WHAT'S HATCHING?

Official Newsletter of the Maryland & DC Breeding Bird Atlas 3

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Barn Owl by Sharif Uddin/Macaulay Library

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Have a story or a picture for the newsletter? We'd love to hear about it!

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BIRD OF THE MONTH

Atlasing Barn Owls requires combining minimal disturbance and effective searching.

TIPS AND TRICKS

Are you thinking about which block a hotspot is in before you select it? You should be!

OUT OF THE ARCHIVE

It's the 'rare owl' follow-up to last month's *Out of the Archive*. "Because", in Sue Ricciardi's own words, "yes, I want **YOU** to find owls!"

On July 8, 2021, Tim Carney (Maryland Environmental Service) located Hart-Miller Island's resident pair of Trumpeter Swans—with three cygnets! This represents the first breeding record for Trumpeter Swan in Maryland. Described in the 1820s as "the most common swan in the interior of the fur-countries", Trumpeter Swans were at risk of extinction a century later. The decline was primarily due to hunting, but concerted conservation efforts throughout the 20th century have been highly successful and the species continues to increase.

References: Richardson, J.R. 1829. Fauna boreali-americana*. John Murray, London. p. 464.*

Trumpeter Swan cygnets by Tim Carney (MDOT MPA/MES)

"Because there is very little published information on finding owls, the average birder usually feels that setting out to see any owls on one's own is a hopeless enterprise. It is not, of course, though only rails require comparable initiative."

--Claudia Wilds

Northern Saw-whet Owl by Sean McCandless/Macaulay Library

UPCOMING EVENTS

January 19, 2022
7:30–9:00 PM (virtual)
Montgomery Bird Club

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 montgomerybirdclub.org

Introducing eBird Trip Reports

eBird has released a brand-new feature, and it's pretty great. It's called Trip Reports, and it allows you to pull together multiple checklists into a single 'report'. Learn more at ebird.org/news/introducing-ebird-trip-reports

From the Coordinator

Sensitive Species are treated, well, sensitively for the Atlas.

Distributing observer effort into effectively every corner of the region is a cornerstone of the Atlas. This results in more thoroughly documented common species, even in areas that we might think of as rather biologically uninteresting, and more accurately assessing the range of rare species. Rare species are rare for a reason, and that reason is generally not enough suitable habitat. And what suitable habitat that does exist is usually in protected areas, areas that are reasonably well monitored.

That rule isn't always true, and Barn Owls are a good example of this. They've declined severely in Maryland and many of the remaining pairs are on private land—probably more than we know about. They're hard to find, and their desirability as a subject for photographs makes them prone to disturbance. If the location of a nest site becomes widely known, it can quickly result in enough disturbance to cause the owls to abandon their nest site. This creates a tricky conundrum—managers need to know where these sites are to accurately estimate population trends, but the site locations shouldn't be spread around.

The Atlas has addressed this problem by identifying a set of "Sensitive Species". These are species that a subset of the Steering Committee identified as sensitive to disturbance. We used recommendations from the Global Biodiversity Information Facility to determine the process and criteria for a species to be classified as Sensitive. For example, just because a species is uncommon does not make it sensitive to disturbance; the response to disturbance varies across species.

All observations of Sensitive Species are hidden on eBird, metadata on relevant media are obscured, and the birds are not included in any automated alerts or in downloads of eBird data. The data are only available by special request.

The subcommittee listed seven species as Sensitive in Maryland during dates that they are considered at risk. Outside those dates, they are treated the same as any other species. The species and dates are:

- Black Rail (year round)
- Northern Goshawk (year round)
- Barn Owl (year round)
- Northern Saw-whet Owl (Apr 1–Sep 30)
- Long-eared Owl (Apr 1–Sep 30)
- Short-eared Owl (May 1–Sep 30)
- Swainson's Warbler (Apr 1–Aug 20)

If you find a Sensitive Species, you can submit your checklist as normal. There's no need for you to hide it in eBird (it will be hidden automatically) or try to obscure location information. On the contrary, please provide as much detail about your observation as you can. Include how you identified the bird, a precise location, habitat and behavior information, and any nest information (if applicable). These qualitative details are important context for your observation.

