First off, we owe a HUGE THANKS to the over 1,200 volunteers who contributed close to 30,000 checklists, totaling 1.2 million individual records, for the breeding component of this project. In the first two years, volunteers spent nearly 27,500 hours atlasing, and over 50% of atlas blocks now have some data. Atlas staff will be working hard on quality control, so our numbers are subject to change, but as of now, we have collected breeding information for 224 species of birds in the state! Maine’s first breeding bird atlas (1978-1983) documented just 201 species, so things have certainly changed.

Clay-colored Sparrow was the only new species confirmed breeding in Maine this year that had not been confirmed in the first atlas or during last year. We also continue to see an expansion of species whose historical breeding range was south of Maine, like Fish Crow, Red-bellied Woodpecker, and Carolina Wren. A singing Chuck-will’s-widow was present for the second year in a row near Great Pond Mountain near Orland, making us excitedly suspicious about the potential of confirming that as a new species for Maine.

In addition to the volunteer efforts, we have had a team of highly skilled individuals deployed around the state the last two years working on abundance sampling and special species surveys for the project. At the end of just two years, these individuals have collectively completed half of the statewide point count surveys and over 40% of the alpine specific sampling routes. We also launched marshbird surveys this year and the combined efforts of two technicians and volunteers completed 14% of our 200 sample marshes. Interested in adopting a marsh to survey next year? Visit the atlas project website, click on ‘Resources and Materials’, and follow the link to the ‘Special Species Survey’ page to learn more.

Despite these staggering numbers and accomplishments, we still have a long way to go. In fact, of the 224 species of Maine birds with breeding information, there remains a list of rare breeders previously reported in Maine that we have yet to confirm as part of the contemporary atlas effort: Mute Swan, Northern Pintail, Redhead, Lesser Scaup, Ruddy Duck, Yellow-billed Cuckoo, Common Gallinule, American Coot, Wilson’s Phalarope, Lesser Black-backed Gull, Least Bittern, Tricolored Heron, Cattle Egret, , Eastern Screech-Owl, White-eyed Vireo, Philadelphia Vireo, Horned Lark, Sedge Wren, and Golden-winged Warbler.

Continued on next page...
Winter is a critical time of year for bird populations because it is the time when food and cover can be most limiting. High mortality rates, often associated with severe winter weather events, can also dramatically reduce populations, and the stress of the winter season can affect their breeding performance many months later. Beyond this, our knowledge of wintering birds in Maine is patchy at best. Maine has decided to attempt to fill in this gap in knowledge about winter bird populations by expending the breeding bird atlas to include wintering birds.

The Volunteer Handbook for the Maine Winter Atlas is now posted online and goes into more detail about winter atlas-ing. The following is a quick summary to get you started.

**Definition of winter period:**
Any bird observations between 14 December and 15 March, 2018-2022, will help populate the winter bird atlas and contribute to documenting the distribution and relative abundance of winter birds in Maine. During this winter period, a majority of birds present in Maine are strictly wintering. A few species with early spring or late fall migration or early breeding periods may overlap with our winter study period. These will be dealt with on a case by case basis at the completion of the Atlas project.

**How to bird in winter:**
Atlassing during winter is fairly straightforward. We are not identifying priority goals, however, as slight mishaps or ill preparation afield in the winter can quickly become life threatening. As such, the goal is to survey as many blocks as can be safely accessed. There is no need to try and visit all areas of a Block. You should attempt to visit a representative of each habitat type in a given block and document as many birds as possible within the winter survey window. Keep in mind, areas with bird feeders can be important sites to check. Surveys should, when possible, be conducted in good weather and not on days with strong winds, heavy snow/rain, very poor visibility, or extremely cold temperatures that may make birds inactive.

**Important details to record:**
Counting or estimating the number of individuals observed for each species can be challenging but is a very important task for the winter bird atlas project.
part of the winter atlas effort. Estimate the number if it is not possible to get an actual count, provided it is reasonably accurate. An educated guess is preferable to no count at all.

