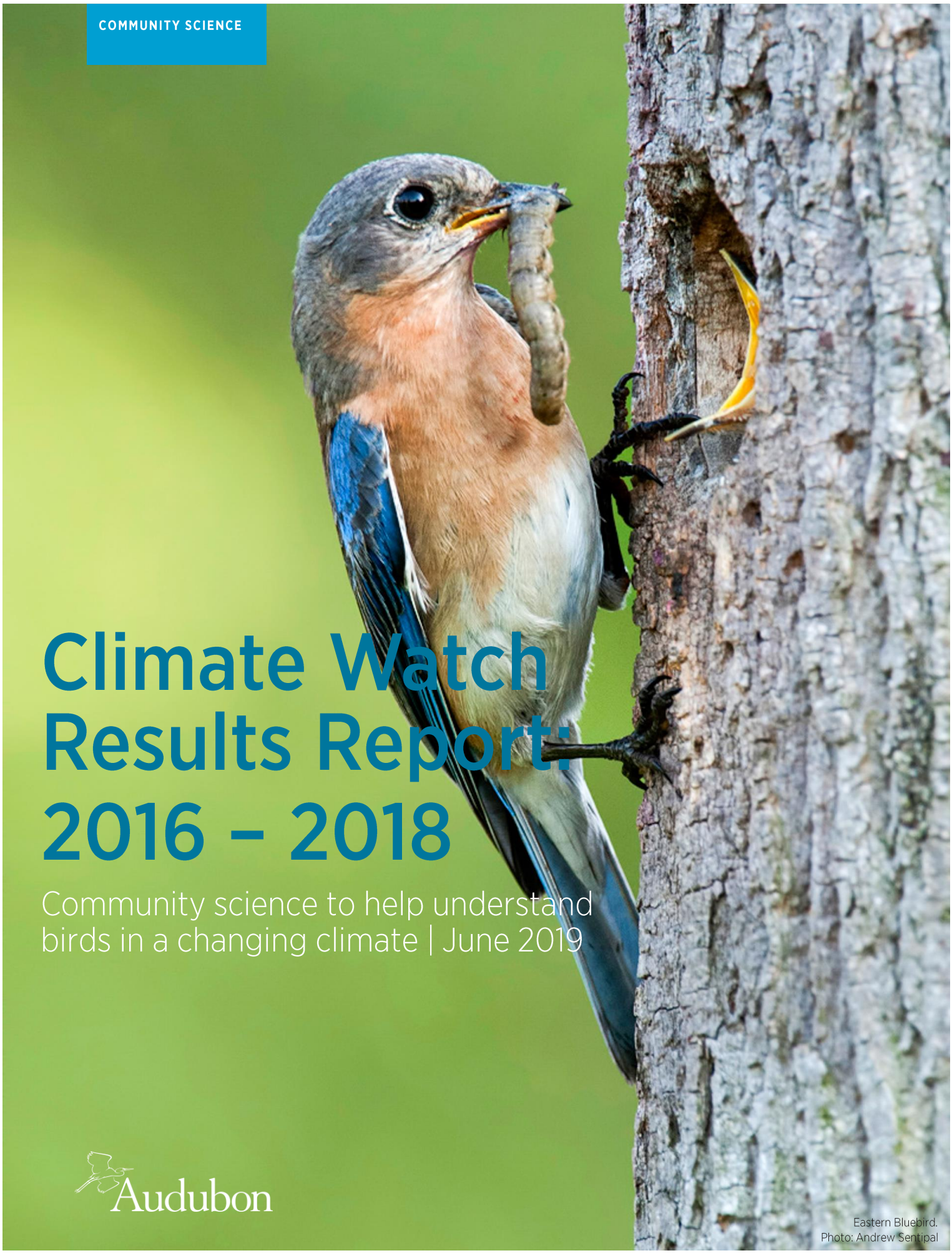
COMMUNITY SCIENCE



Climate Watch Results Report: 2016 – 2018

Community science to help understand birds in a changing climate | June 2019

Audubon

Eastern Bluebird.
Photo: Andrew Sentipal

Contents

Overview

As of 2016, more than 1100 volunteers from across the U.S. have looked for bluebirds and nuthatches as part of Audubon's Climate Watch program, a community science program that integrates species' climate-based range projections with volunteer knowledge to study how birds are responding to climate change. Volunteer Community Scientists collected data on seven target species: Eastern, Mountain, and Western Bluebirds and Brown-headed, White-breasted, Red-breasted, and Pygmy Nuthatches.

Top row: Eastern, Mountain, and Western Bluebirds. Bottom row: Brown-headed, White-breasted, Red-breasted, and Pygmy Nuthatches. Photos from top left: Jim Chagares, Timothy Lenahan, Rick Lewis, Sid Ehlert, Nick Saunders, Megumi Aita, and Clyde Dexter. All from Audubon Photography Awards.

SUMMARY OF SUMMER 2018 CLIMATE WATCH EFFORTS

The summer 2018 survey marked Audubon's Climate Watch program's third season. In this section we provide an account of the summer 2018 survey, including summary information on participation, data collected, data issues, and potential solutions.

