



Black-capped Chronicle



Issue 8

Newsletter of the Maine Bird Atlas

Spring 2021

SETTING THE PRIORITIES FOR 2021

by Glen Mittelhauser, Project Coordinator

The focus for the 2021 breeding season: Priority Blocks

With 3 very successful seasons of the Maine Breeding Bird Atlas behind us and 2 more to go, we are officially on the home stretch and coordinating our birding efforts is of utmost importance. As of the day of writing, we have completed 30% of all blocks and 33% of the priority blocks. Our goal is to have 60% of priority blocks completed by the end of this summer. To do this, 230 more priority blocks need to be completed. If we succeed, it will put us in a good position to finish up the atlas in 2022. Finishing 230 blocks this year may seem like a lot - not something that any of us can do alone. But with some coordinated and focused effort, I am convinced that we can reach this goal.

Why focus on Priority Blocks?

To understand why priority blocks are our focus for this season, let us first go over what priority blocks are.

Priority blocks are a subset of all atlas blocks. Atlas blocks are directly related to the 721 USGS Topographic Quadrangle maps, or Quads, that span Maine. Following the standard protocol for similar atlases, we divided each Maine Quad map into six equal blocks, resulting in 4,081 atlas blocks. We know that Maine doesn't have enough active birders to get complete bird records from all 4,081 atlas blocks, so the priority block system was designed to ensure



Wild Turkey poult. Photo by Doug Hitchcox

that a subset of blocks spanning the entire state receives a minimum amount of effort, even in areas with few birds or birders. In other words, priority blocks are a systematically distributed subset of atlas blocks that we think we have a chance of finishing during the 5 years of the atlas. There is a total of 975 priority atlas blocks (nearly a quarter of the state).

Since priority blocks are systematically distributed across all portions of the state, some priority blocks may not have many unique breeding birds in them. We also know there are areas with very interesting birds that don't fall within priority blocks. But remember that the goal of the Maine Bird Atlas is not to get good coverage of the best birding sites in Maine. The goal is to get even coverage across all areas of the state regardless of whether the site has any unique species breeding there. If we can complete all priority blocks, it will give us a clear and comprehensive picture of the status of Maine birds across all regions of the state.

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How you can help.

In order to complete the Atlas, we need complete coverage of all priority blocks. This summer, if you can choose between atlasing in a priority block or a non-priority block during the breeding season, choose the priority block, particularly one that isn't complete yet. This doesn't mean that observations in non-priority atlas blocks are not valuable. All observations are of great value to the Atlas. I spend a lot of time along woods roads in my neighborhood that span 3 atlas blocks, and none of them are designated as priority blocks. All the bird observations from my walks will be used to improve the overall data quality of the Atlas, so the records are extremely valuable. Every bird observation entered with an associated breeding behavior puts a dot on the map. However, when I am looking to wander farther afield than my normal birding haunts, I look for areas designated as priority blocks.

Volunteers can help the Atlas effort the most by signing up to adopt a priority block to ensure that the block will be adequately covered over these last 2 summers of atlasing.

Atlas Block Busting:

In order to stay on track with our goal of completing 230 priority blocks this summer, we are forming a block-busting team of skilled birders who are interested in stepping in to help finish priority blocks. If you want to join the team or want to learn more, email the project coordinator at mainebirdatlas@gmail.com

You can look up which priority blocks have not yet been adopted by going to www.maine.gov/birdatlas and clicking on the 'Interactive Block Map'. If you are having any trouble adopting a block, email the Project Coordinator (mainebirdatlas@gmail.com). You can get the latest information about the birds that have been reported in any atlas block by going to the Maine Bird Atlas eBird effort map (ebird.org/atlasme/effortmap) and, by zooming in on the map, you can click on any priority block of interest. Priority blocks are outlined in black on the map and the observations for each block can be explored by clicking 'View all block data'.

So, adopt a priority block or make a special trip to a priority block and put in a few hours of birding. It is vital that we focus our efforts on priority blocks so we stay on track for finishing the Atlas by 2022. Doing so will ensure that we collect adequate records across the whole state so the next generation of birders 20 years from now can assess how bird populations have changed.



Northern Parula. Photo by Doug Hitchcox

Proper Portals & Copious Codes

By Doug Hitchcox, Outreach Coordinator

There are a few reminders worth repeating every season and as we go into the fourth breeding season, these are especially important to remember and get correct:

1) Which Portal to Submit Checklist To - If the checklist you are submitting has at least one breeding code on it, you should submit it to the Maine Bird Atlas portal (ebird.org/atlasme). Checklists with NO breeding codes should go in the Maine eBird portal (ebird.org/me).

2) Only Observations with Codes Count - Make sure and add codes to all species when applicable. Volunteers have a tendency to ignore possible and even many probable codes, but those are very important for filling the breeding distribution maps.

Read more about the important of entering breeding codes here: <https://www1.maine.gov/wordpress/ifwbirdatlas/2020/06/05/the-importance-of-entering-breeding-codes-on-checklists/>

Did you have 1 or more breeding codes on your checklist?

Remember that the 'Possible Breeding' codes (S, H) must be within the "Safe Dates"

YES

Entire checklist goes into
Maine Atlas eBird portal

Maine Bird Atlas

www.ebird.org/atlasme

NO

Entire checklist goes into
traditional Maine eBird portal

Maine eBird

www.ebird.org/me

Don't worry if you submit a checklist to the wrong portal. You can always make changes to your lists, and this article has instructions on switching portals: <https://ebird.org/atlasme/news/change-portals>

Strategies for Completing Local Priority Blocks

By Jeff Cherry, Atlas Volunteer

With two breeding seasons left for the Maine Bird Atlas project, the push is on to complete as many priority blocks as possible. No matter where you are in the state, there are nearby incomplete priority blocks that need attention. While these may not be very exciting, I've found covering blocks within a 30-45 minute range of my immediate home turf to be a fun and rewarding challenge.

Louds Island NW Change location

Lincoln County, Maine

Overview Recent visits

Status: Complete ✓	Block type: Priority	Effort hours (diurnal/nocturnal): 23.82 / 0.77
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Updated ~5 hr(s) ago.

45

Checklists | 7 Atlasers

	OBSERVED	POSSIBLE	PROBABLE	CONFIRMED	TOTAL
Maine BBA 2018-2022	22	21	23	26	70

Using the Explore Regions tools explained in the article will show you block status updates, like this Complete Priority Block!

The goal when working within a priority block is to cover all habitat types and code as many species as possible with codes in the Confirmed or Probable categories, with at least twenty hours of effort. It isn't necessary to confirm every species—some species are easy to confirm while others are difficult, but easy to get to Probable.



Nelson's Sparrow is typically a difficult species to code as Confirmed, but easy to get to Probable with the code S7. Seeing this bird carrying food on August 4, 2020 was a lucky break that allowed me to code it as Confirmed with code CF (Carrying Food). Photo by Jeff Cherry.

Because working full time interferes with my birding, I'm usually limited to atlasing for a few hours in the early morning each day, with some late afternoon, evening and nocturnal forays. Fortunately, these are all great times to atlas. Working within given time and space parameters in a priority block is similar to doing a Big Day or a Christmas Bird Count section, and the challenge to accomplish defined goals can be just as motivating. Here are the strategies that have worked well for me.