These birds are exciting finds, but please do not post locations or details on social media, rare bird alert groups, or other public locations. Enjoy the sighting, keep your distance, and hopefully we will see more of these birds in the years to come.

--Gabriel

Swainson's Warbler (not in Maryland!) by Gabriel Foley

bird of the month:

BARN OWL

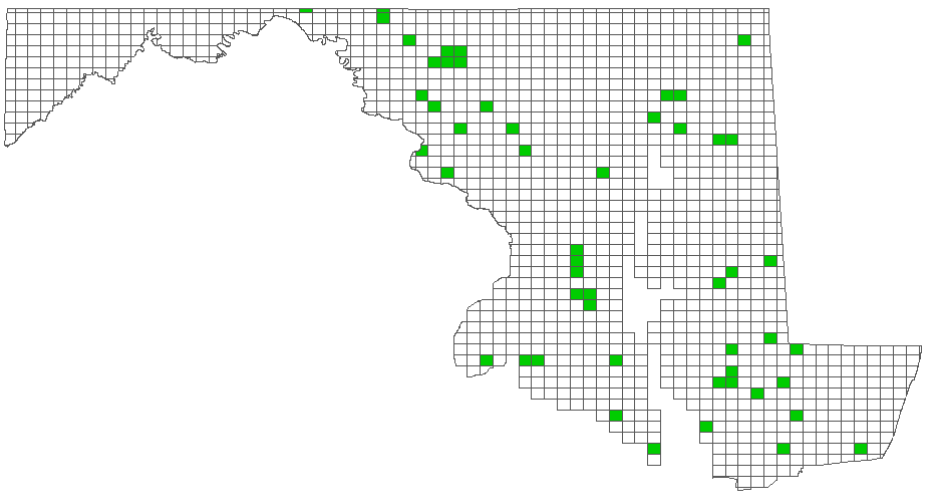
Barn Owl by Ian Davies/Macaulay Library

Described as "fairly common locally" in the late 50s, Barn Owls in Maryland have declined severely enough that they have been listed by the state as a Species in Need of Conservation. This listing indicates that they require conservation measures to sustain themselves. Following the first atlas, they were detected in 72% fewer blocks and had "the largest loss between [atlas] projects for any bird occurring in a hundred or more blocks in 1983–1987". The reasons behind the decline—which seem puzzling for an adaptable species found on six continents—are likely related to changing farmland practices that reduce habitat quality and prey populations.

Barn Owls are surprisingly short-lived, on average dying before their second 'hatch'-day (the oldest recorded wild Barn Owl was eight years old). But they begin breeding in their first year and have large clutches of fast-growing young; as long as nest sites and suitable habitat with ample food are available, they can sustain these losses.

Even in the first atlas, when Barn Owls were more abundant, they were noted as "a challenge to Atlas workers" because they were "generally uncommon, highly nocturnal, and rarely seen or heard". Knocking on farmers' doors and asking if they have Barn Owls nesting on their property is one option for locating them. The other option is searching them out yourself.

The first step to finding Barn Owls is identifying potential areas. In Maryland, Barn Owls are mostly in rural, open areas east of the Alleghenies. Row crops don't support



Barn Owl breeding distribution map from the Maryland & DC Breeding Bird Atlas 2.

OWLS & ETHICS

Owls require respect.

Few other birds possess an owl's charisma, and their habit of static, diurnal roosting makes them easy to disturb. The scarcity of Barn Owls in Maryland makes them a conservation concern, especially when coupled with their photogenic appearance and intriguing behavior. A bird's welfare should always be an observer's top consideration, regardless of population status, but concern about stress and disturbance should peak to hyper-awareness when a species is struggling.

It should go without saying that baiting owls for photographs is unacceptable for any reason, but so is approaching too closely or too often. In the case of Barn Owls, disrupting their normal behavioral patterns could even result in being charged with a misdemeanor, since they are a Species In Need of Conservation in Maryland.