Figure 1a. Summer 2016 Climate Watch survey locations

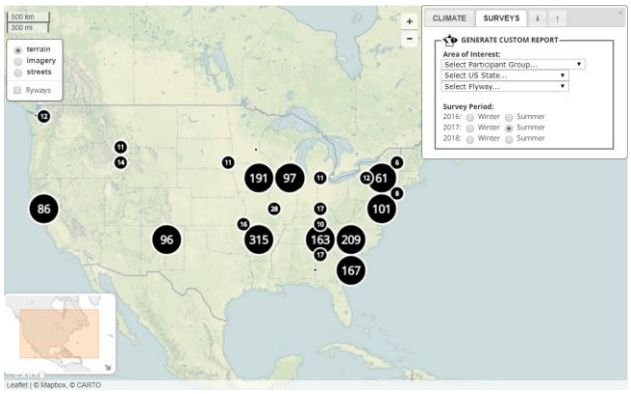


Figure 1b. Summer 2017 Climate Watch survey locations

Figure 1c. Summer 2018 Climate Watch survey locations

SUMMER 2018 PARTICIPANT EFFORT

From May 15 – June 15, 2018, 545 volunteers collected Climate Watch data on seven target species:

- Eastern Bluebirds
- Mountain Bluebirds
- Western Bluebirds
- Brown-headed Nuthatches
- White-breasted Nuthatches
- Red-breasted Nuthatches
- Pygmy Nuthatches

Figures 1a, 1b, and 1c illustrate that with the help of local and regional coordinators who help recruit, train and collect data, Climate Watch participation expanded rapidly in terms of both the number of individual data points submitted, as well as the geographic reach of the program. Volunteers from across 26 states participated as part of more than 50 coordinated efforts led by local and regional coordinators.

Participating groups include:

- Arkansas Valley Audubon Society
- Atlanta Audubon Society
- Audubon Center at Riverlands
- Audubon Great Lakes
- Audubon Nebraska
- Audubon North Carolina
- Audubon Society of Greater Denver
- Audubon South Carolina
- Big Bluestem Audubon Society
- Central New Mexico Audubon Society
- Chemung Valley Audubon Society
- Chesapeake Audubon Society
- Chicago Audubon
- Coastal Georgia Audubon
- Columbus Audubon
- DC Audubon
- Disorganized Bird Club
- Dunes-Calumet Audubon
- Elisha Mitchell Audubon
- Forsyth Audubon
- Fort Worth Audubon
- Fripp Island Audubon Club
- Golden Eagle Audubon
- High Peaks Birders
- Hilton Pond Center for Piedmont Natural History
- John James Audubon Center
- Juniata Valley Audubon
- Lake County Audubon
- Lehigh Valley Audubon
- Lower Columbia Basin Audubon
- Madison Audubon
- Mecklenburg Audubon
- Michigan Audubon
- Napa-Solano Audubon
- National Park Service
- New Hope Audubon
- North Shore Audubon
- Northern Arizona Audubon
- Olympic Peninsula Audubon
- Ozark Gateway Audubon
- Pickering Creek Audubon Center
- Prairie Rapids Audubon
- Red Rock Audubon
- Seattle Audubon
- Snake River Audubon
- South Bend-Elkhart Audubon
- South Shore Audubon
- Southern Adirondack Audubon Society
- St. Louis Audubon Society

SUMMER 2018 DATA COLLECTION

Thank you to all of the coordinators and participants who gave of their time and expertise. Becaues of your efforts, Audubon collected more data on the distribution and abundance of target species than ever before. In particular, thanks you for submitting complete data in standardized forms and for submitting in your data as eBird checklist links. This significantly speeds up the analysis process.

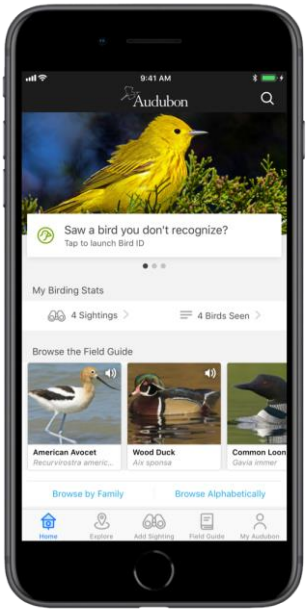


Figure 2. Audubon App

In addition, thanks to those of you who helped us to test the Audubon app as a new data entry system (Figure 2). Audubon continues to use your feedback to make these tools more user-friendly and comprehensive as we look to make participation in Climate Watch more accessible. Keep an eye out for opportunities to use these new data entry tools during the coming seasons of Climate Watch!

ANALYSIS OF 2016 – 2018 DATA

With your help, we are doing important work for birds and the places they need. It is common for ecologists to make predictions about changes in species' distributions as a result of climate change; rarely are these predictions validated with on-the-ground data. Your participation in Climate Watch as a community scientist who collects independent data is essential.

Western Bluebird.
Photo: Don Henderson

This report shows the first analysis of Climate Watch data collected in the summers and winters of 2016, 2017 and 2018. The data reveals how bluebirds and nuthatches are responding to climate change. The bottom line is: it is complicated because responses to climate change are species and season-specific. Still, when we combine data from multiple years, patterns are starting to emerge. The data from Climate Watch participants shows that climate change is already influencing where birds breed and spend winter months.

In addition to data analysis, the report outlines how you can help birds facing the worst impacts of climate change; community scientists, like you, witness the effects of climate change first hand.

What have we found out?

We need your help to prioritize action on climate change with policymakers.

We are now able to make more realistic predictions of each species' future range based on where our Climate Watch volunteers see target species. Your commitment to Climate Watch-- and help with recruitment is vital. Though it is exciting that we are starting to see trends emerge, more Climate Watch volunteers are needed to compile additional data.

This is the first analysis to make use of multiple years of Climate Watch data.