In addition, because we know so little about the winter ecology for most birds Maine, including general behavioral patterns and foraging activity, we encourage volunteers to provide any additional information of interest in the comments section for each species observation. For example, what species or type of plant was it observed on (e.g., evergreen vs. deciduous tree)? Was it foraging? Was it interacting with others of its own kind or with a different species?

How to Know When your Atlas Block is Complete:
Deciding when an Atlas Block is complete during winter is fairly straightforward. There should be a minimum of 6 hours of active surveying, with at least 3 of those hours during early winter (14 December to 31 January) and at least 3 of those hours from late winter (1 February to 15 March).

In addition, each habitat type in a block that can be safely accessed should be surveyed.

Which blocks have already been completed?:
The winter atlas map that shows which atlas blocks have been completed is posted on the Maine Wintering Bird Atlas Dashboard. It is helpful to regularly peruse this map and see which Blocks in your region have not yet been completed for winter surveys. Find the dashboard on the atlas project website and clicking on ‘Winter Atlas Results.’

Where to Submit your data:
Any checklist of birds during migration and winter that do not contain any breeding codes should get entered into the Maine eBird portal. Check out the other article, “Where to submit your winter bird observations” in this newsletter for more information.

By Glen Mittelhauser, Project Coordinator

Counting Birds

The breeding portion of the atlas focuses primarily on behavioral observations of birds to determine breeding status, however, in the winter atlas, birds only need be present. Presence/absence data is important, but our goal is to also come up with abundance estimates of our feathered winter friends. To do that, we need to count them.

Counting sounds pretty easy - most toddlers will know counting rules by the age of 18 month, however, counting birds, which can be constantly moving or extremely abundant, can be hard to keep track of. An important thing to keep in mind is that estimates are always better than nothing and to use simple counting techniques (see links on the next column) when approximating counts.

In addition, the folks at eBird have put together some very helpful articles with tips on how to count birds:

(Why estimating numbers is important, techniques for counting single species flocks)

(Counting Birds at feeders)

(Counting large numbers, moving flocks, and mixed species flocks)

By Doug Hitchcox, Outreach Coordinator

Birding in Maine in the winter can provide opportunities to see birds in very large numbers. Try challenging yourself to estimate large rafts of seaducks along the coast, or visit a crow roost some evening, like this one in Lewiston with approx 12,000 crows.
Where to Submit Your Winter Bird Observations

Now that the Maine Bird Atlas is up and running for both breeding and wintering birds, the process of smoothing out any wrinkles and clarifying confusions can begin. After a great field season I am now spending many happy hours in my office with a cup of coffee as I enter Atlas data from the summer, occasionally looking out the window at the last of the fall leaves, and contemplating the perennial question – What is the best way to explain how to enter bird observations into eBird?

Let’s start from the beginning. eBird is an international platform used for collecting and storing bird observations from all over the world. Birders enter their records online using either a computer or a smartphone. The Maine Bird Atlas is using eBird to manage all of its bird observations.

eBird has different pages for entering bird observations from different regions of the world. There is one for England, one for Colorado, Columbia, Virginia... you get the idea. eBird calls these dedicated pages portals. There is an eBird portal for Maine, but there is also – and this is where it can be confusing – one for the Maine Bird Atlas.

I find it easiest to think of eBird as one big file cabinet that stores bird observations from all over the world. The individual portals funnel observations into the correct “folder” within the file cabinet. For the Maine Bird Atlas, we are using two different portals that each send the data to where it needs to go: the Maine Bird Atlas portal and the Maine eBird portal.

So, what’s the difference? And which observations should you enter in which portal? It all comes down to breeding codes. If you put any breeding codes on your checklist, that entire checklist should be entered in the Maine Bird Atlas portal. If you don’t have breeding codes on your checklist, it should be entered in the Maine portal.