Accurately documenting Barn Owl nest locations across the state is important, and the Atlas is one of the only methods that is doing this comprehensively. However, this does not provide a reason to disturb the owls; once found, they can and should be left alone, and the location should not be shared.

the small mammal populations that Barn Owls need, so look for hay fields, pastures, coastal marshes, and other grassland areas. The owls also need a suitable nest site nearby.

Barn Owls nest in sheltered locations like caves, cliff hollows, tree cavities, barns, silos, church steeples, and duck blinds (a behavior that appears to be unique to the Chesapeake Bay). They will also use nest boxes, and capitalizing on this behavior is a large part of the state's conservation scheme for Barn Owls. If you find open habitat that looks like it would support sufficient small mammal populations (in Maryland, Barn Owls primarily eat voles) near a suitable nest site, then there is potential for Barn Owls.

The conventional way to find Barn Owls has been through passive listening, but its success rate is low. Barn Owls don't call a lot. Recent research has shown that using playback increases detection rates several times that of passive listening—however, playback is only condoned for detecting Barn Owls for atlasing purposes. Using playback for birding or photography is strictly unacceptable, and it should not be used if you know that a Barn Owl has already been documented in that block. Call playback should be done on moonlit nights at least an hour after sunset. Play the owl's territorial call for anywhere from 30 seconds to 2.5 minutes, then listen for 2.5–5 minutes, then repeat the sequence. If you don't hear any response after two sequences of playback, move to another site. Conversely, if you get a response, stop playback right away.

Barn Owl by Mark Linardi/Macaulay Library

Barn Owl by George Jett

In Maryland, Barn Owls are treated as Sensitive Species in eBird, so the locations and details are hidden. If you find a Barn Owl, you can submit it as you would any other sighting; your observation won't be included in any email alerts, it can't be found in your checklists or in downloaded data (other than by you and by eBird reviewers), and it can't be seen on any eBird maps or recent sightings. If you submit a photo, the date will be removed, the checklist unlinked, and the location generalized to the county level. Barn Owls are priority species for the Atlas, so be sure to include as much detailed information as you can, including precise coordinates of where you suspect the nest site to be and a description of the surrounding habitat. Finally, please don't share the location of your find elsewhere, such as Facebook, listservs, or rare bird alert groups.

It's also important to specifically mention the threat of Ospreys to Barn Owls. In a 1972 paper, Jan Reese reported three Barn Owls killed by Ospreys and multiple others attacked after he flushed them from duck blinds; the owls were nesting inside the blinds, and the Ospreys

Barn Owl chicks by George Jett

on top. In a 1990 report, Peter Bendel and Glenn Therres also reported a flushed Barn Owl being attacked by an Osprey. If other raptors are around a location you suspect a Barn Owl could flush from, such as a duck blind, do not risk disturbing the owl.

Identifying Barn Owl nest sites is important, not just to show how populations have changed, but also because the same nest sites tend to be re-used. Building a database of sites allows the population to be tracked through nest monitoring, habitat quality to be correlated, and management strategies informed.

The heart-shaped face and pale plumage are distinctively Barn Owl attributes; in Maryland, not much else looks like them. The sexes are similar, but females tend to be larger with more cinnamon and more spotting on the breast. Great Horned Owl nestlings are also whitish, but they are more similar vocally than visually. If you hear a Barn Owl, do your best to get a recording and be aware that the begging screeches of Great Horned Owl fledglings can sound somewhat similar to the raspy screams of Barn Owls. While Barn Owls have an array of calls, most of which are given during the breeding season, the most commonly heard Barn Owl call is generally considered to have a territorial purpose. It is most often given by males near the nest site.

Barn Owls are largely resident in Maryland. They tend to be monogamous, although instances of polygamy are not uncommon. The safe dates for Barn Owl, April 15 to September 30, shouldn't mislead you. Barn Owls have been recorded nesting in Maryland in every month of the year. Despite that, their peak nesting period occurs from about March to July, and in the 60s Jan Reese noted that half of the 83 nests he found had eggs between March 28and April 9. In 1990, Bendel and Therres reported mid-April to May to be the peak period. Occasionally, Barn Owls will raise two broods in the same year, but it's usually just one.

