill, 2nd PBBA Project Coordinator

Once again I want to thank all of you for your participation, no matter how large or how small. The 2nd PBBA (2004-2008) was your project from the start, and it will be your tremendous achievement and unparalleled success at the finish. And, we are very close, indeed, to being finished.

As you may recall, the project was planned as a 5-yr. project, from 2004-2008. And your collective efforts through 2008 got us almost all the way there. Because only a handful of blocks fell short in terms of coverage at the end of 2008, we decided to do a small amount of targeted block coverage in 2009 (until the end of June). If you are a volunteer and would like to assist with the goal of adding time and new species to under-covered blocks in your region, simply contact your Regional Coordinator. They are the ones assigning people to the few remaining under-covered blocks. Our plan is to bring the level of coverage of these few blocks up to something

comparable to the >4,500 blocks that we considered to be complete at the end of 2008.

Please do not add new (2009) data to your blocks without consulting your Regional Coordinator (i.e., to make sure they are among the few hundred blocks for which additional coverage is needed; chances are that they aren't!).

On the other hand...

Please do enter or send in any data from previous years that you didn't get around to entering. We will accept additional data, even for completed blocks, if they were collected in 2004-2008.

Please do make sure you have entered all of your block and other effort. On your 2nd PBBA home page, look for "Messages" telling you you have some number of incomplete block or other effort. Under "Messages" you also may have some number of incomplete records. These are records that required detailed notes or map coordinates that you did not fill in at the time when you entered the records. Importantly, these records will not be incorporated into the atlas results unless and until you "complete" them.

Please complete any and all of your incomplete effort and records before the end of this month.

Last but not least, if you have been fortunate enough to observe confirmed breeding for one of the state's rare, threatened, or endangered species (the species in **bold** print on the data entry pages and in the project handbook) for the 2nd PBBA, but have not yet filled out a verification form...

Please do so ASAP! Again, these records may end up not being incorporated into the 2nd PBBA results without this additional documentation. Importantly, without the additional information contained in the verification form, confirmed breeding records of these species of greatest conservation concern and importance will not be able to be added to the Pennsylvania Natural Diversity Inventory, a database that helps to protect these species and the habitats they depend upon in Pennsylvania. To be clear, verifica-

tion forms must be filled out for confirmed (but not possible or probable) breeding records of rare, threatened or endangered (i.e., **bold**) species. If you need help filling out this form, don't hesitate to ask your Regional Coordinator or me for help.

If you have any questions about topics raised in this article, or something else, please feel free to call me (toll-free; 1-888-PABIRD1) or send an email to me or your Regional Coordinator. As soon as these last few details have been attended to, we will be turning our full attention toward writing a wonderful book that tells the full story of what we have learned (thanks to you!) about Pennsylvania's breeding birds and changes that have occurred since the first atlas was conducted in 1984-1989.

Results at Press Time:

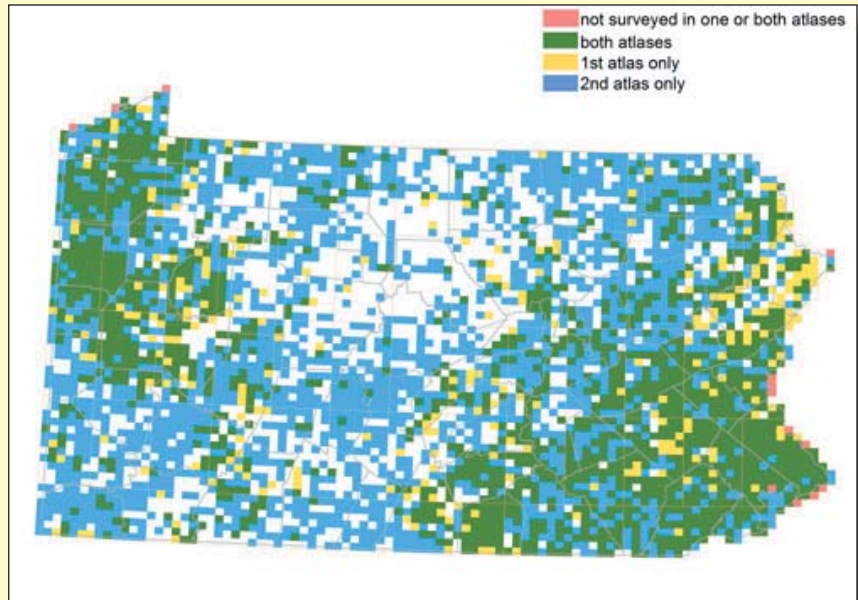
Total Blocks	4,937
Blocks Owned	3,694
Blocks with Data	4,933
Blocks complete	2,955
Block Effort Hours	102,307
Other Effort Hours	32,612
Total Auto Miles	844,776
Total Submissions	825,679
Registered Participants	3,282
Species Reported	217
Species Confirmed	189

