



A chestnut-sided warbler. In nonbreeding plumage, adults and immatures can be identified by bright lime-green above with a neat white eye ring, two wing-bars and pale gray to white underparts.

EVERYONE

Is a Birder

Powered by volunteers, the N.C. Bird Atlas research project is mapping bird populations from the mountains to the coast

written by Scott Anderson

In a Greensboro apartment, a middle-school aged birder sits at the kitchen table, thumbs through a magazine and munches on a toasted peanut butter and banana (sliced lengthwise *thankyouverymuch*) sandwich. Spying quick movement out of the sliding glass window to the small balcony of a fourth-floor apartment, the birder hops down from the chair to see a small brown bird with a jaunty stance and a sharp looking white stripe over its eye. After a few minutes of observation, the birder notes frequent returns to the fern hanging from the balcony.

In Asheboro, a loaded backpack sits on the kitchen table next to precision binoculars, a large-bodied camera with a high-powered lens and a harness for carrying it all. Pungent shade-grown, Bird Friendly coffee notes waft through the air, emanating from the dutifully brewing coffee maker. An excited birder stumbles in from the bedroom, having slept in field clothes to minimize pre-dawn preparations. Grabbing a granola bar and

lunch from the fridge, the birder pours coffee and heads out the door with the excitement of catching the pre-dawn activity of breeding warblers on the Blue Ridge Parkway.

Birding isn't confined to the avid and is not defined by the skill of the observer. Birding can happen anywhere at anytime, with or without binoculars—and can be defined as finding joy in observation wherever it occurs, like:

A birder enjoying a lunch break on a greenway casually spies a green heron.

A birder plans a fall weekend not according to the leaves, but to hit the annual hawk migration hotspots on the Blue Ridge Parkway.

The casual family weekend outing started earlier than everyone—except for a birder accustomed to the early hours—wanted.

A birder running an errand at a big box store notices a nest in a tree in the parking lot.

Each year, over 1.2 million North Carolinians participate in birdwatching,



 = PRIORITY BLOCK  = NON-PRIORITY BLOCK  = RESTRICTED



Here's how:

Mind the Blocks!

To ensure even coverage by volunteers, researchers have split the state into 5,454 virtual areas called blocks. This is too much ground to cover in five years, so 937 blocks have been selected as priorities. Priority blocks are spread evenly across the state, covering fields, farms and forests, as well as urban and suburban areas. We're encouraging volunteers to contribute as many observations as they can in these priority blocks.

Keep It Short

When you walk a trail, look out the window or sit on your porch, you might be listing the kinds of birds you see and hear. In eBird, this list is called a checklist. Shorter checklists—those less than 1 mile long and less than 1 hour—will help researchers associate the kind of habitat (natural area) with where the bird was observed. Knowing the kinds of habitat birds hang out in helps shape conservation priorities.

Sit a Spell

Recording your observations doesn't have to end at identification. If your birding style is to sit and observe a particular bird, take note of its behavior. Is the bird singing? Is it carrying hair or fur? Are there two birds? Did you find a nest? These observations and more can be recorded on your checklist and provide a better

understanding of breeding timing and behaviors. A complete list of options is available at ncbirdatlas.org.

Enter Data in the N.C. Bird Atlas Portal

While the project will use any record entered into eBird, data submitted through the N.C. Bird Atlas portal (ncbirdatlas.org) are particularly valuable. Records submitted through the portal indicate that the observer is more likely to follow the rules above.

When, Where and How to Go Birding

Birds are particular about where they hang out and how long they stay. Some (like Canada geese, tufted titmice or the ever-popular Northern cardinal) stay here year-round. Others (like the rare Kirtland's warbler) only pass through briefly in the spring and fall. Others spend their spring and summer raising chicks on our beaches, pine forests, oak woods and high mountain balds. Because of this diversity of bird use, we encourage observations (including behaviors) submitted at any point during the year.

If you don't know where to go, we've got you. First, you can check out the map of priority blocks (blocksignup.ncbirdatlas.org) that highlights areas where researchers are in most need of your observations. These are evenly distributed across the state, so there is bound to be one near you.



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Inset: A prothonotary warbler. Above: Lauren Pharr uses binoculars and a camera with a digital zoom lens, common tools for birders, while birding at Lake Johnson in Raleigh.

encompassing a wide variety of ways to appreciate our feathered friends that are all considered "birding." But

despite widespread appreciation for our present-day feathered dinosaurs, birds face incredible challenges. A 2019 study led by Dr. Ken Rosenberg in the journal *Science* documented a continent-wide decline of over 3 billion birds in the last 50 years. While this decline is well documented, biologists need more detailed, local information about birds in our state to reverse these declines.

