WHAT'S HATCHING?

Official Newsletter of the Maryland & DC Breeding Bird Atlas 3 ISSUE NO 21 | JAN 2022





CONTENTS

From the Coordinator3	
Atlaser Spotlight7	
From the Field11	

Bird of the Month	4
Tips and Tricks	9
Out of the Archive	12

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BIRD OF THE MONTH

The juvenile plumage of Horned Larks is one of the most useful to be familiar with.

TIPS AND TRICKS

No plane to find eagle nests with? Too bad. Fortunately, Glenn Therres has some tips on how to find eagle nests from the ground.

OUT OF THE ARCHIVE

To satisfy your curiosity, we've reprinted the BBA2 progress report from January 2004—the same point of BBA2 that we are now at in BBA3.

ISSUE NO 21 | JAN 2022

Until 2020, Garrett was the lone Maryland county with no Fish Crow breeding records. In early 2019, a spate of Fish Crow observations in Oakland, Garrett County, caused <u>Aaron</u> <u>Graham</u> and <u>Kyle Klotz</u> to speculate about the possibility of a breeding pair. The following year, the Fish Crow observations continued and on <u>July 18</u> Edward Boyd, Aaron Graham, and Jim Stasz reported two young fledglings and the first record of Fish Crows breeding in the county. A nest has not been found, but the crows returned to Oakland in 2021 and likely may again this year.



"Volunteers are the foundation, muscle, lifeblood, and heart of all breeding bird atlas projects."

-- Walter Ellison





Brown-headed Nuthatch by Kojo Baidoo/Macaulay Library

UPCOMING EVENTS

February 12, 2022 2:00–3:00 PM (virtual) Maryland Natural History Society

Atlas Coordinator Gabriel Foley will be providing an overview of how BBA3 collects data, an update on its current status, and how you can get involved. For more information, see <u>marylandnature.org</u> February 28, 2022 7:00–8:00 PM Tri-County Bird Club MAC Center, Salisbury

Atlas Coordinator Gabriel Foley will discuss the fundamentals of atlasing and how to use eBird to submit your observations. Find more details at <u>mdbirds.org</u>

From the Coordinator

There's lots left to do, but we should be proud of what we have accomplished so far.

In *From the Archives*, I reprinted former Atlas Coordinator Walter Ellison's January 2004 progress update for BBA2. The last atlas began in 2002, so Walter's update was from the same project vantage that we now have.

A comparison of BBA3 to that update is bound to be intriguing, but any comparisons must be tempered by context. Atlas 2 and Atlas 3 are exceedingly similar in many ways, but the technological boost BBA3 has received provides us with greater precision, convenience, and the framework to handle more frequent reports. This means many metrics are expected to be higher for BBA3, such as the number of breeding codes reported. Taking a look at Walter's 2004 report, the most noticeable difference between atlases might be the number of blocks covered. At this stage of BBA2, atlasers had logged observations in 77% of blocks, while we have covered 98% of blocks (and over 20,000 unique locations). BBA3 blocks that lack effort are almost exclusively partial blocks (which didn't exist in BBA2) or blocks with a lot of water. One notable exception is Aberdeen Proving Ground, a US Army facility along Harford County's Chesapeake shore.

Walter also noted that 46% of blocks had at least 50 species coded; 50 species have been coded in 59% of BBA3 blocks. The most species reported in a 2004 block was over a



hundred, a few more than the 97 coded species we have in Garrett County's Bittinger CW block. Fifty-five Confirmations was the most reported from a single BBA2 block, which is dwarfed by a whopping 73 Confirmations in Howard County's Sykesville CE.

At this stage of BBA2, 550 atlasers had participated in the project in one way or another, and 70% of those had submitted >60,000 observations. In BBA3, 1,387 people have submitted checklists to the Atlas portal. After a round of data review, we are just shy of half a million breeding codes.