A Sneak Peek at the Mapping of YOUR Data...

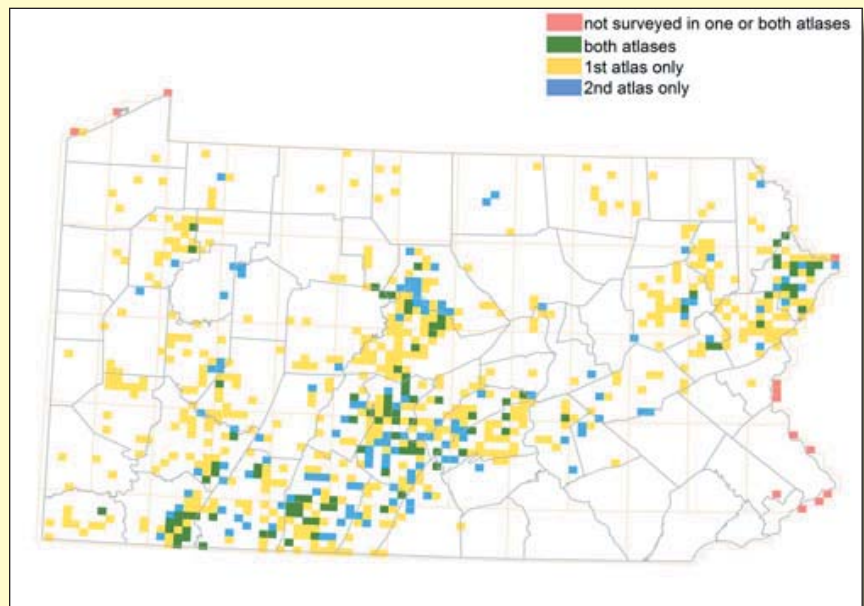
We've been very busy since the end of 2008 examining, analyzing, mapping, and getting very excited about all of the data that you and the rest of the project's thousands of volunteers have helped us to collect. So, we thought you might like to get a sneak peek at what you've accomplished!

On this page are two maps depicting species whose ranges have expanded extensively and contracted extensively between the period of the first atlas (1984-1989) and this one (2004-2009). Determining the status of birds in Pennsylvania (increasing or declining in range) is one the primary goal of the 2nd PBBA, and a lot of very interesting changes already are evident from your data. It will be these changes and much more that will form the content of the 2nd Atlas of Breeding Birds in Pennsylvania, the book publication which will report the results of the 2nd PBBA. It may take a year or more to write, and many months to publish once it's all written, but we still anticipate that it will be available for purchase before the end of 2010.

On page 3 is a glimpse of what a couple of pages of the next atlas may look like. You should all be very proud—it promises to be a handsome, ground-breaking publication that will guide bird conservation in Pennsylvania for many years to come. All registered volunteers who have contributed data will receive advance notice of its publication and a chance to purchase copies at a special discount price.



Map illustrating the change in the range of the **Canada Goose** between the 1st and 2nd Pennsylvania Breeding Bird Atlases.
Prepared by Andy Wilson



Map illustrating the change in the range of the **Golden-winged Warbler** between the 1st and 2nd Pennsylvania Breeding Bird Atlases.
Prepared by Andy Wilson

...And a Glimpse of what the Atlas might look like!