1. Preliminary planning.

Initial planning is a great activity to do during bad weather in the winter and early spring.

First, locate incomplete priority blocks near you using this map <https://ebird.org/atlasme/effortmap>.

Once you've chosen a block that you'd like to complete, check the previous effort and what species have already been coded there using the "Explore Regions" feature on the Explore page of the Maine Bird Atlas eBird portal, <https://ebird.org/atlasme/explore>.

You'll find that some blocks already have a lot of effort so will only need a few targeted confirmations to get to complete status, while others will have little previous effort so will require more work.

Editor's note: Also, review satellite imagery to identify different habitats to explore within your chosen block (click on the orange button link to the Interactive Map from the atlas home page, maine.gov/birdatlas).

2. Preparatory study.

After reviewing ebird checklists and satellite images for the block(s) you're targeting, you'll be able to anticipate some of the species you'll find breeding there. It really helps to study up on the breeding biology of your probable species before going into the field to develop a foundational knowledge of their habitat preferences, nest locations, and breeding displays.

Two of my favorite resources are Birds of the World, <https://birdsoftheworld.org/bow/home>, which is well worth the subscription fee, and A Field Guide to Birds' Nests by Hal Harrison which is long out of print, but well worth owning if you can find a copy.

Editor's note: For those looking for an easy to use, free option, allaboutbirds.org by the Cornell Lab is also a great resource.

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3. Field reconnaissance.

Make a few scouting trips to your block(s), even during the winter atlas season or in early spring, looking for good, safe access to all habitat types, paying special attention to wetlands for waterfowl, rails, and marsh-nesting songbirds.

Don't forget to take note of nesting opportunities within the built environment as well. Look for nest boxes, which provide an easy way to pick up confirmations for Tree Swallow, Eastern Bluebird, and House Wren.



Great finds under this bridge - this Cliff Swallow nest, a Maine state species of special concern and an Eastern Phoebe nest. Photo by Jeff Cherry.

Houses, barns and farmyards will be good places to confirm House Sparrow, European Starling, and Rock Pigeon. Also, note any bridges in your block where you'll be able to safely check the underside for Eastern Phoebe, Cliff Swallow, and Rock Pigeon nests. Finally, power line corridors are great places to find species like breeding Prairie Warbler, Eastern Towhee, Indigo Bunting, and Field Sparrow depending, of course, on where you are in the state. Also check the powerline infrastructure for Osprey, Red-tailed Hawk, and Common Raven nests.

4. Field work.

I start working my blocks in late March and early April with targeted expeditions looking for early nesting species (e.g., owls, American Woodcock, Wilson's Snipe, Ruffed Grouse).

In late April, I start making trips at regular intervals to the habitats I've chosen as likely locations to find specific species within each of my blocks. For instance, if I'm covering 4 blocks in a season, I rotate a day in each block so that there are about four days between visits to a single block.

I keep track of singing birds and code all species, within safe dates. If a bird is singing outside of safe dates, it's still good to note it as singing as a comment in your checklist as that information (as is true of any extra notes you take) often proves to be valuable

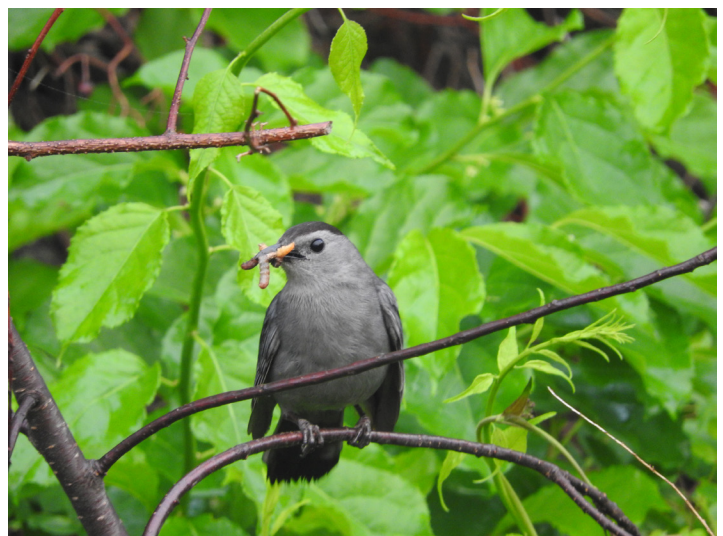


An Eastern Kingbird collecting nesting material is an easy confirmation. Photo by Jeff Cherry.

I continue with regular visits to the same locations throughout the season. As the season progresses, birds that are singing 7 or more days apart at the same location should be coded as S7, the workhorse Probable code that's an easy way to get most species into the Probable category.

In the early season your checklists will have a lot of S (singing) and H (appropriate habitat) codes, with some CN (carrying nesting material) and NB (nest building) codes. Here's a typical early season checklist: <https://ebird.org/atlasme/checklist/S67518983>.

As the season progresses and eggs hatch, you will start seeing many birds carrying food, coded as CF, which is one of the best ways to confirm breeding for most songbirds. Here's a typical peak season checklist: <https://ebird.org/atlasme/checklist/S71113003>.



A Gray Catbird carrying Food. Photo by Jeff Cherry.

If you find that you're struggling to get a few more confirmations to complete a block as the breeding season winds down, concentrate on Wild Turkey which can be confirmed late in the season with an FL (fledgling) code, or look for breeding activities of late-nesting species like American Goldfinch and Cedar Waxwing.

5. Wrapping up.

Since I try to use my time efficiently to complete as many priority blocks as I can within a season, I keep close track of block completion by checking their status on the eBird Maine Bird Atlas portal. That way I don't overspend time in a completed block when other blocks need attention.

So, what can be done by dedicating several hours a day to covering priority blocks during the breeding season? In 2020, I started working on 5 blocks at the beginning of the season. One needed only a few more confirmations to get to complete status, so by targeting a few specific species I was able to complete that block before June.

The other 4 blocks needed more effort, but most were complete by late June. As I completed blocks, I picked up others, so was able to complete 8 blocks last season with 260 eBird checklists submitted to the Maine Bird Atlas portal from February 1 to August 25, representing several hundred hours of effort.

Summary Advice

The trick to efficiently completing priority blocks can be summed up with two words of advice: Be Strategic. Anticipate what species you're likely to see given the habitats within your blocks, know what behaviors to look for, and settle for Probable codes on species that are difficult to confirm.

While many of us might occasionally enjoy wandering aimlessly to explore a beautiful location and see what birds are around, most birders also understand strategically "getting" a certain bird in an efficient way.

But being strategic as an atlas project volunteer yields rewards that are quite different from adding rarities to your list. The rewards of covering priority blocks to completion include developing a deep familiarity with a 9-square-mile range of habitats and their inhabitants, and contributing to the greater scientific good of environmental monitoring and documentation of birds in Maine.

