

Climate Watch Protocol Overview

Goal

Climate Watch documents birds' responses to climate change by having volunteers in the field look for birds where Audubon's climate models project they should be in the 2020s.

Time Period

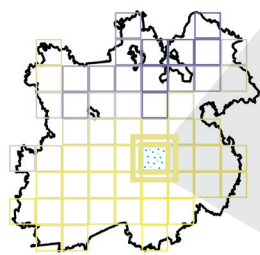
Climate Watch occurs over two 30-day periods each year, in the winter (January 15-February 15) and in the breeding season (May 15-June 15).

Protocol



STEP ONE

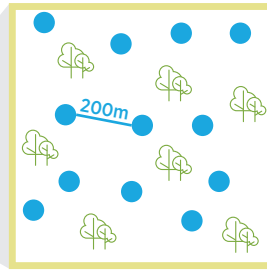
Work with a local coordinator to select a Climate Watch target species to survey: Eastern, Western, and Mountain bluebirds; White-breasted, Red-breasted, Brown-headed, and Pygmy nuthatches; American and Lesser goldfinches; Eastern and Spotted towhees; and/or Painted Bunting



STEP TWO

Work with a local coordinator to select one (or more) 10 x 10 km square from the Climate Watch maps to survey

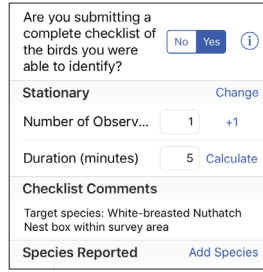
Contact:
Carmen@mtaudubon.org



STEP THREE

Identify 12 points that represent the best accessible habitat for the target species within a given square

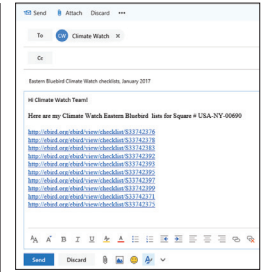
Points should be at least 200 meters apart to avoid double-counting the same areas



STEP FOUR

Conduct 5-minute stationary point counts at each of the 12 points

Record observations with eBird, with each point count as an individual checklist



STEP FIVE

Email your 12 eBird checklist URLs to climatewatch@audubon.org

FOR EACH CHECKLIST, PLEASE RECORD:

- Start time and duration (surveys should be exactly 5 minutes)
- Number of observers (1 or 2)
- Latitude and longitude
- Number of each species (target species and other birds you identify) that you see or hear within 100 meters of your location
- In the comments, write the target species you were surveying for (bluebirds, nuthatches, goldfinches, or Painted Bunting)

NOTES:

- Submit your data whether or not you saw any target species at a given point.
- All point counts should be conducted as stationary counts for exactly 5 minutes.
- Be sure to answer "yes" to the question "Are you submitting a complete checklist of the birds you were able to identify?"
- Make note of any nest boxes or feeders within your survey areas in the checklist comments.

For more in-depth instructions, please refer to our Climate Watch Manual.

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montanabirdsurveys.com/climate-watch

Red-breasted Nuthatch. Photo: Lois Miller/Great Backyard Bird Count

TARGET SPECIES



Eastern Bluebird



American Goldfinch



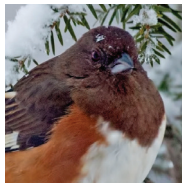
Mountain Bluebird



Lesser Goldfinch



Western Bluebird



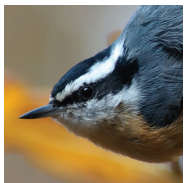
Eastern Towhee



White-breasted Nuthatch



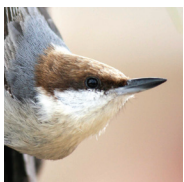
Spotted Towhee



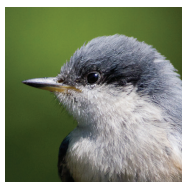
Red-breasted Nuthatch



Painted Bunting



Brown-headed Nuthatch



Pygmy Nuthatch

Cover: Camilla Cerea/Audubon. This page, clockwise from left: Eric Nie; Brian Kushner; Brad Fields; Bob Howdeshell/ Great Backyard Bird Count; Judith Roan; David Morgan; Ron Racine; Denise Massie; Megumi Aita; Joseph Mahoney; Rick Lewis; Timothy Lenahan. All from Audubon Photography Awards unless specified.