SPECIES RESULTS AT A GLANCE

Climate change is a complex issue. Climate Watch target species are revealing that their responses to climate-mediated range shifts are similarly complex. Below are three species-at-a-glance tables that summarize their seasonal responses in the context of the following questions:

- Are birds occupying sites that are climate suitable? (Table 1)
- Are birds leaving sites that are worsening in climate suitability? (Table 2)
- Are birds moving into sites that are projected to be climate suitable? (Table 3)

Although we are starting to see consistent and reliable patterns across species and seasons, climate change is occurring on a longer time scale than just a few years. We will be able to answer even more detailed questions with additional years of Climate Watch data. Once sufficient long-term data is gathered, we will be able to answer fundamental questions about shifts in bird distributions in response to a changing climate. Those results will help prioritize conservation actions and policy for birds, as well as the habitats on which they depend.

In the meantime, we can start to answer climate-related questions and get a better sense of whether birds are tracking their climate niches in both summer and winter. Our new models will help us pinpoint areas that are more or less likely to be occupied by species in certain seasons, helping us identify whether birds seem to be shifting their range edges (e.g., moving northward in winter) in response to climate change.

OCCUPANCY AND CLIMATE SUITABILITY

To determine whether bluebirds and nuthatches are occupying climate-suitable sites (or Climate Watch squares; we use 'sites' and 'squares' interchangeably), we evaluated whether initial site occupancy was related to 2000 climate suitability. Across all species and seasons (summer and winter), we found a strong positive relationship between occupancy and 2000 climate suitability (Table 1). This supports the accuracy of Audubon climate models!

Our climate models projected that certain areas are more or less climatically suitable for a given species in a given season, and our volunteer-collected data confirms these predictions. In other words, birds are occupying sites that are more climatically suitable, and they are not at sites that our models estimate are unsuitable. Now we can

Table 1. Are species occupying sites that are climate suitable in summer and winter? 'Yes' indicates a positive relationship between initial occupancy and 2000 climate suitability.

SPECIES	SUMMER	WINTER
Eastern Bluebird 	✓yes	✓yes
Mountain Bluebird 	✓yes	✓yes
Western Bluebird 	✓yes	✓yes
Brown-headed Nuthatch 	✓yes	✓yes
White-breasted Nuthatch 	✓yes	✓yes
Red-breasted Nuthatch 	✓yes	✓yes
Pygmy Nuthatch 	✓yes	✓yes

have even more confidence in our climate suitability projections going forward!

LOCAL EXTINCTION AND CLIMATE SUITABILITY

By combining multiple years of Climate Watch data, we can estimate local colonization and extinction rates for the first time. This means that we are starting to determine which climate factors are driving birds' movements into and out of Climate Watch squares. For example, in this analysis, we wanted to answer the question 'Are birds leaving sites that are worsening in climate suitability?'.

To answer this question, we evaluated whether there was a significant relationship between local extinction (defined as a Climate Watch square occupied in year t and unoccupied in year t + 1) and the change in climate suitability from the 2000s to 2020s for each species. If there was a significant negative relationship between extinction and change in suitability, that means that birds are less likely to leave a site if it is becoming more climatically suitable. In other words, we would expect birds to abandon sites that used to be 'good' (in terms of climate suitability) but are predicted to become less suitable in the future.

Is that what we found? See our results in Table 2. We found that most species are leaving sites that are worsening in climate suitability only during winter. In summer, only Brown-headed Nuthatch showed a negative relationship between extinction and the change in climate suitability between the 2000s and 2020s. These results indicate that there is more movement away from climatically worsening sites in winter rather than summer, perhaps because colder winter temperatures are more limiting.

Our results also demonstrate that we need more data to fully understand drivers of extinction, given that some species-season relationships were insignificant ('more data needed' entries in Table 2). Additional years of data will help us better understand these seasonal dynamics, which are 'data-hungry' parameters! Additionally, it is crucial to continue surveying the same Climate Watch squares year after year so that we can document transitions in occupancy more precisely.

Table 2. Are species leaving sites that are worsening in climate suitability? 'Yes' indicates a negative relationship between local extinction and the change in climate suitability between 2000 and 2020 (delta CS). 'No' indicates a positive relationship between local extinction and delta CS. 'More data needed' indicates a non-significant relationship between local extinction and delta CS.

SPECIES	SUMMER	WINTER
Eastern Bluebird 	✗ no	more data needed
Mountain Bluebird 	more data needed	✓ yes
Western Bluebird 	more data needed	✓ yes
Brown-headed Nuthatch 	✓ yes	more data needed
White-breasted Nuthatch 	✗ no	✓ yes
Red-breasted Nuthatch 	more data needed	✓ yes
Pygmy Nuthatch 	more data needed	more data needed

LOCAL COLONIZATION AND CLIMATE SUITABILITY

The third question we wanted to answer with our multi-year modeling framework was 'Are birds moving into sites that are projected to be climate suitable?'. To answer this question, we evaluated whether there was a significant relationship between local colonization (defined as a Climate Watch square being unoccupied in year t and occupied in year t + 1) and 2020 climate suitability. In this way, we can determine whether birds are moving into sites that our climate models project to be suitable soon.

What did we find? See our results in Table 3. In general, we found that birds are colonizing sites that are projected to be suitable. In winter, this pattern is more apparent in nuthatches compared to bluebirds. However, in summer, this pattern holds across bluebirds and nuthatches, indicating that both species are finding climatically suitable sites during this season.

These results again emphasize the accuracy of our climate models because we see a strong relationship between our projected suitability metrics and direct observations of birds at such suitable sites.