MAINE BIRD ATLAS WANTED BIRDS

STILL NOT CONFIRMED AS BREEDING IN MAINE

MARSHES & PONDS:

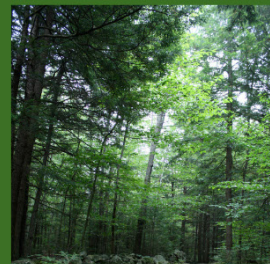
- MUTE SWAN
- NORTHERN PINTAIL
- REDHEAD
- LESSER SCAUP
- RUDDY DUCK
- AMERICAN COOT
- WILSON'S PHALAROPE
- TRICOLORED HERON
- CATTLE EGRET
- WHITE-FACED IBIS
- SOLITARY SANDPIPER
- YELLOW-CROWNED
- NIGHT-HERON



WOODLAND &

UNDERGROWTH:

- EASTERN SCREECH-OWL
- WHITE-EYED VIREO
- GOLDEN-WINGED WARBLER
- HARLEQUIN DUCK



COASTAL:

- LESSER BLACK-BACKED GULL
- BLACK-HEADED GULL



FIELDS:

- CHUCK-WILL'S-WIDOW
- EURASIAN COLLARED DOVE
- RED-HEADED WOODPECKER



KEEP AN EYE OUT
FOR THESE
BIRDS IN SEASON
4 AND 5



Understanding when Blocks are Considered “Complete”

By Glen Mittelhauser, Project Coordinator

As you are out atlasing and submitting your records, you may be starting to wonder how we determine if a block is complete. Basically, we consider a block complete when it meets the block completion guidelines published in the volunteer handbook (<https://www.maine.gov/ifw/fish-wildlife/maine-bird-atlas/docs/Volunteer-Handbook-Maine-Bird-Atlas.pdf>). However, based on guidance from our atlas steering committee, we recently added in 2 alternate options to the block completion criteria. In this article, I will explain all of these criteria and how we use them when assessing block completion.

The guidelines on block completion published in the Volunteer handbook still apply, and can be summarized as follows:

- 1) **Total survey time:** at least 20 hours of surveying in the block – nocturnal checklists are encouraged but not required.
- 2) **Coverage of habitats:** each habitat type present in the block has been checked.
- 3) **Timing of visits:** surveys were conducted throughout the breeding season to account for early and late nesters.
- 4) **% of Confirmed Breeders:** 50% or more of the coded species detected in the block are categorized as ‘confirmed’ breeders.

In addition, we have recently added in 2 alternate criteria for #1 (total survey time) and #4 (% of confirmed breeders). These options can be summarized as follows:

- 1) **Total survey time:** If a block is in a very remote area away from population centers and/or it has few roads, I may be considered complete when at least 15 hours of surveying time has been reached. If you want to check if a particular block falls into this category, send an email to the atlas coordinator (mainebirdatlas@gmail.com).
- 2) **% of Confirmed Breeders:** If a block has met the total survey time requirement but has less than 50% of the species coded as ‘confirmed’ breeders, the block can be considered complete if at least 60% of the species are coded as either ‘confirmed’ or ‘probable’.

The good news is that we take care of all these details regarding block completion for you. We check the status of each block at least once a week during the breeding season and mark blocks that have met the criteria as complete. You can use the ‘Explore Atlas Regions’ tool (ebird.org/atlasme/explore) to check on the completion status of any block.

When a block is considered ‘complete’, we ask that you divert your attention to other incomplete priority blocks. New sightings will still be accepted for completed blocks and you should still submit such sightings if you notice them, but please focus your valuable time on incomplete priority blocks when possible.



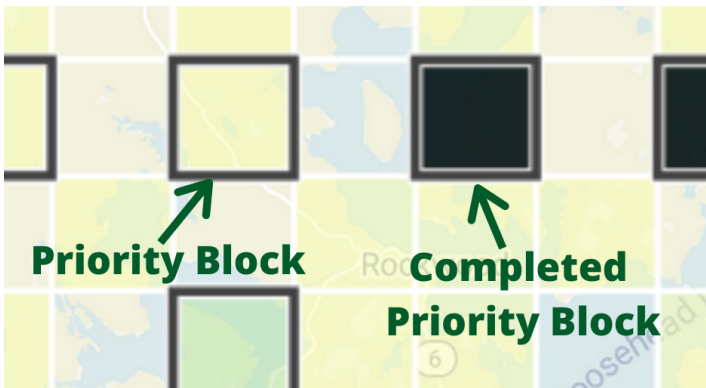
Some species, like this Merlin, can be difficult to get confirmed records of without spending a lot of time in a block, so having an adjusted block completion criteria that allows for 60% of species to be confirmed or probable will help finish blocks without too much extra effort needed.

Atlasing Like A Pro

By Glen Mittelhauser, Project Coordinator

Atlasing during the breeding season is quite simple - every bird observation within an atlas block entered with an associated breeding behavior puts a dot on the map. By pooling all of our observations among all atlas blocks across the state, we will have a pretty good understanding of the breeding distribution of all species by the end of this project. Strategic atlasing, however, can give us even greater insights into Maine bird species. Essentially, strategic atlasing means putting your effort where it is most needed to help fill in large gaps of the state with little to no information on breeding birds. Here are some planning tips to start atlasing like a pro.

Find incomplete priority blocks: Use the 'Atlas Effort Map' to explore priority blocks in areas where you want to go birding (ebird.org/atlasme/effortmap). Priority blocks needing effort are outlined with a thick black line. Once they are completed, priority blocks are colored black.

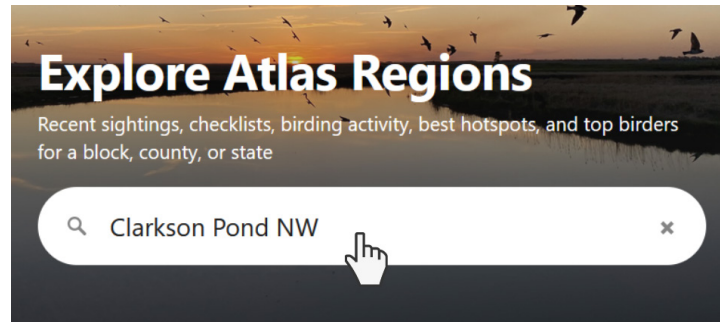


Download a block map: Plan how you will access the priority block and what spots you will visit by downloading a detailed topographic map of the block (maine.maps.arcgis.com/apps/webappviewer/index.html?id=e78f7fc-be2248369ee35cb8acce29f). Take this map with you when you go birding to help you keep track of block boundaries. These maps are also great for referencing/finding different habitat types to explore in a block.

For help with boundaries, you can also check out our blog post on downloading and using the ArcGIS Explorer app for free: maine.gov/wordpress/ifwbirdatlas/2021/01/27/winter-atlasing-app-for-block-updates/



Look up what species have already been coded in the block: Consider ahead of time what species you are hoping to see and what level of breeding code you are hoping to get. Go to the 'Explore Atlas Regions' tool (ebird.org/atlasme/explore) to look up the species that could be upgraded from no code or possible breeding code to the probable or confirmed breeding codes. See if there are any obvious gaps – are species represented from all of the habitats present in the block? You can also print out the list to take with you in the field.