From the 3-foot bald eagle to the 3-inch ruby-crowned kinglet, birds' needs are as

variable as the diversity in appearance and behavior. In just six hours in North Carolina, one can traverse forests, fields, lakes and cities—from the cool, high elevation spruce-fir forests near Old Fort to the acrid, steamy marshes of the Outer Banks. These stunning landscapes host over 470 kinds of bird species. To maintain this diversity, we need a clearer picture of how many birds live in the 53,000 square miles we call North Carolina and where they nest, feed and shelter. That's where birders (like you!) come in.

To take advantage of the enthusiasm for birding and address this urgent need for information, we began the North Carolina Bird Atlas (ncbirdatlas.org) last year. This five-year project calls on all birders to contribute observations throughout the

state. Atlases are a common method for recruiting volunteers to collect detailed information about birds over a large area. Many other East Coast states have completed atlases in recent years, and four (North Carolina, Maine, New York and Maryland/D.C.) have atlas projects going on right now.

To date, over 800 people have already collected over 30,000 checklists of birds in North Carolina and submitted them through the popular eBird platform (either online at ncbirdatlas.org or through the eBird smartphone app). But we have a long way to go, and we need your help. Any bird observation is worthy of the N.C. Bird Atlas (see sidebar for details on how to submit observations), but there are ways to make them even more valuable.

MELISSA MCGAW/NCWRC

GET INVOLVED

Participation is easy—all are welcome to contribute!



GET PREPARED

- Download the eBird app on your smartphone
- Change your portal to “North Carolina Bird Atlas” in the settings
- Optional: Download the MerlinBird ID app to help with identification

GO BIRDING!

- Stay within block boundaries—spend more time in priority blocks. See map at: blocksignup.ncbird-atlas.org
- Keep your checklists short (less than an hour, less than a mile)

You can find many more details about where and when to go birding to collect the most useful data at ncbirdatlas.org.

Top: When perched, the barn swallow appears cone shaped, with a slightly flattened head, no visible neck and broad shoulders. Bottom: Brown pelicans are typically found in Coastal marine and estuarine waters.



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Second, check out the N.C. Birding Trail—a driving trail of great locations for birding in the state. Details about each location are available at ncbirdingtrail.org.

Worried about misidentification? You may be familiar with a Carolina chickadee or a blue-gray gnatcatcher, but have you seen a prothonotary warbler? A swallow-tailed kite? A loggerhead shrike? For many, fear of misidentifying a bird prevents participation. Fortunately, a wealth of resources is available for visual and audio identification. First, check out the free Merlin Bird ID smartphone app. By either recording a bird's song or answering five simple questions, this app will whittle down the possibilities from hundreds to a handful. Second, check your local bookstore for bird guides (we recommend one with Eastern U.S. species only) or go to the free All About Birds website (allaboutbirds.org).

What Is Next for the N.C. Bird Atlas?

The data collected from the N.C. Bird Atlas will not only answer simple questions about the breeding behavior and distribution of birds in the state, but it will also provide baselines for future, more robust bird conservation work. At the end of the five-year data collection period, biologists will publish the distribution and abundance of hundreds of bird species, but the work won't end there. The millions of records will fuel future research to understand the needs of the birds that rely on North Carolina habitats.

The N.C. Wildlife Resources Commission has recruited a diversity of partners,

like the N.C. Natural Heritage Program, North Carolina Audubon, the U.S. Fish and Wildlife Service, Catawba College and N.C. State University to ensure that the data collected go to the highest and best use. All volunteer data collected through eBird are already being used to model large scale presence and migration of hundreds of species at ebird.org/science/status-and-trends.

Whether you dedicate your hard-earned time and money on trips and expensive equipment to see and enjoy birds or revel in the invigorating birdsong from your back porch on cool spring mornings, you are a birder and we need your help. We need a better picture of where birds live to know where to put conservation resources to make sure they stick around. We need People to Count because Birds Count.

Want to Learn More?

Visit ncbirdatlas.org for project status, a participation handbook, frequently asked questions and much more. If you want to know more about where to go birding, check out the NC Birding Trail (ncbirding-trail.org). To learn more about best practices for observing birds without disturbing them, check out the American Birding Association's Code of Birding Ethics at aba.org/aba-code-of-birding-ethics. ➡

As the N.C. Wildlife Resources Commission's bird conservation biologist, Scott Anderson focuses on the conservation of birds wherever they occur, including by serving as a co-leader of the N.C. Bird Atlas. He advocates for equitable access to and appreciation of the nature around us.