SPECIES-SPECIFIC RESULTS

Let's take a look a closer look at the results for each species. This information allows us to improve our models of future ranges of birds under projected climate change by enabling us to make more realistic predictions of each species' future range based on where volunteers see birds!

Below are plots that illustrate a sample of the results described in the tables above. From these plots, we can visualize the strength of association between either occupancy, colonization, or extinction and our climate suitability projections. We include plots from a few of the strongest relationships across species and seasons. By demonstrating a strong association between occupancy dynamics and climate suitability, we are independently validating our climate models – an overlooked critical step in the scientific process.

In Figures 3 and 5, the x-axes display climate suitability projections (from 0 to 1) for the 2000s (Figure 3) and 2020s (Figure 5). Values closer to zero indicate lower climate suitability; values closer to one indicate greater climate suitability. In Figure 4, the change in climate suitability between 2000 and 2020 ranges from -1 to 1, with negative values

Table 3. Are species moving into sites that are projected to be climate suitable? 'Yes' indicates a positive relationship between local colonization and 2020 climate suitability. 'More data needed' indicates a non-significant relationship between local colonization and 2020 climate suitability.

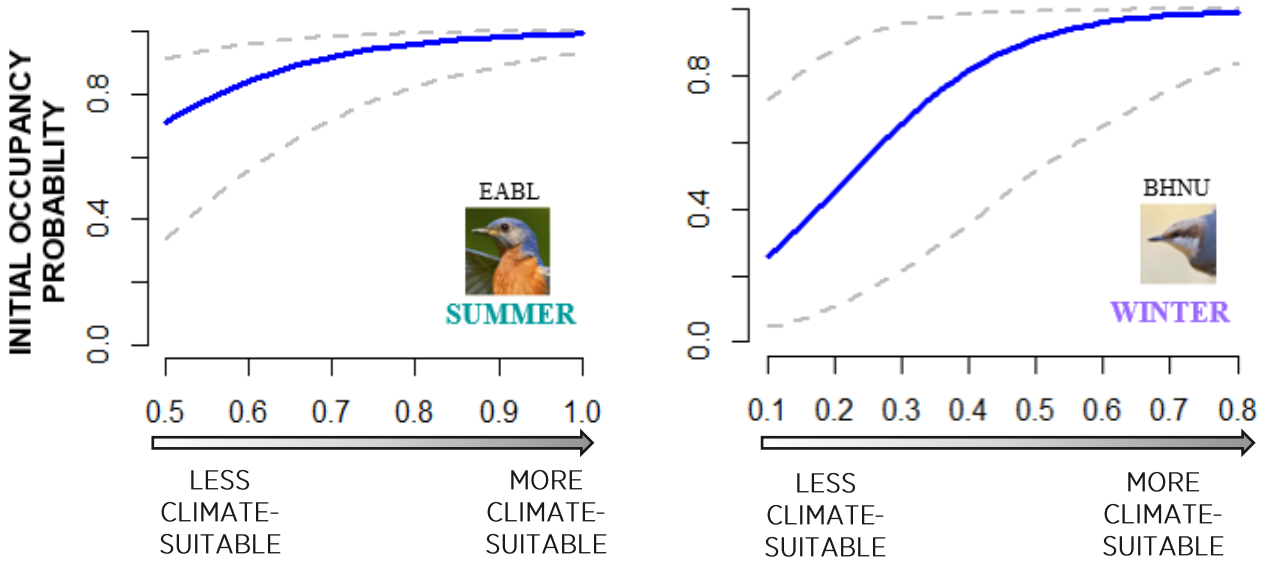
SPECIES	SUMMER	WINTER
Eastern Bluebird 	✓yes	more data needed
Mountain Bluebird 	✓yes	more data needed
Western Bluebird 	✓yes	more data needed
Brown-headed Nuthatch 	✓yes	✓yes
White-breasted Nuthatch 	✓yes	✓yes
Red-breasted Nuthatch 	more data needed	✓yes
Pygmy Nuthatch 	more data needed	more data needed

indicating worsening climate suitability and positive values indicating improving climate suitability. Some of the x-axes do not display the full range of climate suitability values because we don't have volunteers surveying Climate Watch squares across the full spectrum of climate suitability. However, the more volunteers that join Climate Watch, the greater the variability in climate suitability we'll be able to sample across within each season.

From these plots, we see that several species are responding to how we would anticipate to a changing climate. For example, we see that Eastern Bluebird and Brown-headed Nuthatch are occupying sites that are more climate suitable in summer and winter, respectively (Figure 3). This relationship is more pronounced for Brown-headed Nuthatch, where occupancy probability is around 0.2 at climate suitability values close to zero (0.1), but is close to 1.0 at climate suitability values near one (0.7 – 0.8).

From Figure 4 below, we can see that Mountain Bluebird and Brown-headed Nuthatch are more likely to leave (go locally extinct at) sites that are worsening (negative values on x-axes) in climate suitability (left-hand side of plots). This tells us that these species are particularly sensitive to changes in climate suitability within a Climate Watch square. Knowing this helps us understand how species' ranges may shift under climate change projections – in other words, areas that are projected to dramatically decrease in suitability are the areas most likely to 'lose' those species in the future. Similarly, areas projected to drastically increase in suitability are the areas most likely to 'gain' those species.

Figure 3. Species-specific occupancy probabilities (blue lines) as a function of 2000 climate suitability for Eastern Bluebird in summer (left) and Brown-headed Nuthatch in winter (right). Gray dashed lines indicate 95% confidence intervals.