Look up the effort already expended in the block: Each block needs 20+ hours of effort to be completed, however, if you think that your block may be considered quite remote with few roads (you can email mainebirdatlas@gmail.com to check), this requirement may be reduced to 15+ hours of effort. Remember, this effort needs to be distributed across all habitats found in the block. Make sure to check grasslands, marshes, hardwood forests, softwood forests, etc. if they are present in the block. The 'Atlas Effort Map' (ebird.org/atlasme/effortmap) gives you a great visualization of the effort in each atlas block.

Understand the New Block Completion Criteria: Reference our article on this topic on p.6 and then look up how close your block is to being completed using the 'Explore Atlas Regions' tool (ebird.org/atlasme/explore).

Join the Atlas Block-busting Team: If you need some help figuring out where exactly to bird and you're interested in helping complete blocks that are more distant than your local neighborhood, join the Atlas Block-busters by sending an email to mainebirdatlas@gmail.com. We will give you access to a block busting website that can help you be even more efficient in the field.

In summary, before heading out in the field, make a plan. Figure out your route and what target species you are after. When out in the field, know how to figure out your location in relation to the block boundary. Keep your checklists short so that the location is fairly precise. We generally suggest that traveling checklists should not exceed 1 mile long. Perhaps the most valuable tip for atlasing is to go slow and listen.

And finally, enjoy your time birding! We thank you for all of your efforts atlasing during these last 2 years of the Maine Bird Atlas.

Join the Special Species Team!

By Logan Parker, Special Species and Habitat Technician

Want to take your atlasing efforts to the next level? Join a special species project to help us gather observations of some tough-to-observe birds that are often overlooked while birding. Volunteers of various experience levels are needed to listen for nocturnal species, secretive wetland birds, and nest box-using bird species. Whether hearing the “boom” of a Common Nighthawk, watching young American Kestrels fledge from your nest box, or observing a Virginia Rail lead it’s downy, black young through the sedges, special species projects can create some wonderful memories all while contributing to conservation!

Adopt-a-Marsh: We have just over one hundred marshes left to survey for secretive marsh birds with just two years remaining. Marsh adopters will visit and conduct playback surveys of wetland birds three times between mid-May to late June. While some marshes are accessible from the road, others may require a hike or a paddle. The level of adventure is up to you! We have prepared training materials to help volunteers identify the project’s 9 target species by sight and sound: Pied-billed Grebe, American Bittern, Least Bittern, Green Heron, Virginia Rail, Sora, American Coot, Common Gallinule, and Sedge Wren. A map of available marshes can be found at: www.mainenaturalhistory.org/mebirdatlas-marshbirds-surveys.

Nightjar Monitoring: Calling all night owls! We are seeking volunteers to collect observations of Eastern Whip-poor-wills and Common Nighthawks - two nightjar species known to be undergoing widespread decline throughout

their breeding ranges. The extent of declines in Maine is unknown and requires specialized monitoring protocols to collect data. We are looking for volunteers to adopt and survey a road-based route once at sunset and again on a moonlit summer night. Volunteers must be able to identify Maine’s nightjars by sound. An ability to identify Maine’s owls and other crepuscular/nocturnal birds by ear is a big plus. A map of available routes can be found on the project website: www.mainenightjar.com/routes.

Nest Box Monitoring: Initiated to improve nesting opportunities and gather valuable breeding information for Maine’s cavity nesting birds, the Maine Nest Box Monitoring Project is entering its third season with over 100 nest boxes deployed all around the state. These boxes target species including Eastern Bluebirds, Tree Swallows, American Kestrels, and Northern Saw-whet Owls. We are also seeking volunteers with access to Cliff Swallow colonies to install and monitor artificial clay nests (available free while supplies last). Handbooks for building and monitoring nesting structures for all of the target species can be found here: <https://www.mainenaturalhistory.org/nestbox>.

Additional guidance for observing birds in priority habitats can be found on the Special Species page of the Atlas website: www.maine.gov/ifw/fish-wildlife/maine-bird-atlas/special-species.html.

To sign up to take part in any of these exciting projects, contact Logan at logan@hereinthewill.com with the project title included in the subject line.



Common Nighthawks and other nocturnal birds are not often detected by regular atlasing effort, but by following special protocols, we can find them more easily for the atlas. Photo by Logan Parker.

First Maine Bird Atlas - Thoughts and Memories

by Chuck Whitney, Regional Coordinator

I migrated to Maine from South Carolina 42 years ago, eager to begin a new life. Finding fellow bird and natural history enthusiasts to pursue my passions was an important part of acculturating to my new home territory. In the process of establishing new friendships, Maine's Breeding Bird Atlas proved to be invaluable as an introduction to both the geography, culture and people of my new home. Many of my favorite places in Maine to this day were discovered in the early 1980's while working on the first bird atlas.

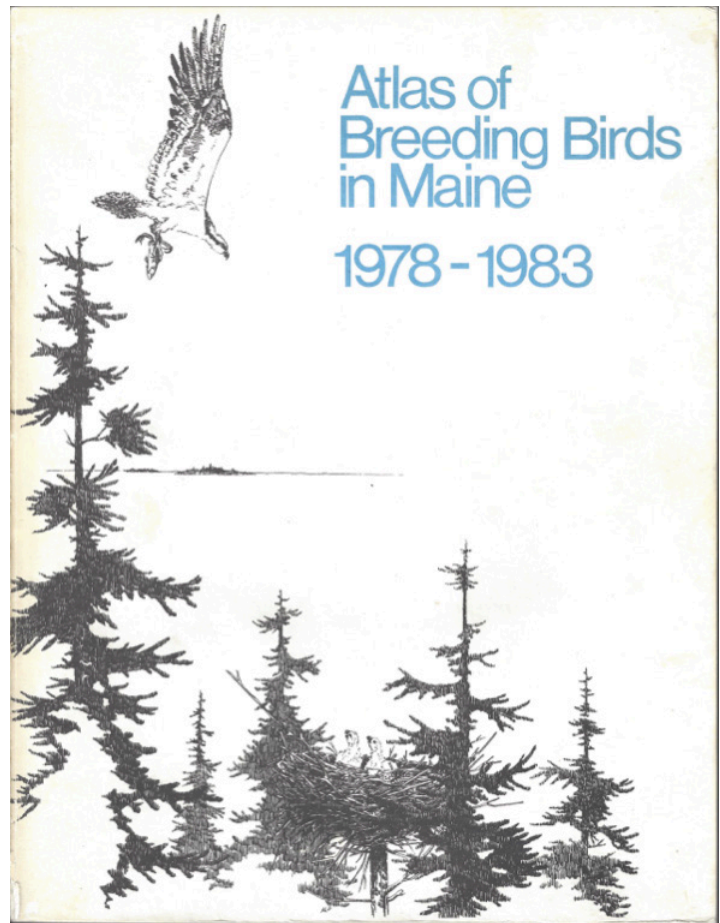
In anticipation to my move to Maine, I followed bird sightings here through *American Birds* and A.O.U publications. Studying all the state records of rare birds, I decided Lincolnville was the best birding in the state. I later discovered that Peter Vickery was from Lincolnville and all those records reflected time documenting what was in his yard. That showed me how important both effort and shared data are to understanding bird distribution, especially in a vast geographical region with relatively few people contributing data.