Eastern Meadowlark

Sturnella magna



The Eastern Meadowlark, as its name suggests, is a characteristic bird of meadows and other open grasslands. As such, its status in Pennsylvania has always been intrinsically linked with agriculture. Once a scarce bird, it quickly expanded its range to occupy the new grasslands created by the agriculture of early European settlers and was described as abundant by the middle years of the 19th Century (Baird 1845).

During the first atlas period the Eastern Meadowlark was widespread, absent only from the most densely forested regions and largest urban areas. However, by then populations had already been in long-term decline - Breeding Bird Survey data showed steep declines during the 1970s and early 1980s. By the second atlas period the population had dropped by 75% since 1970. Such declines have been noted across the species' breeding range (Sauer et al. 2008). Concurrent with the population decline, range contractions resulted in a 24% reduction in occupied blocks between the first and second atlas periods, with substantial gaps in the Eastern Meadowlark's range appearing in southeast Pennsylvania. The reduction in occupied atlas blocks was similar to that in New York State between 1980-85 and 2000-05 (McGowan and Corwin 2008).

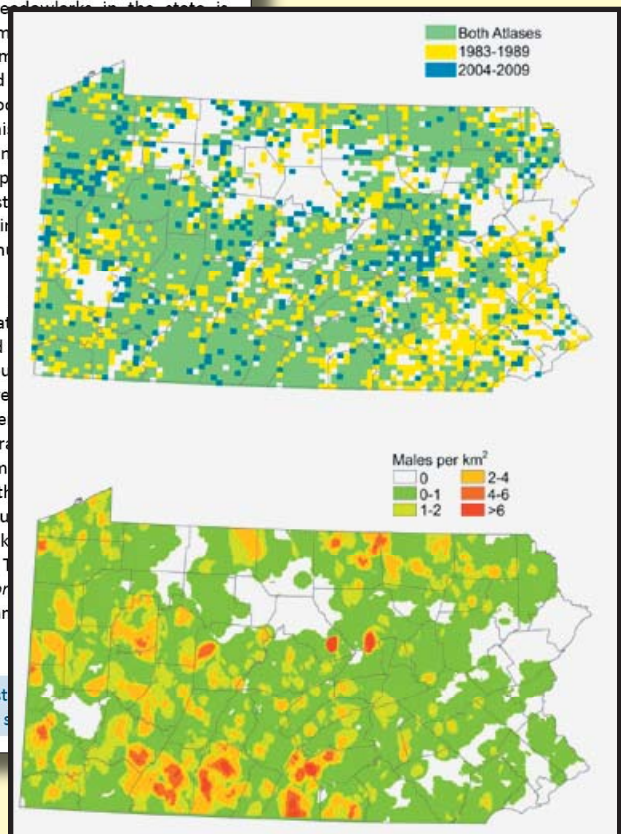
Some of the contraction in the range of the Eastern Meadowlark may be due to the development of farmland. Between 1969 and 1992 27% of farmland was lost in the Lehigh Valley, 37% was lost around Philadelphia (Goodrich et al. 2002), while there have been similar losses around Pittsburgh in recent

decades (Bolgiano 2000). In other areas, such as Tioga county, reforestation of former agricultural lands has resulted in localized range contractions. More generally, population and range losses can be attributed to changes in habitat quality, such as the loss of traditionally managed hayfields and substantial reduction in lightly grazed pasture (PFBC and PGC 2005). Despite the trend towards range contraction, there were localized range expansions, for example in Mercer, Clearfield and Northumberland counties, which may be due to new habitats created by reclaiming surface mines or planting of conservation grasslands.

During the second atlas period the Eastern Meadowlark was most likely to be found in atlas blocks that were at least 8% grassland. Although reclaimed surface mines support higher densities of this species than any other habitat in Pennsylvania, the bulk of the state's population is found on agricultural grasslands. Maintaining a substantial population of Eastern Meadowlarks in the state is therefore dependent on maintaining suitable habitats within the farm landscape. Increased fertilizer use and grassland meadows that are often too frequently cut for this purpose reduce grasslands such as those in the Pennsylvania Enhancement Program and have led to localized increases in Eastern Meadowlark abundance since 2001, but such increases are not sufficient to offset continuing landscape changes (Wilson 2009).