It's an astounding amount of effort that is creating the most detailed examination yet of the breeding avifauna of Maryland and DC. Whether you've submitted one breeding code or 10,000, you should be proud of your contribution to this project. We aren't finished yet of course—we still have to increase our nocturnal effort, put more effort into less-populated regions, and strategically 'mop-up' high-effort blocks—but we are well on our way. And as Walter put it so well in 2004, "we can do it; the effort thus far says this is so."

--Gabriel

Each point represents the unique location of checklists that have been submitted to the Atlas portal as of August 2021.



Horned Lark by Jonathan Irons/Macaulay Library

Horned Larks are an expected part of Maryland avifauna and have nested in every county (but not in DC). However, Horned Larks are relative newcomers and only began nesting in the eastern US after heavy clearing for agriculture occurred. Maryland's first breeding record was in Garrett County in 1904, and it took another 18 years before it was recorded breeding east of there this time in Prince George's County. Since then, their regional breeding distribution has shifted with habitat suitability.

Horned Larks demonstrate that one bird's junk is another bird's treasure; they require bare ground or very short vegetation. This habitat does not support many species, but Horned Larks can be found in any open area matching that description. This includes recently plowed or harvested agricultural fields, overgrazed pastures, golf courses, airports, and recently reclaimed strip mines.

Between the first and second atlases, the local distribution of breeding Horned Larks shifted from the Alleghenies to the Piedmont and the Ridge and Valley. The same pattern not unsurprisingly—was also seen in Pennsylvania, during their second atlas (which overlapped our own BBA2). The Pennsylvania atlas found that Horned Larks did not nest in blocks with less than 300 acres of arable land but were found in almost all blocks with at least 800 acres of arable land (for context, one square mile is 640 acres).

With a good look, adults are nearly unmistakable. Sexes can be separated by the males' slightly



Horned Lark breeding distribution map from the Maryland & DC Breeding Bird Atlas 2. Green fill indicates a breeding observation in that block.

CODE FL

A recently fledged bird has left the nest but is still dependent on its parents.

The 'recently fledged young' breeding code (code FL) is extremely useful, but can also be easily misunderstood.

A 'recently fledged' bird has left the nest but is still dependent on its parents. Horned Larks are good examples of why the ability to fly is not used as part of this definition. It is not unusual for songbirds to leave a nest before they can fly (sometimes early fledging also occurs due to disturbance), and it is the rule for waterfowl, shorebirds, and upland game birds.

To determine if a young bird is still dependent on its parents, consider how developed its gape and its tail and wing feathers are. If those feathers are short, have any down on them, or the gape is fleshy, it's probably still dependent. Watch its behavior; if it is begging, following an adult closely, or even just noticeably clumsy, it's probably still dependent. Many species also only make begging calls while still dependent; these can be helpful to know, but resources to help accomplish this are meager. larger size and darker, bolder colors on the face and chest. Juveniles are more nondescript, and could perhaps be taken for a sparrow, like a Vesper Sparrow. Vesper Sparrows will even occupy similar habitat, but they prefer more shrubby growth. Juvenile Horned Larks have a mottled appearance on their upperparts, a black tail, and lack the white eye ring, rufous wing patch, or streaked back that Vesper Sparrows have. Regardless of any morphological similarities, habitat and behavior remain strong clues for correctly identifying Horned Larks.

Horned Larks are exceptionally early nesters and begin forming territories and monogamous pairs in February. However, like many other species, Maryland is an overwintering destination for non-breeding populations of Horned Larks. Until mid-April, be aware that larks you see may be non-residents. Breeding males select a territory and declare their ownership with a <u>"ground" song</u>. This song is given from a slightly elevated position, such as a rock or a dirt clod, but rarely from a truly elevated perch like a shrub or a fence post. Any intruding males will be chased from the territory; these chases may result in physical altercations.

Their <u>aerial song</u> synchronizes function with beauty. Rather than being used in territorial defense, it is used in courtship. Males fly as high as 800 ft to perform this display, with long glides corresponding to a light tinkling song that recalls delicate, ethereal bells. Their song begins slow and haltingly, accelerating towards the end.