Wait, what? To clarify, you will create a list of birds you observe and then submit them to eBird as a “checklist”. A checklist also includes the date, time, and location of the sightings. If you observe any breeding activity, as defined in the Maine Breeding Bird Atlas Volunteer Handbook, the associated “breeding code” should be added to the checklist. Use the graphic to the right to help decide which portal to submit your checklists to.

As you may have noticed, this means that nearly all winter checklists and checklists during the migration season should be entered into the Maine eBird portal unless you find an early nesting species such as owls or pigeons. Checklists entered in the wrong portal will not be properly integrated into atlas results and outputs. However, there is a quick and easy way to move your bird observations into the correct portal even long after they were first entered.

As we move toward winter, you will want to get used to entering all your checklists (with few exceptions) into the Maine portal. Getting to the correct eBird portal for winter atlas records is quite simple. If you are using a computer, go to ebird.org/me. If you are using the eBird app on your mobile phone, you can set the app to automatically open the portal you use most often. Open the eBird app and find the settings option (this may be a gear icon in the lower right hand corner of the screen or a drop down list in the upper left hand corner of the screen depending on what kind of phone you have). Once in settings, select the correct portal from the list and you are ready to go.

Visit our project website and click ‘Get Involved’ to learn more about breeding codes and the breeding bird component to this project.

By Glen Mittelhauser, Project Coordinator
Atlasting Your Christmas Bird Count

December 14th marks the beginning of the Christmas Bird Count (CBC) season, but it’s also the first official count period for the winter portion of the Maine Bird Atlas. Each year hundreds of people participate in the Maine CBCs and the data collected for that, the longest running citizen science project, is also beneficial for the Maine Bird Atlas. These two projects have the same aim, to count birds, but follow slightly different protocols. In this article, we’ll discuss some tips for atlasing your CBC effort.

What is the difference?
While the goal of both the Christmas Bird Count and the Maine Bird Atlas is to count the number of species and individuals of birds, the size of the survey area is very different. As with the breeding portion of the Maine Bird Atlas, winter atlas reports are confined to the block where the birds are observed, a roughly 3 x 3 mile square. In comparison, each CBC looks to census birds within a 15 mile diameter circle – much larger than the atlas as nearly 20 blocks will fit within a circle. While the long term surveying of birds within these circles is a good measure of the changes in populations, the scale is too large for the atlas and doesn’t show birds in representative locals or habitats.

Best Practices:
In general, checklists that are shorter and cover less distance provide better data. We strongly encourage everyone to try making lots of short lists throughout a CBC day. One long list for the day would cover multiple blocks and be useless for the atlas. Most CBC efforts require lots of short drives between birding spots, each of which could be entered as its own list. The new eBird Mobile 2.0 makes quick data entry much easier though iOS users might have to wait for this update. Try entering as many lists via the phone app, or on recording sheets, as you can for these short distance surveys.

Prepare:
Most people who participate in CBCs are well aware of their sector boundaries (no birder would dare poach another sector!) While reviewing maps of your CBC’s sector, also refer to the atlas maps to see where block boundaries are. You can use the Interactive Block Map or download .kmz files of block boundaries to overlay on software like Google Earth, or a GPS device, by visiting the atlas project website and clicking on the Resources and Materials page.

By Doug Hitchcox, Outreach Coordinator

In the map above, you can see how each Christmas Bird Count circle, outlined in green, encompasses nearly 20 Maine Bird Atlas blocks, 3 x 3 squares outlined in black. You can download this map overlay by visiting the Resourses and Materials page on the atlas project website.
Buy Holiday Gifts that Support Birds and the Maine Bird Atlas

Not only is it time for Christmas Bird Counts and the Maine Winter Bird Atlas, but the festive time of year with more holiday celebrations than our wallets can handle! No matter how you are celebrating this year, we recommend giving a gift that will have a positive benefit for Maine’s birds!