The Pennsylvania Eastern Meadowlark population was estimated at 168,000 singing males during the second atlas period, with the highest densities found mainly in southeastern Pennsylvania, with the highest densities from Adams west to Somerset. The statewide population. Extrapolating from the population was estimated at 168,000 singing males in the second atlas period, a 70% more than the current population. If declines are halted, it is likely that the population will continue to contract. The Eastern Meadowlark is listed as a *species of concern* in the Pennsylvania Game Commission's population declines.

2004-2009 population estimate: 99,000 (89,000-110,000)



Preliminary draft of a **species account** by Andy Wilson

Top: Map illustrating the change in the range of the **Eastern Meadowlark** between the 1st and 2nd Pennsylvania Breeding Bird Atlases.

Bottom: Map of the 2nd PBBA Eastern Meadowlark abundance data.

Maps prepared by Andy Wilson

2nd PBBA "Top Ten" Lists (through May 2009)

Volunteer Top Tens

No. of hours logged on the website:

Margaret Higbee	2488
John Fedak	2284
Richard Nugent	1908
Florence McGuire	1649
Jim McGuire	1507
Chris Lundberg	1464
Richard & Patricia Williams	1399
Nick Bolgiano	1364
Greg Grove	1272
Ramsay Koury	1254

No. of Records Entered:

John Fedak	41,413
Daniel Snell	23,878
Stan Kotala	18,660
Margaret Higbee	17,451
Richard Nugent	17,355
Richard & Patricia Williams	11,083
Doug Gross	9,999
Deuane Hoffman	9,784
Ramsay Koury	9,608
Amber Wingert	9,068

No. of blocks data submitted for:

Richard Nugent	658
John Fedak	340
Richard & Patricia Williams	289
Ramsay Koury	193
Margaret Higbee	181
Daniel Snell	162
Florence McGuire	155
Allen Schweinsberg	136
James Dunn	131
Deborah Grove	131



BLUE-HEADED VIREO ON NEST
PHOTO BY BOB ROSS



CHIPPING SPARROW, 3RD MOST COMMON SPECIES
PHOTO BY CHUCK MUSITANO

Species Top Tens (total # of blocks reported in)

Conservation Interest Species:

Wood Thrush	4549
Scarlet Tanager	4488
Eastern Meadowlark	2848
Black-throated Green Warbler	2640
Acadian Flycatcher	2396
Hooded Warbler	2362
Blue-headed Vireo	2283
Willow Flycatcher	1982
Louisiana Waterthrush	1740
Broad-winged Hawk	1696

Species of Special Concern:

Bald Eagle	544
Osprey	311
Northern Bobwhite	243
Northern Harrier	196
Double-crested Cormorant	195
Ring-billed Gull	165
Great Egret	116
Barn Owl	116
Sora	99
Swainson's Thrush	96

Most Common Species:

American Robin	4910
American Crow	4875
Chipping Sparrow	4871
Song Sparrow	4851
Common Yellowthroat	4817
Mourning Dove	4817
Indigo Bunting	4814
Red-eyed Vireo	4810
Gray Catbird	4800
American Goldfinch	4702

Least frequently observed:

Lesser Scaup	2
Lark Sparrow	2
Least Tern	2
Common Tern	2
Black Rail	2
Chukar	2
Trumpeter Swan	1
Yellow Rail	1
Bonaparte's Gull	1
Canvasback	1
Cattle Egret	1
Chuck-will's-widow	1
Northern Pintail	1

Once again, a HUGE Thank-you to ALL of our volunteers for each and every record submitted— we couldn't have done it with you!

Looking for Something To Do Now That the Atlas is Over?

Now that the data collection phase of the 2nd Pennsylvania Breeding Bird Atlas has come to a close, you may be wondering what to do with all of the free time you suddenly have. Why not put your fine-tuned bird observation skills to good use by joining NestWatch, the newest Citizen Science program from Cornell Lab of Ornithology?