Nesting begins in March. The female selects a nest site,





often on the lee side of a small object like a rock or a tuft of grass. Over the course of one or two days, she digs a shallow depression in the ground with her bill. She weaves a nest out of fine grass or roots and lines it with plant down, rootlets, and feathers. "Pavings", such as dirt clods, dung, or small pebbles, are regularly placed at the nest entrance. After 2–4 days, her construction efforts are complete and she begins laying 2–5 speckled-brown eggs. On early nests, she might begin incubation with the second-last egg, but normally she will wait for her clutch to be complete. Incubation lasts eleven days; in cold weather, an additional day may be required. The newly hatched nestlings look like downy moss, until they open their mouths and reveal a distinctive, attention-grabbing orange and black pattern.

The nestlings will stay in the nest for ten days. The female does all of the brooding, but both parents help provision the chicks. A parent may return with food as often as once every five or six minutes. Adults eat primarily seeds all year long, but nestlings are provided with a diet composed mostly of beetles, grasshoppers, and caterpillars. Adults are stealthy when approaching the nest, and land 60 or 70



feet away. Likewise, when they leave the nest they walk 15 or 20 feet before flying away, often carrying a fecal sac. After ten days, the chicks will leave the nest but remain in close vicinity, crouched and motionless. Unlike adults, young Horned Larks do not walk, but rather hop. A week later, they are capable of weak, fluttery flights, and can finally walk and fly well at 27 days. At this point, they are independent of their parents and will form roaming flocks with other juveniles.

The adults will begin a second brood, assuming the habitat is still suitable, and may even go for a third brood. Horned Larks are intolerant of any vegetation growth though, and if they deem it too long or dense, they move to a more suitable location—even if a nest is already underway.

In Maryland, the early courtship and territory formation by Horned Larks is complicated by the presence of



overwintering individuals. Prior to safe dates, be cautious when using code P (pair). Instead, watch for territorial interactions (code T) and provide comments to support the breeding code. Nests are difficult to find, but this is largely unnecessary. The open habitat Horned Larks prefer provides ample opportunity to Confirm them at a distance from April to August. Watch for adults carrying food (code CF) or fecal sacs (code FS) or for recently fledged young (code FL). In BBA2, 92% of Confirmations were of adults carrying food (26%) or of recently fledged young (66%). Young birds will molt out of their juvenile plumage in August, but beware flocks of young birds in midsummer. These do not represent local breeding, and should not receive a breeding code. Instead, look for fledglings that hop rather than walk, that have pinkish legs and yellowish bills rather than grayish legs and bills, and for any interactions with nearby adult Horned Larks.

Author: Gabriel Foley



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ATLASER SPOTLIGHT

David R. Smith, from Mt. Airy, is the Carroll County Coordinator for the Maryland & DC Breeding Bird Atlas 3.

What made you interested in birds?

A family friend of my parents, who was an avid birder, spent a week with us at our summer home in the Cumberland Plateau region of Eastern Tennessee when I was 12 years old. As I was leaving the house to start my day each early morning that week I would see her on the porch with her binoculars looking at birds. I had always been a nature boy, but at the time, butterflies were my main interest. However, each day I found that I began to pay more attention to birds. One day I came home and described a small gravish bird that I had seen that day that was similar to a mockingbird but much smaller. The woman explained that it was likely a Blue-gray Gnatcatcher and she showed it to me in her Peterson field guide. Bingo! After that I was hooked. Later that year she gave me several bird books, including a James A. Tucker Combination List of Birds of North America checklist, within which I began to keep a list of the birds I had seen. I still have that list, and have never lost my love for birds.

What bird best reflects your personality?

Probably any corvid, but I will go with Blue Jay, and not because they are among the most intelligent birds. Jays seem to always be intensely curious about every little thing and they can be quite a chatter box. I think my wife would attest to that latter similarity in particular.

What is the best thing about atlasing?