In Figure 5, we see that Western Bluebird and White-breasted Nuthatch are more likely to move into (colonize) sites that we project to be suitable in the 2020s. For example, Western Bluebird have a near-zero probability of colonizing sit es that are unsuitable (values close to zero), but their probability of colonizing a site jumps to 0.8 when suitability is > 0.35. This relationship tells us that Western Bluebird are moving into sites that our models project are even moderately suitable, suggesting that this species is flexible in its climate requirements.

Figure 4. Species-specific extinction probabilities (blue lines) as a function of the change in climate suitability between the 2000s and 2020s for Mountain Bluebird in winter (left) and Brown-headed Nuthatch in summer (right). Gray dashed lines indicate 95% confidence intervals.

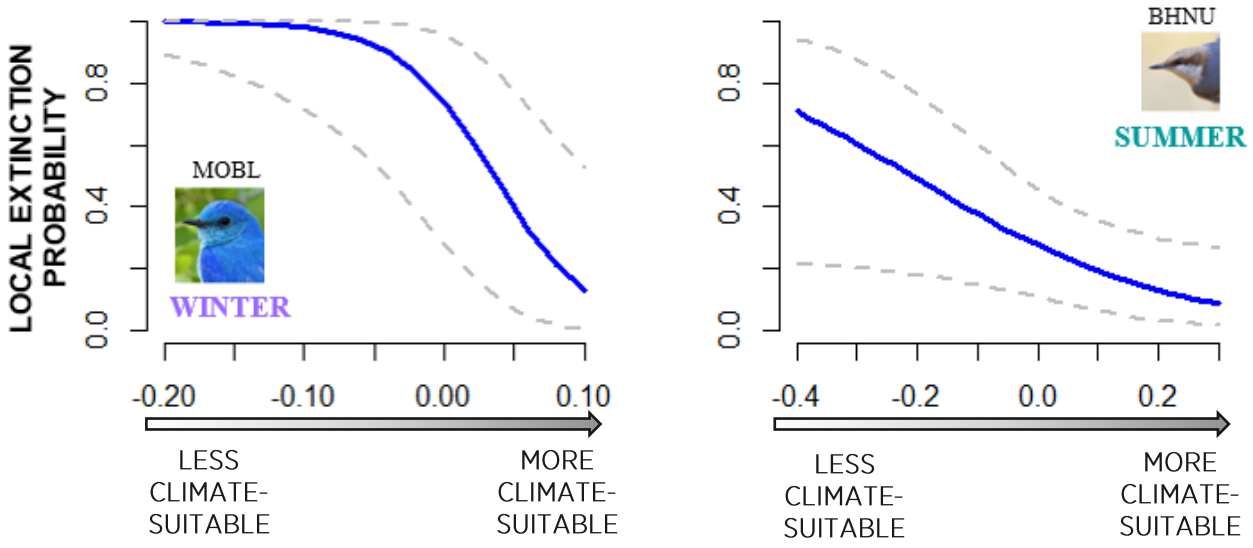
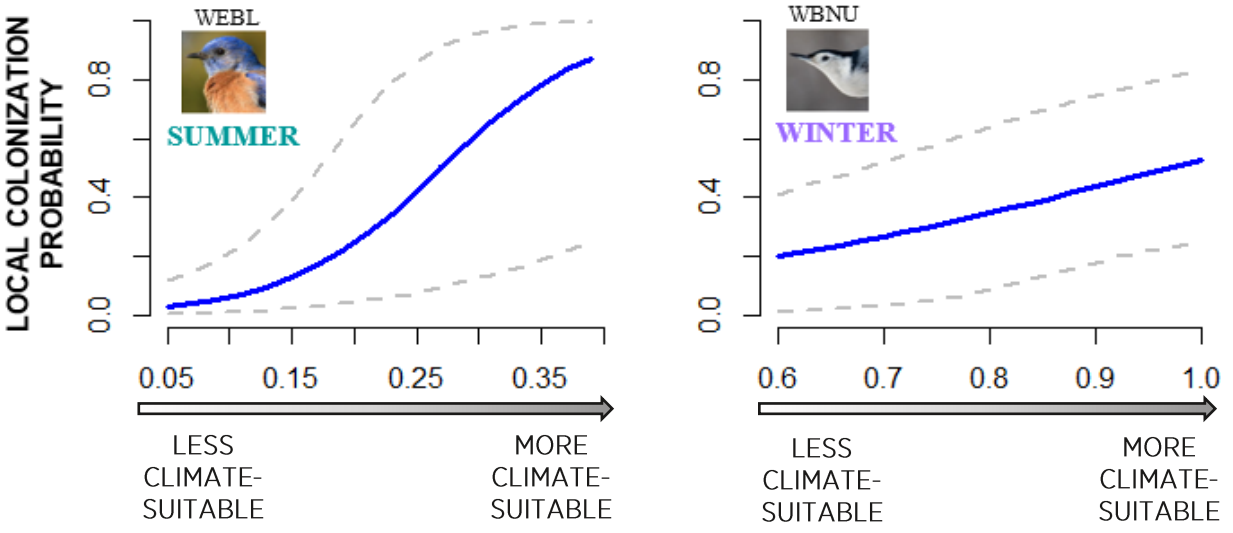


Figure 5. Species-specific colonization probabilities (blue lines) as a function of 2020 climate suitability for Western Bluebird in summer (left) and White-breasted Nuthatch in winter (right). Gray dashed lines indicate 95% confidence intervals.