BARN OWL CHICKS, PHOTO BY JIM MALONE

Participants in Nestwatch can help scientists learn more about bird families and how they might be affected by climate change. Researchers at Cornell hope to gain valuable information about breeding birds and how their natural rhythms may be changing. Studies have shown that some birds are laying their eggs sooner than in the past—as much

as nine days earlier in the case of Tree Swallows—and that could spell trouble if the eggs hatch before a steady supply of insects is available for feeding the young.

The Cornell Lab of Ornithology is a nonprofit membership institution whose mission is to interpret and conserve the earth's biological diversity through research, education, and citizen science focused on birds. Their programs work with citizen scientists, government and non-government agencies across North America and beyond, in the belief that bird enthusiasts of all ages and skill levels can and do make a difference.

NestWatch project leader Tina Phillips says, "NestWatch is easy and fun for adults and children. It helps all of us reconnect with nature, which is good for our own health and well-being. NestWatch is a great activity to do on your own, in a classroom, or as a homeschool project. And it helps the birds too!"

NestWatch participants

visit nests once or twice per week and report what they see during each visit, such as which kinds of birds are nesting, when the first eggs are laid, and the total number of eggs and young. NestWatchers will collect data for all nesting birds in North America. "Citizen scientists really make a big difference" says Phillips. "You can turn a nest-box hobby or a passion for bird watching into reliable data that, when combined with other observations from across the continent, increases our understanding of the impacts of environmental change and human land-use on breeding birds."

Participation in Nestwatch is free, and open to anyone in the United States and Canada. The only requirement is that you find an active bird nest, record the breeding activity and enter your data through the "My Nests" page on the website. The Cornell Scientists are especially interested in data on a group of focal species (see insert below), but will accept data on all nesting birds.

The time you devote to the project is entirely up to you. You may want to search for nests for a few days or for only a couple of hours. However, keep in mind that if you find a nest and want to follow it through the nesting season, you will need to give a bit of your time, possibly a few hours over two to four weeks. Although we



accept nests that have been visited only once, we encourage you to make multiple visits (4-5 days apart) to the same nest as this provides us with valuable additional information.

All NestWatch materials and instructions are available at www.nestwatch.org, and you won't even have to remember a new password— you can sign in as a NestWatcher using your 2nd PBBA account name and password! Downloads available from the NestWatch website include the project handbook and data sheet, a "Code of Conduct (instructions on collecting data without interrupting the nesting cycle)," and building plans in case you want to add nest boxes to your backyard and attract even more nesting birds.

Check out the "Frequently Ask Questions" for some great Nestwatching tips, and don't miss the Nest-cams (both live stream and still shots) showing real-time nesting activity of a variety of species, including owls, falcons, flycatchers, phoebes, and ducks!

NestWatch Eastern Focal Species

American Goldfinch
American Kestrel
American Robin
Barn Swallow
Black-capped Chickadee
Blue Jay
Carolina Chickadee
Eastern Bluebird
Eastern Phoebe

Gray Catbird
House Finch
House Wren
Mourning Dove
Northern Cardinal
Northern Mockingbird
Red-winged Blackbird
Song Sparrow
Tree Swallow



2nd Pennsylvania Breeding Bird Atlas
Carnegie Museum of Natural History
Powdermill Nature Reserve
1847 Route 381
Rector, PA 15677



**The 2nd Pennsylvania Breeding Bird Atlas
is sponsored by:**

Carnegie Museum of Natural History
Powdermill Avian Research Center
The Pennsylvania Game Commission

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Trish Miller ~ *GIS Support*
Pam Ferkett ~ *Administrative Assistant*
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Audubon Pennsylvania
National Park Service

IMPORTANT Reminder!... If you have breeding bird data from last year,
or any previous year, please enter it online before June 30,
or mail copies of your data (as soon as possible) to:
2nd PBBA; Powdermill Avian Research Center
1847 Route 381; Rector, PA 15677