I had no friends here and 2 relatives with me when I arrived. I now have fewer relatives and more friends. Bonnie Bochan, a colleague at work and coordinator of the project, got me involved with atlasing. Jeff Wells, a high school student (with no transportation), joined me in many adventures afield. Bruce Barker, Mike Lucey, Bill Townsend, Peter Vickery, and others shared many hours traversing the state for birds. James Bond's historical, detailed records and field notes added much to my knowledge and excitement for Maine's birds and subsequent documenting of breeding birds.

Communication and data distribution were primitive by today's standards. Members of the Breeding Bird Atlas Committee came together a few times a year in person to share data and strategize how to best cover such a vast area with few people. Data were recorded on index-sized cards as blocks were surveyed. If you did not have access to the cards already filled out for a block you had no idea what was complete and what needed work.

Very few photographs were used to document unexpected or first state records. I'm explaining this not because it was "the good old days" of field work but to put into perspective some of the challenges we had. Now in the second atlas, I get frustrated when I lose internet connectivity, run out of camera battery charge or when people do not respond to emails quickly. In the first atlas frustrations arose around losing my pencil, cards getting wet, or struggling with my sadly lacking ability to sketch and describe an unexpected species with the precision of a digital photograph. (see also 'Documenting Birds' article-p. 10)

My many forays to the far reaches of Maine in search of breeding birds not only revealed to me the beauty and



The cover of the Maine's first breeding bird atlas, which provides the baseline for much of the breeding information we are now updating, 35 years later.

diversity of our state but taught me that there could be more to "watching birds" than identification and satisfying a passion for finding new or rare species. I quickly learned that to confirm evidence of breeding I needed to slow down, spend more time with individual birds and exercise more patience. I needed to understand what birds were doing. Breeding behavior details were not to be found in traditional field guides of the day. This taught me that there were new possibilities for appreciating birds for more than their rarity to our state bird list and made me a better naturalist. Being in my twenties I was impatient, competitive, and eager to find new birds above gaining experiential knowledge of behavior. I learned that what birds were doing was as interesting as knowing who they were. For a young man, that was an important revelation.

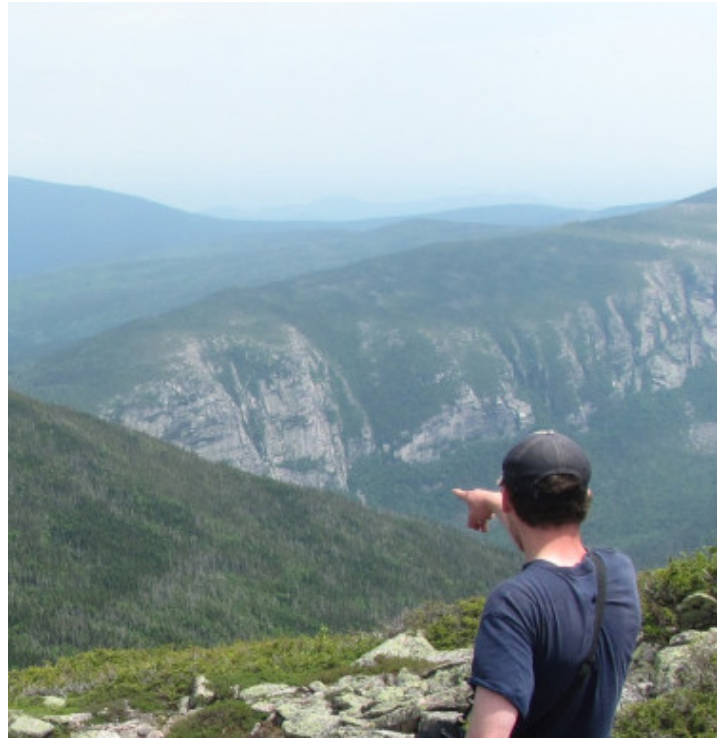
The year after the first atlas ended, I was ready to begin the next one. This second atlas has brought renewed interest in bird watching (as opposed to birding) for me. I only wish so many of my birding buddies from those days were still around to share this atlas experience. I am so very happy to see the wealth of talent, energy, and pan-generational engagement in the second atlas. I know our understanding of the avifauna of Maine will be richer for it. I also know that those participating will be better for the experience.

Remote Travel Grants

Is paddling the Allagash Wilderness Waterway scanning for waterfowl, wading birds, songbirds, and inland gulls on your birding bucket list? Have you dreamed about heading out with friends for a few days of exploring the North Maine Woods looking to add boreal birds like American Three-toed Woodpeckers, Spruce Grouse, and Boreal Chickadees to your life list? Maybe you have always wanted to hike sections of the Appalachian Trail listening for the alpine songs of Bicknell's Thrush and Blackpoll Warbler? We can help make your birding expedition a reality through an exciting new grant opportunity for Maine Bird Atlas volunteers.

The Maine Bird Atlas is currently accepting proposals from adventure-seeking birders who are interested in adopting and surveying atlas blocks in remote regions of the state during the 2021 breeding season. Grants will be awarded to volunteers to help cover the expenses associated with traveling to these remote areas. To apply for a grant, volunteers must complete and submit the [2021 Grant Application](#). Grant proposals should be submitted to Glen Mittelhauser, Coordinator of the Maine Bird Atlas as soon as possible to be considered for the 2021 breeding season.

Read more at: mainenaturalhistory.org/travelgrant



Virtual Weekly Q&As



Last summer we began hosting weekly discussions on Zoom as an opportunity to answer questions and talk about anything birds and atlas related. Thanks to the positive feedback from participants, we are continuing these Zoom Q&A sessions again this summer!

This is a great opportunity to talk with Atlas staff about any questions you have, from the birds in your backyard, to data entry or eBird problems, or even where to

best spend your time atlasing, we've got the answers! **Join us every THURSDAY nights at 6:30PM beginning on April 29th!**

<https://us02web.zoom.us/j/84851950089>

Check the [Maine Bird Atlas Facebook page](#) or our Event Calendar on maine.gov/birdatlas for updates to this schedule.

Documenting Birds

by Louis Bevier, Steering Committee Member

One of the pleasures of watching birds is sharing observations with others. Whether it is a first for the year or a first for the state, we naturally enjoy telling other people of our finds. If your sightings are used for a detailed study of birds in your region, as for the breeding bird atlas, then your detailed notes will have made a lasting contribution both to other people and to bird conservation. To ensure your observations are as valuable as they can be, one must practice keeping notes. Photographs without accompanying notes may someday be looked on as a mystery—Where was that? When was that? Who took that? Audio recordings of birds lacking notes also lack context and scientific value.

The allure of listing is undeniable and the prospect of finding unusual birds has probably led to better coverage of our state than at any other time. Seeking out a locally rare breeder in one's atlas block is motivation enough. Let's put this to good work. Some birds perceived as mundane can be rare on a local level. When you learn that a bird is the only local record, some documentation should be recorded. A *description of the bird* is the fundamental part of documentation.