I love slowing down my birding to fully appreciate the nuances of birds. Atlasing, unlike counts or big days, requires patience in following a bird's behaviors to look for clues that it is breeding. I often learn so much just by spending quality time with a bird in its breeding habitat. And more times than not, I am rewarded with a nice Confirmation of breeding.

You can take binoculars, a field guide, and what other item?

Smartphone for sure; it's now indispensable for keeping checklists, and has replaced the hardcopy field guide in my pack.







Where is your favorite place to atlas?

As the Carroll County Coordinator it may be blasphemous to say, but my favorite place to atlas is the Audrey Carroll Audubon Sanctuary in eastern Frederick County. I do a lot of volunteer work there for the Audubon Society of Central Maryland, including leading nature walks. I also covered the sanctuary during the previous atlas when I served as the Frederick County Coordinator, where I added some very good breeding bird records (Swamp Sparrow for one). I enjoy birding there so much that for this atlas, I volunteered to take the Libertytown CW atlas block that includes most of that property even though I have all of Carroll County to worry about.

What's our biggest conservation issue?

So many negative forces seem to be conspiring against Mother Earth these days that it is hard to pick just one issue. However, from an immediate conservation perspective, habitat loss is high on the list of concerns. Whether more gradual from the effects of climate change or sudden from the destruction of natural habitats for sprawling developments, the alteration of our natural landscapes is causing widespread declines in the biodiversity of the planet. As E.O. Wilson stated in his book Half Earth, to avoid another catastrophic extinction event humans must protect and restore half of the earth as green space. While a seemingly pie in the sky notion, Doug Tallamy, University of Delaware entomologist and author of the 2020 New York Times Best Seller Nature's Best Hope, presents a compelling recipe for doing just that, one guarter acre lot at a time, through landscaping with native plants.

Who would you go atlasing with?

Mike Welch—past Frederick County Bird Club president, past state May Count compiler, long time Catoctin Christmas Count compiler, and co-discoverer, along with Kathy Calvert, of Maryland's only confirmed Couch's Kingbird. Mike moved from Maryland out to Tucson a few years ago, but over the years I have had some great birding days with him in Maryland and some amazing trips with him to Central and South America. He is the birding yin to my yang. Unlike me, he is always so well prepared on birding trips, and seems to tolerate well my constant need for one thing or another. He is also a most fun traveling companion.

What bird do you particularly like?

The American Kestrel has been near and dear to my heart since I intensively followed adult and fledgling kestrels of the Southeastern paulus race at the Archbold Biological Station in South Central Florida in the early 1980s. I later studied habitat behavior of the wintering northern kestrels as a graduate student at the University of South Florida. Since moving to Maryland, I have continued to enjoy observing kestrels, including a work project documenting their nesting in transmission towers. During the atlas, I have taken great pleasure in finding nesting pairs in Carroll County, primarily in the northwestern corner of the county within the Monocacy Grasslands IBA, and have gotten to work with farmers to attract kestrels by erecting nesting boxes on their property.

Have you been involved with any atlases prior to this one?

I participated in the first Florida BBA in the mid-1980s while at the Archbold Biological Station. I covered an entire guad that occurred on one large cattle ranch just west of the biological station that contained a broad diversity of Florida upland and wetland habitats. What an introduction to atlasing. I discovered a mixed species heron rookery, nesting Least Bitterns, a King Rail nest, and a new colony of Swallowtailed Kites. I missed the fieldwork for the first Maryland atlas but wrote the kestrel species account for the book after moving here in the late 1980s, then served as the Frederick County Coordinator in BBA2.



TIPS AND TRICKS

Searching for Bald Eagle Nests—by Glenn Therres

Even though it is still winter, now is the time to start searching for Bald Eagle nests. Their courtship has already occurred. They started building their nests around Thanksgiving or have already added sticks to the nest that they used last year. They won't have laid eggs just yet, except perhaps on the lower Eastern Shore or extreme southern Maryland, but it's easier to find their large stick nests while the trees are bare of leaves. Once the leaves come out, it is much tougher to find their nests.