Red-breasted Nuthatch.
Photo: Betsy Bass

Taking it a step further

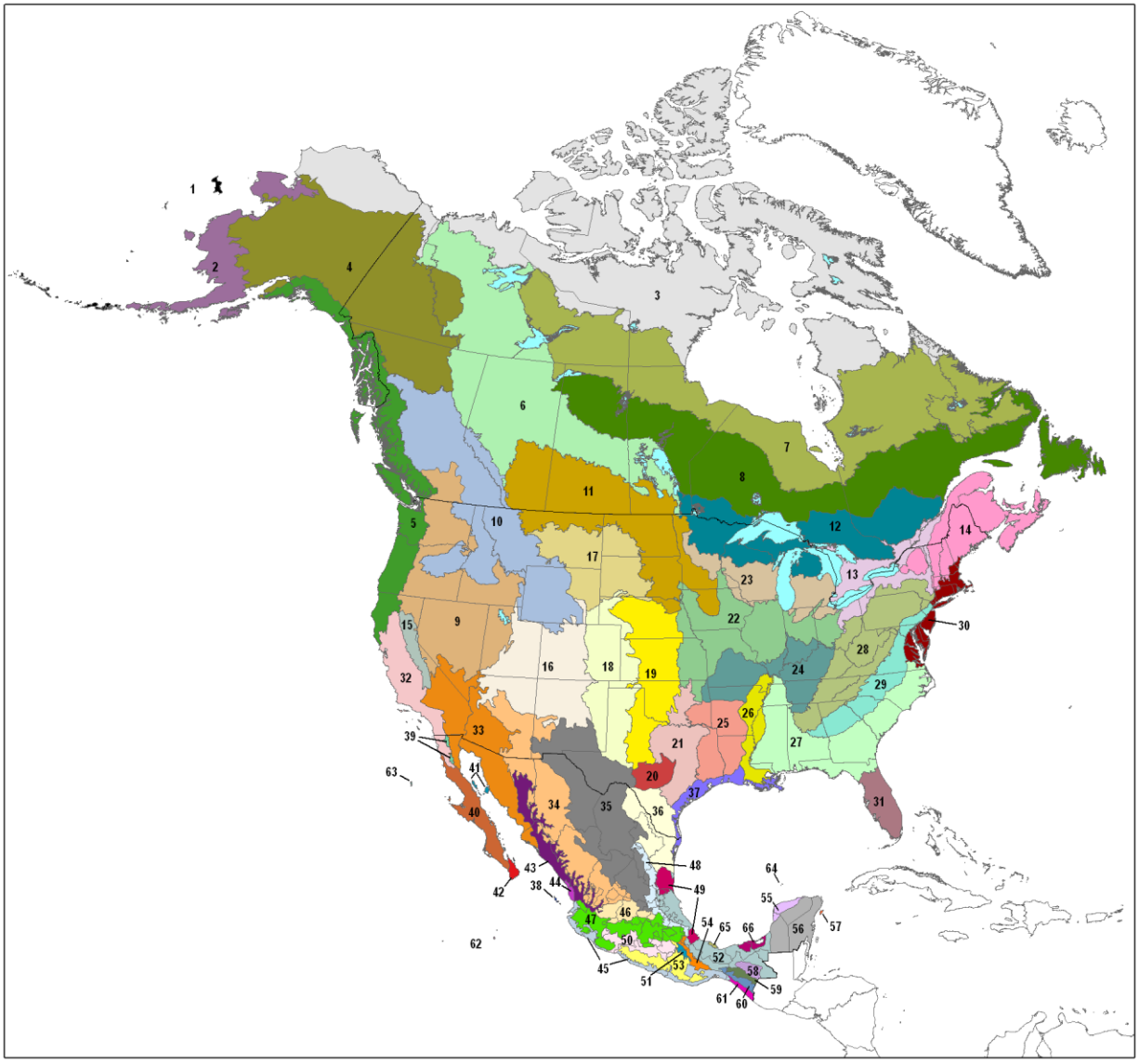
SPATIAL VARIABILITY IN OCCUPANCY

Climate Watch participants conducted surveys all over the country. Because of the wealth of data, our Climate Watch models needed to account for the inherent spatial variability, so Audubon scientists grouped Climate Watch squares by Bird Conservation Region (BCR; Figure 6), and evaluated whether each species is currently more or less likely (than average) found in a given region during each season. Bird Conservation Regions (hereafter regions) are ecologically distinct regions in North America with similar bird communities, habitats, and resource management issues. Thus, we would expect species-specific occupancy within a given area to be mostly consistent.

The breeding and non-breeding ranges of each of the Climate Watch target species are different, so we would expect occupancy to vary across the species' ranges differently – independent of climate suitability. For example, Brown-headed Nuthatch has a small, concentrated range compared to White-breasted Nuthatch and Red-breasted Nuthatch. As a result, we would expect Brown-headed Nuthatch occupancy of to be concentrated in their range center, whereas we would expect more variability in occupancy across White-breasted Nuthatch and Red-breasted Nuthatch ranges given that they occupy much broader spatial extents.

By combining multiple years of Climate Watch data, we increase our statistical power and thus our ability to understand fine-scale spatial variability. In the figures below, we summarize results from this spatial variability assessment, taking into account the relationships with climate suitability explained above. We do not have enough data yet to tease apart this spatial variability for all species-season combinations; additional years of data collection will help us get there!

Figure 6. Terrestrial Bird Conservation Regions (BCR) used in analysis of 2016 – 2018 Climate Watch data. Climate Watch squares were assigned to regions, which was included as a random effect on initial occupancy. Map reproduced from Bird Studies Canada (2014).