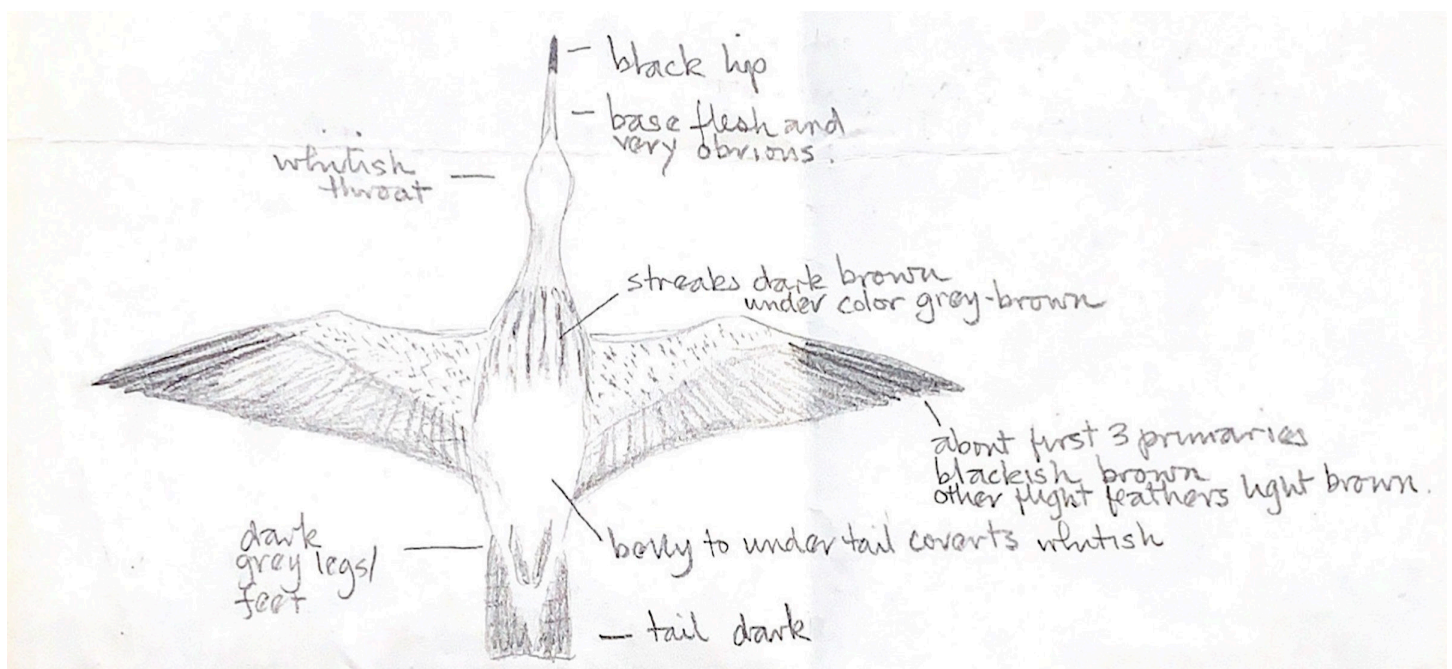
This short article will describe techniques to make your observations valuable to those using them long into the future. There are many excellent resources on keeping notes and writing descriptions that I'll point you toward at the end.

For most of us, the basic form of documentation is the written description based on notes taken while studying a bird. Learning to write a description takes practice, in part because learning to see accurately takes practice. The best way to start is to describe common birds or photographs of

birds. Learn the names for feathers and patterns on birds (use bird topography outlines in field guides), and then develop an orderly and consistent approach to description, including size and structure, head, upperparts, underparts, and bare parts (eyes and legs, for example). Follow the same order each time. Don't be put off by jargon like tertials or scapulars. Communication with others is most effective if these terms are used. Learn techniques for describing field marks; understand molts and plumages; learn to accurately judge size and structure. Have you ever wondered why tail spots on warblers look different from above and below? Have you ever seen the bold black-and-white wing patch on the underwing of White-breasted Nuthatch?

Take notes while watching the bird! This is often difficult, particularly when you want to chat and enjoy a rarity with your friends. Get them to help out, though. One can write as another dictates, then reverse roles. This is a great learning exercise and reinforces independent confirmation of what each thinks they see. Sketches of the bird can be quite helpful. It is relatively easy to draw a diagram of the bird with notes pointing to observed patterns. Avoid the temptation to use a field guide when making these drawings, and remember that one's aim is to describe the individual bird under study and not a generalized image of the species.

Write notes for the benefit of someone who has not seen the bird you describe. Descriptions should include as much detail as possible. Behavioral notes are highly valuable. One persistent problem is that written details often contain descriptions of the bird's location, habitat, or movements but fail to describe the bird itself (see examples). Lastly, do not be afraid to state what details you did not note; sometimes a negative comment imparts more information than an ambiguous description.



Sketch of Black-tailed Godwit with notes by Donna Dittmann

Examples of details submitted but lacking actual descriptions; Could you identify these birds based on this information?

Single female at edge of Mallard flock, diving and foraging. Seen from 20 m in good light with binoculars.

perched over marsh calling

— or —

continuing

Although earnest, these notes are of little to no scientific value.

Avoid a pre-conceived or generalized “field guide” image of a species. Such preconception leads to bias. In this regard, be mindful to avoid writing down characters that should be present on the species you think you are seeing. These impressions and biases also may cause you to overlook or to be fooled by common abnormalities and deformities, illusions of color under different lighting conditions, misperception of size, geographical variation in a species, or the oddball hybrid (several folks innocently fell into this trap with our smaller white egrets). Through careful observation you will avoid these problems and acquire a deeper and more lasting appreciation for birds.



Snow Bunting documented! (photo by L. Bevier)

Photographs greatly enhance the substantiation of any record and should be sought if at all possible. Obtaining video or recordings of vocalizations is also valuable and becoming more prevalent. If you document a rarity with such materials, remember that digital files and formats are ephemeral; for their long term preservation you should have the originals deposited with an archive.

What about birds caught, measured, banded, and released by researchers? Banders that release a bird may think they have a more secure record, but the data recorded are no different from a sight record because there is no independently verifiable evidence without a photo. Once the bird is gone, nobody can re-confirm the measurements and identification unless the bird is trapped again. Bird banders who trap a rare bird should take careful notes, measurements, and photographs from a number of angles (take photos against a neutral background away from harsh light and with a normal perspective as possible showing dorsal, ventral, and lateral aspects). Practice taking photos with a common bird so that you are ready when a rarity hits the net. The practice of rehabilitating injured birds has become important to bird conservation, and people working in places where birds are taken, such as veterinary hospitals, should obtain the exact date and place where the bird was found. Sometimes injured birds are transported great distances, and this can confuse the place of origin.

I hope the above encourages observers to look closely at birds, take careful notes, and thereby leave something of lasting value for the enjoyment of posterity if not for science.