You can purchase a variety of items, from shirts to bags, and our best-selling coffee mug, all featuring the Maine Bird Atlas logo, designed by Maine artist Jada Fitch.

Another great gift this year would be sponsoring a species for a friend or loved one (or to treat yourself!) Sponsoring can also be done in memory or honor of a person or in the name of an organization. In return for your contribution, which can range from $30 to $2000 depending on the species, the name of the sponsor will be printed on the species page of the final atlas. Wouldn’t you love to see Grandma’s name next to the Northern Cardinal, or Dad’s next to Common Loon?

Shop our store and see what species are still available by visiting visiting the atlas project website and clicking on the “Support the Project.”

Profits from the sale of these items help expand the coverage and range of work that can be done for the atlas. Funds will be used to create a small grant program to provide incentives to volunteers, assist volunteers with travel expenses to survey remote areas of the state, and support specialty surveys of difficult to study species.

Whatever your holiday shopping brings, try to keep birds in mind. Beyond supporting the Maine Bird Atlas, other choices you make at the counter can have positive impacts on birds. Have to shop for a coffee drinker? Try introducing them to a Smithsonian certified bird-friendly shade grown coffee. Know someone who complains about birds hitting their windows? There are now several very effective window applications that make thoughtful gifts. (Visit the American bird Conservancy at abcbirds.org to learn more about these products). Or need to buy someone a piece of “jewelry”? Look no further than the Maine Birder Band available at the Maine Department of Inland Fisheries & Wildlife online store.

By Doug Hitchcox, Outreach Coordinator
Getting Owls on the Map

For the eager bird atlasser, early-nesting owl species provide the first opportunity of the year to document breeding for the Maine Bird Atlas. Birders trying to put owls on the atlas map can start surveying for our resident owl species when the nights are long and snowbanks still line the roads. Strigiphiles (owl lovers) enjoy more than six months of breeding season to survey blocks, document and confirm. Owl breeding can be evidenced from first territorial hoots resonating from White Pine stands in late January in York County to the last awkward “brancher” juveniles testing their wings as they crash from fir to fir in late July.

Though owls will sometimes vocalize and perform courtship displays in the daylight during breeding season the species are primarily nocturnal. More than a few of the owl nest discoveries are serendipitous finds made while birding in the day. But the best chance for detecting breeding owls usually requires some reconnaissance to locate appropriate nesting habitats and focused surveys of these areas after sundown. Knowledge of the target species and their preferred habitats can be key to successful detection and (hopefully) eventual confirmation.

Residents:

Great Horned Owl is a widespread resident and our earliest breeding owl. They use abandoned stick nests of Red-tailed Hawk, crows and ravens located in mature deciduous trees but will nest on broken stubs and in hollows where available. Because the Great-horned starts nesting so early and well before leaves develop, the incubating owls (or at least their ear tufts!) are often visible from a distance. Favoring nest sites in wooded areas with nearby open land, breeding activity has been documented in every county of the state. We have few atlas blocks confirming this species, however (see map below).

The Barred Owl (above) is a cavity nester and needs large diameter standing trees. The species is also widespread and may be the commonest breeding owl statewide. Their nine note “Who-cooks-for-you? Who cooks for you ALLLL?!” advertising call loudest and most recognizable owl call of the Maine woods.

Eastern Screech-Owls are cavity nesters that reach the northern limit of their range in southern Maine. The species is often found in suburban environments. There are historic breeding records, but no atlas confirmations, in York, Cumberland and Franklin counties, but intriguing spring reports of vocalizing birds exist to the east through Lincoln to Hancock county.

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Migrants:

Northern Saw-whet Owls are migratory cavity nesters that may well be one of the most abundant owl species in Maine. Despite this, there is only one confirmed breeding record so far for the atlas. They probably depart from northern and western portions of its range in Maine during the bitterest months of winter when deep/crusted snow limits their ability to hunt. The males are vocalizing strongly by mid-March statewide. Their song, a monotonous series of toots sounding like heavy equipment backing up, is audible for up to a half mile over open water. The species responds aggressively to playbacks. Dense coniferous forests near water are preferred.