SEASONAL SPATIAL VARIABILITY IN OCCUPANCY

From these regional results, we are starting to learn how birds are shifting their ranges seasonally. In general, we see a pattern of birds being more likely to occupy Climate Watch squares within regions that are at species' range centers. For example, Western Bluebird in summer is more likely to be found at sites in region 16, which is in the center of their breeding range (Figure 7). Similarly, Brown-headed Nuthatch are more likely to be found at sites in region 29 (the center of their year-round range) in summer and winter (Figure 8). These results make sense biologically, which tells us that are models are working! It also means that our volunteers are doing a great job covering these areas of species' ranges.

Figure 7. Bird Conservation Regions that are currently more likely (yellow circles) than average to be occupied by Western Bluebird in summer. The number in the circle matches that of Figure 6.

Figure 8. Bird Conservation Regions that are currently more likely (yellow circles) than average to be occupied by Brown-headed Nuthatch in summer (left) and winter (right). Numbers in circles match those in Figure 6.

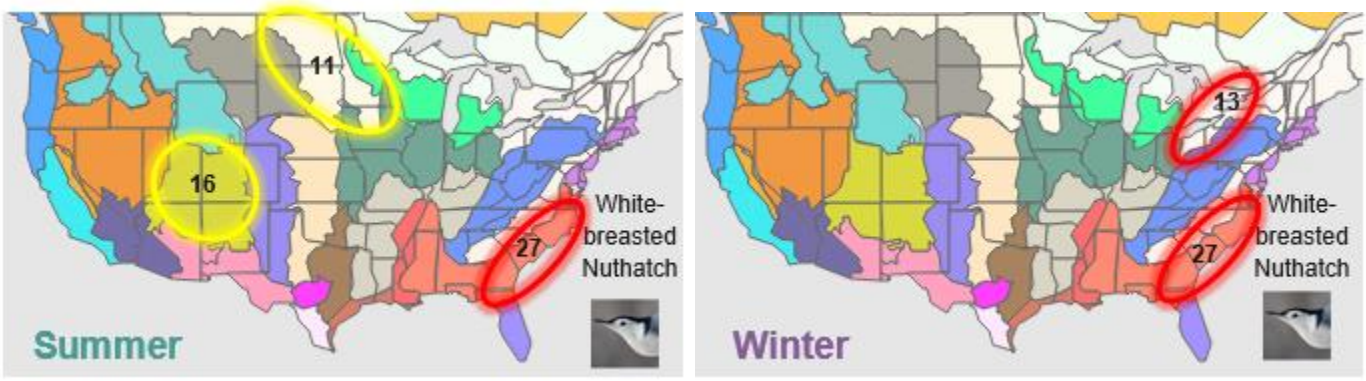
In addition to these patterns, we can see where birds are less likely to be found currently. Eastern Bluebird in winter are less likely to be found at sites in region 23 (Figure 9), on the northern edge of their non-breeding range. This indicates that Eastern Bluebird do not seem to be shifting further northward in winter, as we may expect with climate change. However, in summer, Eastern Bluebird are more likely than average to be found at sites in region 11, at the northwestern edge of their breeding range (Figure 9). This suggests some current movement northward in summer, although it may be unequal across the northern edge of their range – they are less likely to occupy sites in region 14, on the northeastern range edge.

Like Eastern Bluebird, White-breasted Nuthatch are more likely to occupy sites in region 11 during summer (Figure 10). Interestingly, this species is also less likely to occupy sites in region 27 at the southern edge of their breeding range. Together, these results hint at a shifting breeding distribution away from the southern 'trailing edge', but with a northern 'leading edge' push. In winter, White-breasted Nuthatch are less likely to be found in regions 13 and 27 on the northern and southern edges of their non-breeding range, respectively. These intriguing results point to a contraction of their winter range, hinting at a particular vulnerability to climate change. We hope to understand this pattern better with additional years of data.

Red-breasted Nuthatch in winter exhibit an interesting pattern in spatial variability as well (Figure 11). Currently, this species is more likely to be found in regions 5, 9 and 25, and less likely to

Figure 9. Bird Conservation Regions that are currently more likely (yellow circles) or less likely (red circles) than average to be occupied by Eastern Bluebird in summer (left) and winter (right).

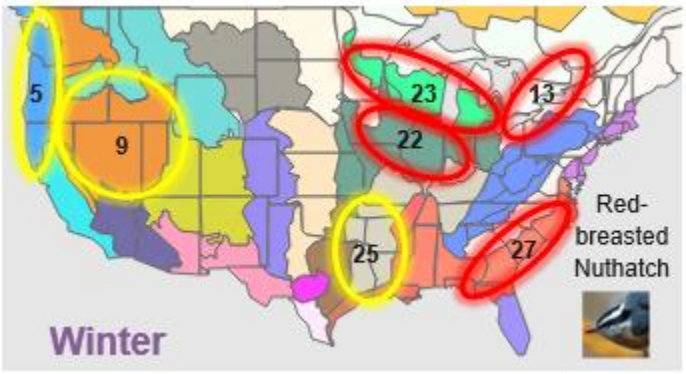
Figure 10. Bird Conservation Regions that are currently more likely (yellow circles) or less likely (red circles) than average to be occupied by White-breasted Nuthatch in summer (left) and winter (right).



be found in regions 13, 22, 23 and 27. Regions 5 and 9 are on the western edge of their range, whereas regions 13 and 27 are on the eastern edge. These results suggest a shift in the Red-breasted Nuthatch winter distribution from east to west. Often times this is due to shifting precipitation patterns, suggesting that this species is likely more sensitive to rainfall than temperature changes.