The pair will begin courtship about a month before egg-laying commences, and during that time they roost in the intended nest site, coughing up pellets of undigested material all over the floor. Eventually, the female shreds these pellets and uses them as a base to lay her eggs on. She does all of the incubating, which begins immediately after laying the first dull white egg. Clutches in Maryland have ranged from 1–10 eggs, but the mean has consistently been five eggs. Incubation lasts for about 31 days, and the female continues brooding for another 25 days—even if the younger chicks are unable to thermoregulate (the older chicks help keep the younger chicks warm). She begins helping the male provision their family after two weeks. The nestlings are capable of flying at about 55 days, but they'll continue to roost in the nest cavity and be fed by their parents for a few more weeks. They're independent at 76–86 days, and they begin dispersing another 2–8 weeks after independence. Fledglings can disperse tremendously far—over a thousand miles is not unheard of—although normally their dispersal is closer to 50 miles.

Author: Gabriel Foley

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ATLASER SPOTLIGHT

Marcia Balestri of Ocean Pines, Worcester County, is retired and enjoys birding the Eastern Shore.

Where is your favorite place to atlas?

Along the Pocomoke River in Worcester County.

What bird do you particularly like?

It is hard for me to pick a favorite bird. I love the elegance of Cedar Waxwings, but I find myself delighting in common birds with "personality" like Blue Jays (my uncle Dick's favorite), Winter Wrens, and White-eyed Vireos.

What is the best thing about atlasing?

When I expressed hesitation at contributing to the second MD-DC atlas because I didn't feel qualified, Bob Ringler told me that I would learn an incredible amount, and that it would change the way I looked at birds. He was right on both counts. It has made me a better, more thoughtful birder.

What made you interested in birds?

My uncle Dick, who started birding when he was eight, got me interested in birding. He visited us in Frederick from his home in California, and I was fascinated by the way he could identify our Wood Thrushes and other regular visitors in our yard just by their songs and chip notes. He took me birding nearby and bought me a field guide and a hummingbird feeder. I became addicted fairly quickly.

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

My iPhone. It makes it easy to record results and keep track of block borders.

What's our biggest conservation issue?

I think you can't separate conservation from climate change, so anything we can do to work towards solving that problem is key to better conservation.

Who would you go atlasing with?

I would like to spend the day with Michael O'Brien, who is such a pleasure to bird with. He could help me sort out some mysterious chip notes that I haven't been able to identify and point out all the birds he hears that I am missing.

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

I contributed to the second MD-DC atlas, doing a number of blocks and mini-routes in Frederick County.

Cedar Waxwing by Marcia Balestri/Macaulay Library

TIPS AND TRICKS

Hotspots and block boundaries

Atlas blocks provide a way to map out species occurrence, sure, but more importantly they distribute effort across the region. One of the fundamental assumptions of the Atlas is that all sightings reported from a block occurred within that block—that is, no one crossed block boundaries on a checklist. In fact, this is one of the main reasons why we ask atlasers to submit checklists through the portal, and we don't just go searching through eBird for breeding codes. If you submit your checklists through the Atlas portal, then we can assume that you understand and follow the project protocols, like staying within block boundaries.

This seems simple. But if you're like me, you're atlasing wherever you are, and sometimes you're not thinking as much about the block you're in as what birds you are finding. It's easy to cross a block boundary and not notice. The addition of the block grid to the eBird app's map helps a lot with this (when using the Atlas portal, tap on the elapsed time and distance to see where you are in relation to the block's boundaries), but an even more helpful feature will be coming out soon (if you have an Android, you may have it already). As you approach a block boundary, a message will pop up and notify you that, hey, there's a block boundary coming up. I'm excited about this, because my memory needs all the help it can get.

There's still one more boundary-related issue to be aware of though. If you've been birding a location with a hotspot, be cautious of hotspots that are located outside of the block you were atlasing in. If your checklist is in block A, but the hotspot is in block B, you will need to use a personal location for your checklist. Don't assign your checklist to a hotspot that is located in a different block.