USEFUL REFERENCE:

Further Reading:

“What is Sufficient Documentation for Unusual Records?” by George Clark (Connecticut Warbler 3:19-20, 1983)
<https://ctbirding.org/wp-content/uploads/2017/01/CTWarblerVolume03.pdf>

Other articles with tips documenting birds are on the Maine Bird Records Committee web site:
<https://sites.google.com/site/mainebirdrecordscommittee/rare-bird-report-form>

Recording Vocalization:

Learn to use your smartphone to record. Voice memo apps or dedicated recording apps are best, but a video can capture sound too, although not at as good a quality. Learn the settings and record in a lossless format. Aim mic directly as bird vocalizing. Helpful tips can be found at this web site:
<https://support.ebird.org/en/support/solutions/articles/48001064298-sound-recording-tips>

Translating Atlas Data Into Information

By *Evan Adams, Ecological Modeler*
and *Ed Jenkins, Avian Biologist*

Data Rich, Information Poor. Ecologists use this phrase to describe situations where a lot of data have been collected, but analysis or synthesis is missing to affect positive outcomes for the environment. By the end of the 2nd Maine Bird Atlas, we'll have data from over 10,000 bird surveys in addition to thousands of hours of citizen science atlas efforts. We'll be data rich! So how do you convert all of these data into useful information?

To answer that, we first have to think about what kinds of decisions we want to inform and who is making them. In the world of conservation biology, we are often making decisions about management or regulatory actions based on an animal's population size, distribution, or demographic rates such as adult survival or productivity. While the Maine Bird Atlas can't answer all these questions, we can convert our survey data into tools that will hopefully inform key conservation decisions in the years to come. Our project is well-suited for spatial planning efforts, so converting our data into maps that people can use to identify critical areas for conservation prioritization.

Here, we preview some of the data visualization tools we are building for the published end product, useful by Maine's conservation community and others. As a quick reminder, we aren't done with the atlas yet, and all figures are preliminary and only based on 2-3 years of data. We chose Northern Cardinal as our example species here. They have been frequently detected during the atlas, and I think we can all agree, are pretty cool birds.

First, we want to show you breeding confirmation maps. Breeding codes are unique to atlasing, and we can leverage those data to map where we are confident that birds are nesting. We plot the highest breeding category (possible, probably, confirmed) for each atlas block. For Northern Cardinals in Maine, we have a high breeding confirmations rate, perhaps because they nest in easy-to-find places near people's houses.

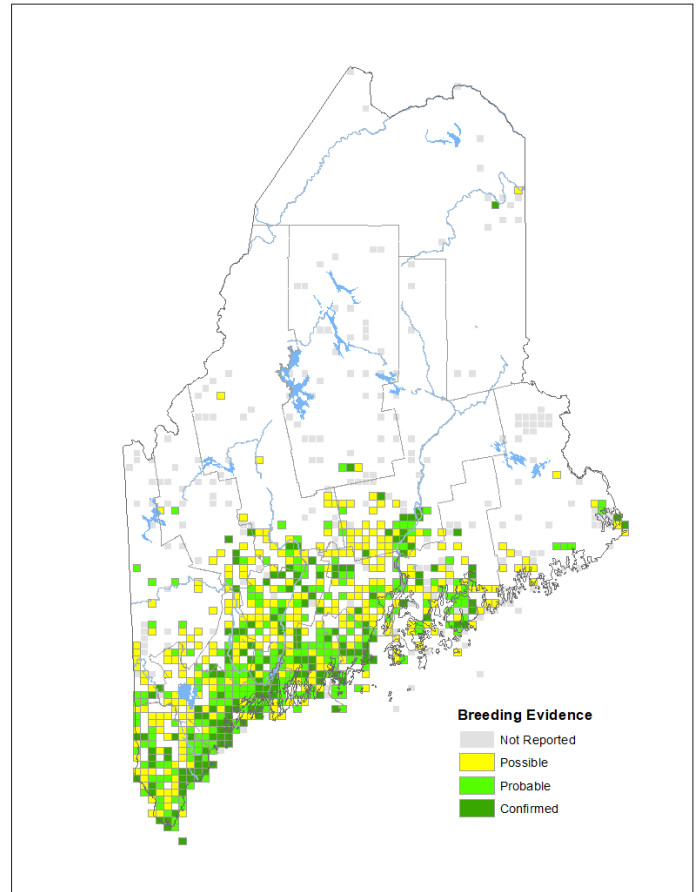


Figure 1. Highest breeding evidence per atlas block for Northern Cardinal in the first three years of the second Maine breeding bird atlas.

Second, we can break down our atlas data into seasonal charts that show the changes in detection rate and detection type throughout the year. Northern Cardinals start singing early in the year, and you can see that detections begin in March. Based on breeding codes, we can track when early nesting, late nesting, and post-fledging happens for the species. Cardinals have a fairly protracted breeding season; recently fledged young being seen from May to August. (See figure on top of next page).



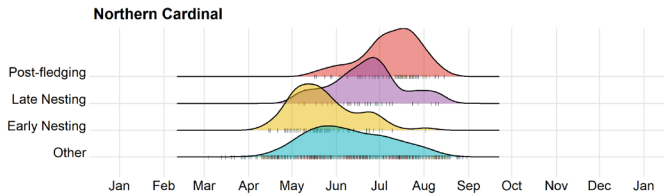


Figure 2. Distribution of breeding evidence categories throughout the calendar year for Northern Cardinal observations in the first three years of the second Maine breeding bird atlas. Early nesting includes territorial behaviors and nest-building, late nesting includes food carrying and nestling provisioning, and post-fledging includes recently fledged young.

Third, we want to compare our data to that of the first atlas published in 1983. By looking at changes in breeding distributions and breeding categories, we can begin to understand the factors driving population change in these species. Northern Cardinals have increased considerably in southern Maine since the first atlas, which is likely a result of increased urbanization and warmer weather in southern Maine. We'll further explore the reasons for this shift once data collection is complete.

In addition to volunteer contributed data, we have hired crews each year that conduct standardized abundance sampling surveys (i.e., point counts). We can use this data to estimate bird density during the breeding season. To do this, we collect additional data during point counts that help us estimate how effective our survey is at finding birds in the study area. Once we correct those biases, we can estimate the species' true density using some nifty spatial models. Using this method, we can estimate bird density continuously through the state, even in areas that we haven't visited before.