We are excited that our modeling results are revealing new information about how species are shifting their distributions. Thanks to multiple years of volunteer-collected data, we are able to understand fine-scale variation in species occupancy. This ability helps us pinpoint areas that birds appear to be avoiding and those that birds appear to be moving into during each season. With this information, we can get a sense of how birds are already shifting their ranges in response to climate change!

Figure 11. Bird Conservation Regions that are currently more likely (yellow circles) or less likely (red circles) than average to be occupied by Red-breasted Nuthatch in winter.



WHAT DOES ALL THIS MEAN?

These results are complex, but we can understand more about how species are responding to climate-mediated range shifts with every year of data collection! Thanks to volunteers' efforts, we know much more about occupancy dynamics for these species than we did in 2016 when the pilot version of Climate Watch began.

It is expected that these target species will respond differently to climate change and that for some, change on the ground will take longer than for others. This is why Climate Watch is such a valuable program. Getting a sense of how these birds are responding at each location to broad-scale climate change will help us target conservation efforts for these species at the scale that matters – the local level!

Climate change is a landscape scale issue, but it affects us (and the birds) locally. Without the efforts of Climate Watch volunteers, we wouldn't be able to tell the story that the birds are telling us about climate change!

WHAT CAN WE DO NEXT?

You are the local bird experts in your area. Through your work for the birds, not only are you contributing to the larger scientific investigation of birds' responses to climate change, but you also carry the knowledge of what the birds are telling us about climate change in your area.

Because you see these changes first-hand, it is critical that you act on this information. Please take a few minutes to use your power as a constituent and a community leader to voice your demand for change by sending a letter to your legislator and submitting a letter to the editor of your local newspaper. We have created a template letter to an elected official and to an editor to get you started!

Please contact us at climateaction@audubon.org to let us know how you are making climate change solutions a priority. You can also help us protect birds and the places they need by planting native plants and supporting land conservation. Learn more about Audubon's Plant for Birds Program or take action in other ways through Audubon's Action Network. Thank you for all you do for birds!

HOW DID WE ANALYZE THE DATA?

WHAT IS OCCUPANCY ESTIMATION?

Occupancy estimation is a model-based approach for analyzing species presence/absence data. A model is used to describe and predict real-world systems based on limited information – meaning, we can't know where every bird is or isn't, but we can use the information we gather from a small portion of the birds we do count to make inference about the system as a whole. With this, we can also start to understand how the system might respond to changes in the environment, like climate change.

Occupancy estimation is a powerful statistical tool that can:

- *Account for imperfect detection* – Since many factors can affect whether a species is detected on a survey (weather, habitat, etc.), we will not always 'get it right' when we're counting birds. Sometimes we will not see or hear a bird species that is there. We might also count a bird species as being present when, in fact, it is not; this is imperfect detection. Occupancy models were developed to correct for imperfect detection by estimating the proportion of times when birds that were present were not detected.
- *Provide a measure of occupancy, local colonization, and local extinction* – Occupancy allows us to understand how likely it is that a species is present in the survey area (Climate Watch square). Colonization enables us to know how likely a Climate Watch square is expected to be unoccupied by a given species in a given year and then occupied by that species in the following year. Likewise, extinction helps us understand how likely a square is to go from occupied by a species in a given year to unoccupied the next year.
- *Can relate occupancy, colonization, and extinction to changes in the environment* – We can compare these three measures of occupancy dynamics to changes in the environment, such as case climate suitability.

HOW ARE CLIMATE WATCH DATA USED IN MODELING?

Replication is a key design component of occupancy estimation. For Climate Watch, the surveys are repeat visits in space, meaning there

are multiple (12) survey points within each Climate Watch square. These replications allow us to get a measure of the probability that a species occurs within the Climate Watch survey area, based on the proportion of survey points at which the species is detected. Therefore, we need to estimate our ability to detect the species before we can get a reliable estimate of occupancy. In Climate Watch, repeat surveys at the survey point level help to address imperfect detection.

Also, specific data are collected in ways known to affect species detection, such as:

- Time since local sunrise
- Survey date
- Habitat type
- Party size (does detection differ if there are more or fewer observers?)
- Target species (does it matter if an observer went out looking for bluebirds or nuthatches?)

At the Climate Watch square level, which is made up of the 12 repeat surveys and the associated detectability of the species determined from each point, we can model the occupancy probability of that species in an area. Information on nest boxes and feeders are also important at the square level, as they can attract species into an area and increase its probability of occupancy. Once we have an estimate of how likely a species is to occur across our study area, we can then use that information in relation to changes in climate and other factors.

When we combine multiple years of data, we can model the probability that a Climate Watch square will become occupied (colonization) or unoccupied (extinction) from one year to the next. Being able to model these dynamics is essential for understanding the mechanisms governing changes in species' distributions.

Additionally, our ability to accurately estimate these dynamics will be improved with additional years of data! For more information on occupancy modeling, check out this resource.

QUESTIONS?

Please email us at climatewatch@audubon.org.

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Hannah Waters, Senior Associate Editor

THANK YOU TO ALL ORGANIZATIONS FOR THEIR EFFORTS IN COLLECTING CLIMATE WATCH DATA, IN ADDITON TO MANY INDIVIDUAL VOLUNTEERS. WITH YOUR HELP, WE ARE DOING IMPORTANT WORK FOR BIRDS – THANK YOU!