If you are atlasing the Wildlife Drive of Blackwater NWR, a block boundary cuts across the road. If you create two checklists, one on each side of the block boundary, but assign both to the Wildlife Drive hotspot, Checklist 1 will have an incorrect location associated with it. Instead, a personal location should be created for Checklist 1.

If you want your observations associated with the hotspot's recent sightings, top 100, etc., then don't use the Atlas portal to submit your checklist; just use core eBird. If you have observations on that checklist that you still want included in the Atlas dataset, then submit them as Incidental observations from the appropriate block. This is not ideal, of course—the better solution by far is for you not to use the hotspot—but fortunately the hotspots that fit this description are fairly limited.

Similarly, if you are atlasing near a block boundary then you may observe birds in the other block. You should include these birds on your current checklist (this is required for you to submit a complete checklist), but you should not include a breeding code for those individuals. Instead, finish your checklist and make a new, Incidental checklist located where you saw those birds and use the appropriate breeding code.

There are lots of details to remember when you're atlasing. If you occasionally forget, you won't break the Atlas. But the more often that you do remember and, as a result, our assumptions are met, the more accurate the predictions we make from our analyses will be.

Author: Gabriel Foley

FROM THE FIELD

Rock Pigeon chick by Keith Eric Costley/Macaulay Library

Rock Pigeon chick by Jonathan Lancher/Macaulay

Rock Pigeon on a nest by Tim Ray/Macaulay Library

Rock Pigeon carrying nest material by Derek Hudgins/Macaulay Library

Rock Pigeon carrying nest material by Derek Hudgins/Macaulay Library

Rock Pigeon on a nest by Crystal Kunst/Macaulay Library

OUT OF THE ARCHIVE

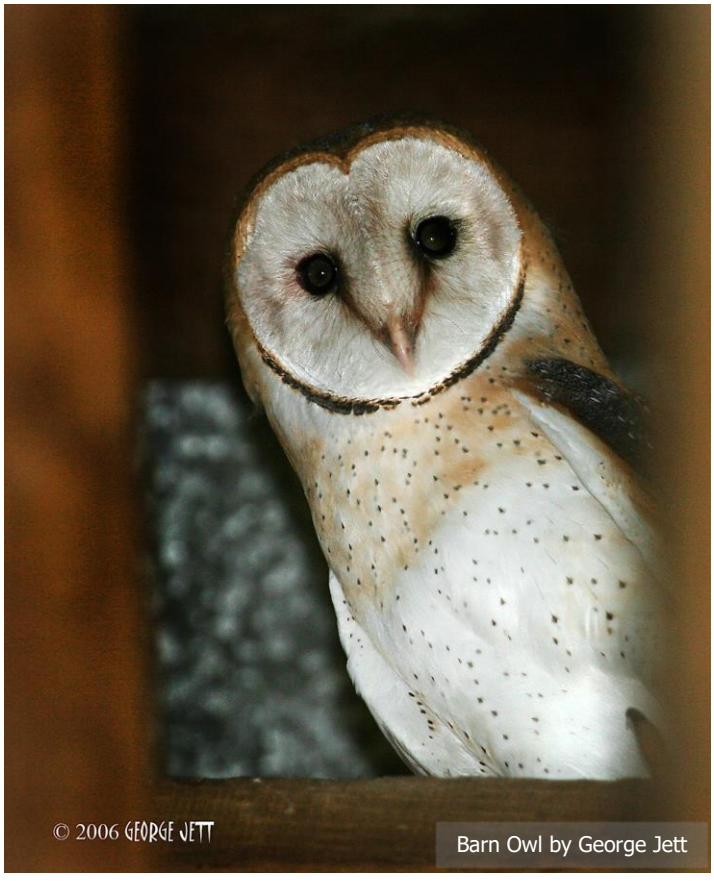
Owls? You want ME to find owls?!? (Part II)

Ricciardi, S. 2002. Owls? - You want ME to find Owls?!? (Part II). *The Maryland Yellowthroat.* 23(1):4.