In Maryland, the majority of Bald Eagles nest in the counties surrounding the Chesapeake Bay. During the second breeding bird atlas, eagles nested in most of the blocks along the Bay and its major tidal tributaries. Further west of the Bay, eagles usually nest in the vicinity of large lakes and reservoirs or near large rivers like the Monocacy, Pocomoke, Susquehanna, and upper Potomac. Most eagle nests are within one mile of these large bodies of water. They also nest near the coastal bays behind Assateague Island and Ocean City.

Bald Eagles build huge nests of sticks towards the top of a large tree. The nest will be built near the tree trunk on large tree limbs, not out on the tips of the limbs. The only bird here that builds a nest similar in size is the Osprey, though their nests are usually in dead trees or on manmade structures. Bald Eagles usually nest in live trees; loblolly pines in southern Maryland and the lower Eastern Shore and deciduous trees elsewhere in the state. Nests are usually built in trees along the edge of the woods instead of deep in the



forest. Some eagle nests occur in single trees or in hedgerow trees. In pine country, Bald Eagles often will build their nest in a pine tree left standing after a timber harvest.

Now is a good time to go searching for an eagle nest or two. I recommend driving around on back roads in blocks near large bodies of water and looking for a large pile of sticks in the top of a tree. Searching from a small airplane is even better, but I suspect most of you do not have that option. Too bad. During my 18 years of flying eagle surveys for DNR, we found lots of Bald Eagle nests that way. If you have a boat, searching along the shorelines from the water is another good way to find eagle nests.

January, February, and March are good months to look for nests since there are no leaves on the deciduous trees and the adults may be sitting nearby. In pine country, finding nests is more difficult. If you see two adult Bald Eagles sitting near each other, look hard in the pine trees nearby for a nest. If you find a nest, your observation can be recorded as code P (pair in suitable habitat) since no other territorial eagles would allow two other adults to sit near their nest. Because our breeding Bald Eagles start nesting before the migrant eagles have moved north, two adult eagles near each other does not necessarily make them a breeding pair. The Chesapeake Bay region is a major wintering area for migrant Bald Eagles. While our breeding pairs are starting to nest,



there are hundreds of eagles from the north wintering in Maryland at the same time. The safe dates for Bald Eagle start on April 15, which is when all adult migrants are out of the state and on their way to their breeding grounds in Maine, New York, New England, and eastern Canada.

If you see a white head near the trunk of a pine tree while searching, look really hard for a nest under the white. Eagles usually do not roost close to the tree trunk. Once you find the nest, mark its location so you can come back in March when there should be eggs in the nest. While incubating, one adult eagle will be deep in the nest with only its white head visible. When you see that, you have Confirmed the nesting as an occupied nest (code ON) since there are either eggs or small young under the adult that you cannot see. If you come back later in the spring and observe young standing in the nest, you can upgrade the Confirmation to nest with young (code NY). Most of the young will fledge by July.

It will take a lot of driving around to find a nest and you will not be successful in every block. Not every eagle nest in a block will be visible from a road. Other techniques may be needed. For those blocks in which you did not find an eagle nest, try again next year.

I found five Bald Eagle nests in five different Queen

Anne's County blocks during the first year of the Atlas using the driving technique; three in deciduous trees and two in pine trees. There were another four blocks in which I came up empty. In 2021, I drove around in seven blocks in February and March but did not find a single new nest in a block that needed a Bald Eagle confirmation. Most of those blocks were further away from big open water. Better luck this year!

Even if you don't find an eagle nest in the block, driving around at this time of year is a good way to locate good breeding bird habitat for all the other species you need to find in the upcoming nesting season. Keep your eyes opened for those huge piles of sticks and good luck with your Atlas efforts!

Author: Glenn Therres, Queen Anne's County Coordinator



FROM THE FIELD













OUT OF THE ARCHIVE

The Soul of a Breeding Bird Atlas

Ellison, W. 2004. The Soul of a Breeding Bird Atlas. The Maryland Yellowthroat. 24(2):4.