QUICK FACTS

DATES

Jan 15-Feb 15 and May 15-June 15

TIME

2-4+ hours

TARGET SPECIES GROUPS

Bluebirds, nuthatches, towhees, goldfinches, and Painted Bunting

LOCATION

Specific
10 km x 10 km squares; see inset map example

HOW TO GET INVOLVED

If you would like to find out more about being a volunteer or coordinating

in your area, please contact the Audubon Climate Watch Team at climatewatch@audubon.org

When does Climate Watch take place?

Climate Watch takes place during two distinct seasons in winter (January 15-February 15) and summer (May 15-June 15) each year. Participants are free to conduct their surveys at any time during these time windows.

How does it work?

Climate Watch focuses on bluebirds, nuthatches, towhees, goldfinches, and buntings: Eastern, Mountain, and Western Bluebird; White-breasted, Red-breasted, Brown-headed, and Pygmy Nuthatch; American and Lesser Goldfinch; Eastern and Spotted Towhee, and Painted Bunting. Bluebirds, nuthatches, goldfinch, towhees, and buntings are easy to identify, have an enthusiastic constituency, and Audubon's climate models for these species offer strong predictions for range shifts for us to test.

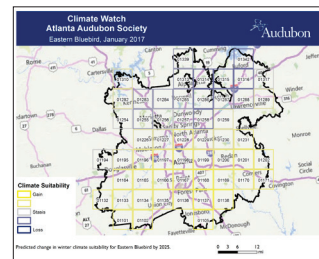
Where will Climate Watch take place?

Climate Watch focuses on areas of predicted change for bluebirds and nuthatches at each location. These areas of change include areas of potential range expansion and contraction based on Audubon's climate models. Audubon provides volunteers with maps of each location, overlaid with a grid of 10 km x 10 km squares showing species-specific predictions for each square based on the climate models.

What is the field activity?

Using the maps provided,

volunteers survey appropriate habitat within a square and conduct 12 point counts of five minutes each, then record the number and species of all birds seen or heard within 100 meters. Point counts within a given square should be separated by at least 200 meters. The 12 point counts in each square can be done by the same person or different people.



Atlanta Audubon Society territory with sample survey squares provided

What will be provided?

Audubon provides printable and digital mapping resources, instructional materials, and training to coordinators. Each location will determine how best to convey these resources to their volunteers to conduct the protocol.

How much time do I spend?

Volunteers in our previous pilot period generally were able to complete one survey square in two to four hours (12 five-minute point counts per square). Surveys should either be started in the morning and completed before noon, or started in the afternoon and completed before sunset. It is up to each participant how much time to spend on the overall activity,

but make sure to talk with your Climate Watch coordinator about your level of interest. Some advance scouting and planning may be required to choose survey point locations. Your Climate Watch coordinator will communicate with you if this will be required.

How do I submit my survey data?

Each five-minute checklist should be submitted through eBird separately, and we also ask that volunteers email a link to their eBird checklist to the project team at climatewatch@audubon.org.

How is this different than just reporting bluebirds when I go birding?

Audubon is using general bird data, such as reported through eBird, to help inform this program. However, data reported using the Climate Watch protocol measure detectability in a way that general birding data do not. This protocol is being implemented in areas where the birds do not yet have climatic range, or may be abandoning their range. That focus is a very important part of measuring how the birds will respond to climate change.

Why get involved?

Audubon would like your help to learn how birds are responding to climate change. Your participation will be a valuable part of refining our climate science and protecting birds.

montanabirdsurveys.com/climate-watch