Picking up from where we left off in the last issue of the Yellowthroat, here are some tips for locating other species of owls in Maryland:

Barn Owl

During the first atlas, Barn Owls were tough to find. In the published atlas species account, Pete Jeschke and Glenn Therres commented: "The Barn Owl posed a challenge to Atlas workers. It is generally uncommon, highly nocturnal, and rarely seen or heard." So what can you do to be more successful? Well, you have one slight advantage with this owl in that searching during the daytime likely will give better results. Barn Owls prefer open country for foraging, but avoid regularly disturbed lands that don't support the populations of small mammals they feed upon. Look for fields, farmlands, pastures, grasslands, meadows, and coastal marshes in which to search by day for nest sites. These include barns (surprise, surprise), silos, church steeples, abandoned buildings, tree cavities, ledges, Wood Duck and other artificial nest boxes, deer and waterfowl blinds, and similar structures. If no owl is present, look for fresh pellets and excrement as they will also be good indicators of a nesting Barn Owl. Ask farmers and other property owners if they are aware of any Barn Owls and for permission to inspect promising locations. At night you might hear their hissing calls as they fly over fields and marshes, or the raspy calls of owlets in the nest begging for food. Although their safe dates extend from April 15 through September 30, Barn Owls nest all year in Maryland and may be double brooded. Thus, you can look for them year-round.



Barn Owl by George Jett

Northern Saw-whet Owl

Here's an owl for which you could contribute new information about its breeding biology. In the first Atlas, only two blocks yielded saw-whet owls within safe dates and these were determined to be only possible breeders. It wasn't until late April of 1993, when the Atlas had ended, that Dave Brinker and Kevin Dodge documented the first nest in Garrett County, Maryland. Country-wide, they are woodland generalists with a preference for coniferous forests. In Maryland, evergreen trees or shrubs, including Red Spruce, Eastern Hemlock and rhododendron are among the dominant vegetation within breeding territories. Cavity nesters, saw-whets use both natural cavities and nest boxes. Try tape-recorded calls (cautiously), starting in April. (There is some debate that May 5 is too late a beginning safe date.) The ending safe date for the Northern Saw-whet Owl is September [10].

Long-eared Owl and Short-eared Owl

No breeding Long-eared or Short-eared Owls were found during the first Atlas. There is historical breeding evidence

for each, but the extent of their current breeding in Maryland or DC is poorly understood. In addition, the Short-eared Owl is officially listed by the state of Maryland as In Need of Conservation. Safe dates for both species are May 1 and September 30. Long-eared Owls are known to lay eggs in old crow, hawk, or squirrel nests. You might try dense evergreen stands in otherwise open country. Short-eared Owls nest on the ground, also in open country, especially grasslands, meadows, or open fields. The Atlas Handbook lists Long-eareds as rare nesters in the Garrett/Allegany County section of Maryland and suggests searching for Short-eareds from the Piedmont west and also on the Eastern Shore of Maryland.

If you think you've found a nesting Northern Saw-whet, Long-eared, or Short-eared owl, contact your county coordinator and state coordinator…for advice on how to proceed. It is important to search for these species to learn more about their breeding in Maryland and the District, but all three are considered rare breeders and additional documentation via the Atlas verification form will be

Northern Saw-whet Owl by Michael Bradley/Macaulay Library

Long-eared Owl by Mark R Johnson/Macaulay Library

required. It is imperative that you not reveal their nesting locations to anyone except your county coordinator… The successful breeding of these rare species will very likely depend on your judicious behavior.

Except for the latter two, you can find much more information about each species, especially the saw-whet, in the publication, Atlas of the Breeding Birds of Maryland and the District of Columbia. (See the list of references.)

It's not too soon to start examining the territory in your block(s) to identify locations to look for owls. Because, yes, I want **YOU** to find owls! Good owling!

Author: Sue Ricciardi, BBA2 Anne Arundel County Coordinator

Acknowledgements and References

Harry Armistead, Rick Blom, Lynn Davidson, Walter Ellison, Jan Reese, Jo Solem, and Hal Wierenga provided significant editorial assistance and/or owling information and tips, and I am very grateful to them for their help.

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Short-eared Owl by David Palmer/Macaulay Library

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Long-eared Owl by Austin Jennings/Macaulay Library

Short-eared Owl by Stephen Davies/Macaulay Library

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