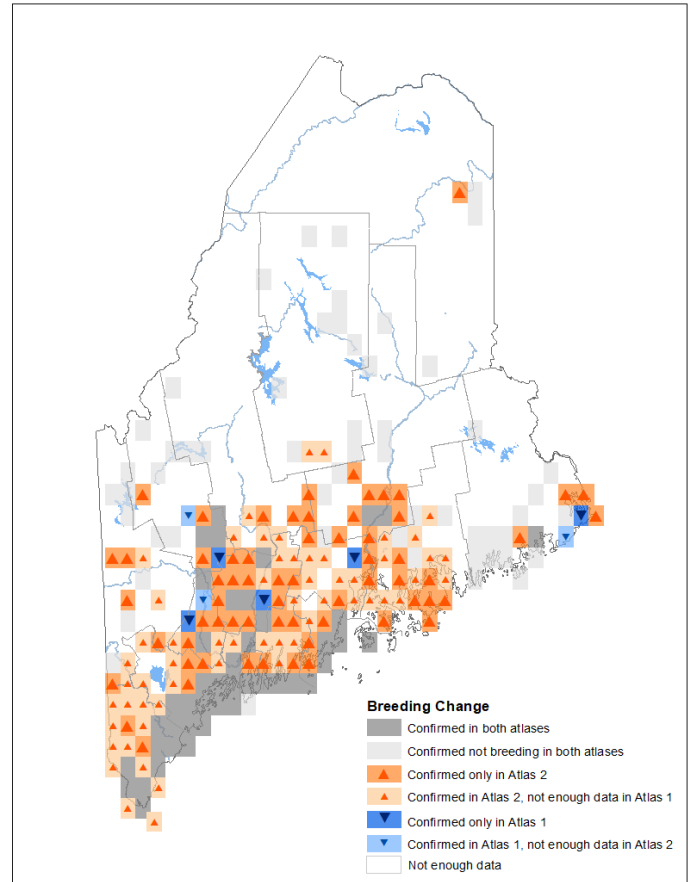
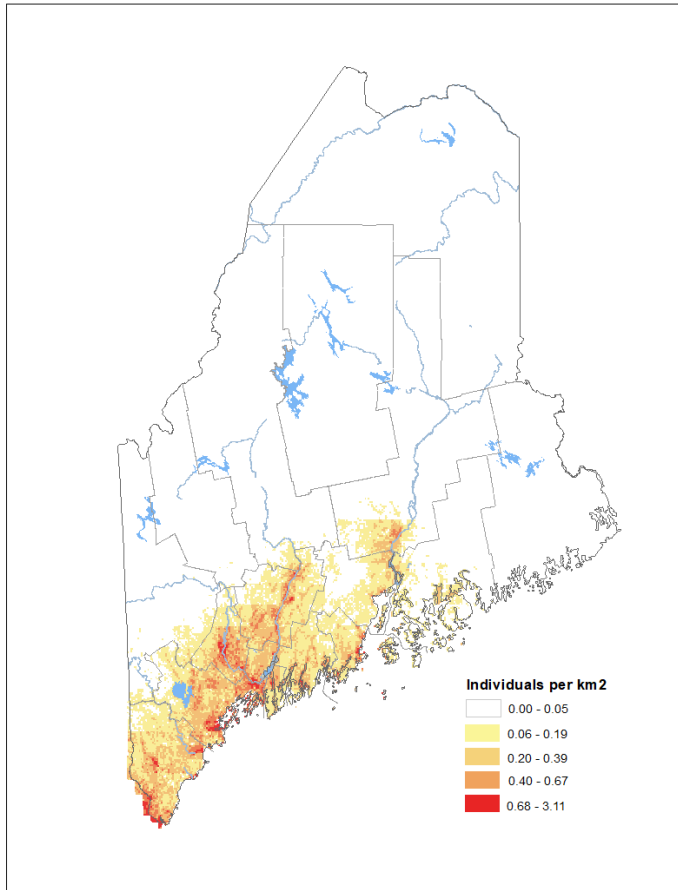


Figure 3. Northern Cardinal breeding distribution changes in breeding distribution from the first and second Maine breeding bird atlases. A quad is considered confirmed if there is a probable or confirmed breeding code in a given atlas. No change includes quads where the species was both present and absent in both atlases.



A recently fledged Northern Cardinal, though nearly fully developed, this bird was a weak flier and was still being fed by an adult. Photo by Doug Hitchcox

In the figure below you can see high densities in southern Maine. The same locations where we see most of the breeding confirmations. Our model suggests that cardinals have higher densities in low-elevation, low-canopy mixed forests and developed and developed areas, sounds about right!



You might have noticed that the areas indicated by our density map has breeding confirmations outside of these areas. Since atlas volunteers spend hours in these blocks and are more likely to detect rarities than our hired crew, we have two different data sets. We are working to integrate data from these two surveys in a way that shares the strengths of each.

That's the preview of how we plan to turn atlas data into valuable information for multiple stakeholders throughout Maine. Let us know if you have any questions or plans for using atlas data or science products. We'd love to hear your thoughts.

Figure 4 (left). Density estimates for Northern Cardinal during the breeding season based on statewide roadside point counts. Detection probability and availability were estimated in a Bayesian modeling framework with a distance and time to detection model. Bird density was explained by a spatial random effect paired with habitat variables like land cover type, forest height, surface impermeousness, and elevation. Densities were predicted using this model at a 1 km² grid scale.

Photo Submissions

The Maine Bird Atlas is looking for submissions of exceptional bird photos to feature on each species page of the published atlas. Please consider sending us your best bird photos (featuring only species that breed or winter in Maine) to be considered for inclusion in the published Atlas. Final selections will be made by committee closer to the publish date (2023-2024). If selected, your photos will be credited to you and you will retain the copyright.

To have your photos considered for inclusion in the Atlas, send your best photos that were *taken in Maine* to mebirdatlas.photos@gmail.com. Rename each photo with the bird's common name followed by your first and last name (e.g. American Robin John Doe). Send unedited photos at the size and quality that your camera produces. This will ensure that the image is high enough quality for consideration. We will contact you for final permission if your photos are selected to appear in the Atlas. We will request locality and date (month) information for selected photos. Your photos will not be used for any other purposes. Once we have an initial collection of photos, we will send out a request for particular species that we still need photos for.

You can also submit photos by mailing a disc or USB drive to Tom Aversa, 115 Fisher Rd., Unity ME 04988 or sharing photos to the email listed above via DropBox or Google Drive.



Sponsor-a-Species and Atlas Gear

Do you or someone you know have a favorite species? Say it with a sponsor! Give the gift of conservation this year with a species sponsorship (and maybe an atlas Tshirt too).

With a species sponsorship, **your name will be in print (along with anyone you choose to sponsor in honor of) in the final Maine Bird Atlas publication.** Each of Maine's breed-ing and wintering bird species have been divided into sponsorship levels ranging from \$30-\$2,000 and are available to sponsor for each year of the project. You can sponsor a species for one, several, or all five years.



Sample species account for Snowy Owl with Sponsor a Species example circled in yellow.

See what species are still available at:

www.mainenaturalhistory.org/sponsor-a-species

As for Maine Bird Atlas logo merchandise, shop around and place orders at:

www.teepublic.com/user/mainebirdatlas

All proceeds from product sales and species sponsorships will help fund travel grants to support birders going to remote, isolated regions of the state. Remote northern and western blocks in the state are still in desperate need of attention.



Have you signed up as an official volunteer yet?

Just a reminder, even if you have already contributed observations to the project through eBird, make sure you sign up as an official project volunteer. This is where we need you to enter your volunteer time (inc. travel, data entry, etc.) for us to count towards the required match funding. After doing so, you can also choose to benefit from state health insurance coverage while participating in any atlas activities. Go to <https://ifw.citizenscience.maine.gov/programs/mainebirdatlas> and click 'Register'.

VOLUNTEERS NEEDED!

CONTRIBUTE OBSERVATIONS TO THE



**MAINE
BIRD
ATLAS**
2018-2022



For More Information: maine.gov/birdatlas
All Experience Levels Welcome!

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