Volunteers are the foundation, muscle, lifeblood, and heart of all breeding bird atlas projects. The biological atlas concept relies on the combined skills and efforts of an army of knowledgeable volunteers to survey a land area impossibly large for any small group of professional investigators, however well-trained and dedicated. The Maryland/D.C. Breeding Bird Atlas is a classic expression of how an alliance of like-minded people can generate a body of knowledge of greater worth and scale than any single person could ever hope to produce.

Most Maryland/D.C. Atlas volunteers work in the field, gathering bird reports as county coordinators, assigned block leaders, helpers in assigned blocks, or miniroute observers, or by reporting incidental sightings from their bird trips and general wanderings. Frequently volunteers will fulfill many of these roles in a single atlas season. Volunteers have also contributed to the project in a variety of other ways, including coordinating the activities of other observers, entering data, preparing atlas materials such as maps and block packets, generating publicity for the



project, fundraising, and helping oversee project organization and policy.

As of January 2004, atlas birders have recorded data in 997 blocks, 77% of the total for Maryland and D.C. These range from single random encounters with birds in a block to blocks with totals in excess of 100 species and 55 nesting confirmations. Nearly 590 blocks have reports of 50 or more bird species, indicating the quality of volunteer work over the first two years of the atlas.

As project coordinator, I've established a database of atlas volunteers of all types. The current database contains the names of 550 volunteers of all types. A list of atlas volunteers may be seen at the MOS Atlas web page at [https://web.archive.org/web/20100415000000*/www.md birds.org/atlas/docs/workersjan04.doc].

As of late January, some 64,285 bird sightings were listed in the Maryland/D.C. Atlas database housed at the Patuxent Wildlife Research Center. These were linked to the names of 383 volunteers, for an average of 168 sightings per observer. A "sighting" consists of any report of a bird species an observer enters into the database within a given year's field card. Sightings include regular species entry when a volunteer starts an online atlas field card, upgrades to a field card including additions to quarterblocks (where required), and any incidental sightings.

I have a listing of atlas observers broken down by number of sightings from the Patuxent atlas database. The following volunteers have contributed 400 or more sightings to the database.

Chandler Robbins	
Lynn Davidson	3171
Mark Hoffman	2951
Walter Ellison	2072
Sue Ricciardi	1212

Fred and Jane Fallon1076
Bob Ringler
Deanna Dawson 1049
Fran Pope
Matt Hafner
Patty Craig
Kyle Rambo 853
Stan Arnold
David Smith 745
Julie Maynard 733
Glen Lovelace 708
Nancy Martin 630
Charles Vaughn 608
Connie Skipper 538
Jeff Shenot 506
Arlene Ripley 500
Sue Hamilton 490
James McCann 483
Glenn Therres 455
Sam Dyke 453
George Jett 429
Barbara Dowell 425
Dotty Mumford 413

To make the list, an observer had to work on four or more assigned blocks and be alert to the breeding behavior of





birds wherever and whenever they birded during the peak atlas season from late May to early August. Chan works all over the state, has done a lot of incidental field cards, and has had a large number of block assignments each year. Lynn Davidson (Dorchester) and Mark Hoffman (Worcester) are doing their counties almost singlehandedly and have done two annual field cards apiece for a great many blocks. If you do a lot of blocks, and have worked both years, the sightings can really add up.

The observer list illustrates a number of points. First, the county coordinators have invested a great deal of time and effort in field work and data entry. Over two-fifths of the 400 Club are among our 30 county coordinators. The second, very exciting fact is that a great number of selfless, enthusiastic and focused birders have submitted records from their blocks and contributed many incidental records.

My hat's off to the volunteers who are making this project a success. I am impressed with their efforts, because I know what it takes to find all those birds and put them into the online database. Over the next three years we must get into the more than 290 blocks that still lack data, survey for night birds and marsh dwellers to fairly represent them on the state map, and make sure every block is as well-covered as possible. We can do it; the effort thus far says this is so.

Author: Walter Ellison, BBA2 Atlas Coordinator