Long-eared Owls are rare migratory breeders in Maine. The species prefers to lay their eggs in abandoned crow nests in conifers near open fields, grasslands and marshes where it likes to hunt. Confirmed nesting records are few but well-distributed across the state from Cumberland to Aroostook to Washington counties and breeding locations include coastal islands. The species is very nocturnal and best chance for locating one is listening, at night, for their song- a series of repeated “hoo” notes which sound like blowing over a bottle.

Continued on next page...
Owls continued...

Short-eared Owl - This state-threatened species has only been documented breeding five times in the state. It is a migratory owl of open meadows and marshes. In mothlike flight, it prefers to hunt late afternoon and early evening.

Since the bird is active in the daylight, its vocal repertoire is limited, though wing clapping displays (which sound like hands slapping on your thighs) are good auditory evidence of breeding. Short-eared Owls nest on the ground and is one of the few owl species that constructs its own nest. It prefers open country and hunts in haylands, abandoned fields and low perennial vegetation. Breeding display flights and copulation may be observed in Maine from late March through May, but beware this is the same time as late migrants may be passing through. Historically, breeding has been documented in York, Androscoggin, Penobscot and Aroostook counties.

Possibilities...
These species have never or nearly never been documented breeding in the state. They are tantalizing long shots but worthy of consideration and would be equally valuable additions to the winter atlas.

Boreal Owl - The species bred once in northern NH and formerly at southern, coastal New Brunswick. The species still nests in northern New Brunswick. A cavity nester preferring large poplar trees and snags near conifer habitat similar to Saw-whets. Its advertising song is very similar to a winnowing Wilson’s Snipe.

The Northern Hawk-Owl (above) is the most diurnal owl, readily hunting in daylight. Another cavity nester the Hawk-owl uses old Northern Flicker and Pileated Woodpecker nest holes. For hunting, the species prefers bogs and clearcuts with scattered trees. The species has bred in Gaspe, Quebec and southern coastal New Brunswick and has been observed occasionally in summer in Maine.

A species of Special Concern in the state, the Barn Owl is a former breeder that nests in natural and human made cavities including old buildings. Since 1960, when a pair was last documented attempting to nest, there have been only a few confirmed observations in Maine during breeding season. Though primarily a nocturnal hunter, Barn Owls are sometimes seen flying in open country during the day.

Because of their similar habitat affinities and light coloration, care is needed to distinguish these from Short-eared Owls in flight.

By Bill Sheehan, Northern Regional Super-Coordinator

What’s Next?

eBird Mobile 2.0
Android users will have noticed this update to the eBird Mobile app already and an update for iOS users is coming soon. Look for more from us on this update soon!

Priority Blocks
As we head into the third breeding season next year, we need volunteers to seek out priority blocks needing completed. Use downtime this winter to locate priority blocks near you.

Start Planning Remote Atlasing Trips
Related to the above note on priority blocks, now is a great time to be planning trips to more remote areas of the state. Don’t forget we have travel grants available to help you reach far away priority blocks! Look for the “Travel Grant Application” button on the project homepage.

Maine Bird Atlas Team

Atlas Director
Adrienne Leppold
Maine Dept of Inland Fish & Wildlife
Adrienne.J.Leppold@maine.gov

Atlas Coordinator
Glen Mittelhauser
Maine Natural History Observatory
mainebirdatlas@gmail.com

Outreach Coordinators
Doug Hitchcox
Laura Minich Zitske
Maine Audubon
dhitchcox@maineaudubon.org
lzitske@maineaudubon.org

Spatial Analysis and Mapping
Amy Meehan
Maine Dept of Inland Fish & Wildlife
Amy.Meehan@maine.gov

Ecological Modeler
Evan Adams
Biodiversity Research Institute
Evan.Adams@briloon.org