

# Chimney Swift Monitoring Protocol

Over the last several decades, chimney swift populations have been declining across their range. Although the reasons are unclear, there is speculation that food availability, and nest and roost availability are possible factors. Chimney swifts are aerial insectivores, spending most of their time catching insects on the wing, and they have adapted well to human settlement. Reduced insect availability (food) is one factor that may be affecting chimney swifts. Another is that changes in chimney construction and building codes have reduced the number of chimneys suitable for nesting and roosting sites. Without access to adequate shelter, chimney swifts may be experiencing nest failures, or die offs due to exposure. The monitoring protocol will help us better understand where chimney swifts are nesting, what structures they are using, and how we can best keep track of local populations.

## Chimney Swift ID

For this survey, you do not need any particular expertise, but you will need to be able to recognize chimney swifts. Before you start your survey, take some time to study a field guide or look them up online. This may help:

Chimney swifts are often dubbed “flying cigars” because of their short, tubular bodies and blunt tails. They are small dark brown birds that are constantly on the wing. As insectivores, they eat flying insects, and are often seen performing aerial acrobatics to do so. You may also hear a twittering or chattering when they are nearby. They are very vocal and can be heard even when not seen.

## For this survey you will need:

- Binoculars
- Chimney Watch Data Sheet
- Chimney Swift Monitoring Protocol
- “Bird Survey in Progress” sign
- Clipboard/other writing surface
- Watch/clock
- Extra pens/pencils
- Map
- Directions
- Compass

## Survey Protocol

The purpose of this survey is to identify new nesting structures for chimney swifts, and to test our monitoring efforts. This will take place in two ways:

- **Randomly assigned chimneys:** You will be assigned anywhere from 3-6 chimneys that need to be watched in a given area (a town or neighboring towns). This will help us identify new nesting sites.
- **Known nesting sites:** If you have had chimney swifts in your own chimneys in the past, you will monitor your own chimney according to this protocol. This will help us test our methodology for detecting chimney swifts.

## Surveys

- **Time Period:**
  - Each chimney needs to be surveyed once a month in May, June and July.
- **Time of Day:**
  - Surveys can be conducted at any time of day, as long as there is light enough to see.
- **Duration per survey:**
  - Each chimney needs to be watched for fifteen minutes consecutively at each monitoring session.
- **Time between surveys:**
  - As long as each chimney is surveyed once a month in May, June and July for a total of three surveys, it does not matter how you space apart your visits.

For each chimney you watch, we are looking to see if there are chimney swifts flying in or out. We are targeting nesting pairs, and studies have shown that when feeding their young, the adults will take turns leaving the chimney to forage, and return with food within roughly fifteen minutes. So, we just need you to watch each chimney (and the immediate vicinity) for fifteen minutes, and then move on to the next one! Easy!

## When Not to Survey

Please do not survey in rain heavier than a drizzle, in dense fog, or in high winds. These conditions will affect the behavior of the birds as well as your ability to detect them.

## Getting Started

Make sure you read through and understand everything before you head into the field! A couple of notes:

- **Multiple Observers:** If there is more than one person conducting the survey-it is important that only one be designated to count and record the data. This person is the one identified as the observer on the data sheet. The other volunteers can help with the other measurements, as well as help keep an eye out for chimney swifts.

- **“Bird Survey in Progress”:** You may feel free to put this sign in the window of your car so that people will understand what you are doing. Also, if you choose, you can contact the local authorities in your survey area to let them know your purpose and activities ahead of time.
- **Chimney Assignments:** You will be assigned 3-6 randomly selected chimneys in an area. In the case that you are assigned a chimney on a building that has two or more chimneys-you are only responsible for surveying the chimney assigned to you! This will be made clear when you receive your maps and directions (front, rear, left, right or center of building).

## Data Sheets

Each month (May, June, and July), it is your choice to monitor all your chimneys in the same day or to do so over a period of days. Either way, **before** you begin each day of effort, fill out the top of the datasheet. Each row of the datasheet should indicate a different chimney. **Start a new datasheet for each day.**

- **State/Providence:** Enter the two letter code for your state (NC, CT, NJ, etc.)
- **Survey Block Code:** This is a unique code identifying the survey block that will be on your map and directions
- **Observer Information:** Fill in your name, your affiliation, and the best way to reach you on the appropriate lines
- **Date:** Enter the date for the day you choose to conduct your survey.
- **Start/Stop Time:** Start and stop times should include your travel time to and from the site

## In the Field

There should be one row filled out for each chimney you survey.

Each Row on the datasheet consists of the following fields:

**1) Chimney#/nest code:**

With your map/directions, each chimney will be coded with a 2 number code, enter that here.

**2) Visibility/Rain/Cloud/Wind:**

Write in the code, found at the bottom of the data sheet, for the description that best fits the conditions during your survey period.

**3) Time Start:**

Note the actual time you began the fifteen minute survey period.

**4) Nothing Observed:**

If in the fifteen minutes you didn't see anything, put a mark in this column.

**5) Bird Enter Chimney:**

When you see birds entering or exiting the chimney, note the time this **first** occurred and the number of birds you saw.

**6) Any Birds Observed Within 20m Radius:**

Even if you don't see chimney swifts actively using your assigned chimney, you may see one or more flying close by. If you do see any within a 20 meter radius (about 65 feet) of the chimney, note if it was:

- In the first three minutes of starting your survey (0:00-3:00),
  - Three to five minutes from the start of your survey (3:01-5:00),
  - Five to ten minutes from the start of your survey (5:01-10:00),
  - Ten to fifteen minutes from the start of your survey (10:01-15:00).
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- Maximum Group Size: using the code chart at the bottom of the data sheet, write in the maximum number of chimney swifts you saw at any one time, within the time segments mentioned above. For example, if in the first three minutes of the survey you saw a group of four chimney swifts, and then a group of six chimney swifts, write down "medium" in the first column for 0:00-3:00 minutes.

**7) Comments:**

Write down anything you think may be noteworthy. If you notice anything about the chimney that might prevent birds from entering, if visibility is impeded, or if you see chimney swifts in the area, but outside the 20m radius, etc. Whatever you think we might want to know about what is happening during your survey, or just before or after it.

When you have completed your surveys, send the data forms back to:

< add regional contact information here >

If you have any questions, you can contact XXXXX at:

< add regional contact information here >

Instructions for modifying this template for a state:

- 1) Add contact information to the two sections above
- 2) Change the header to reference the regional contact (to change the header in Microsoft Word choose "Header and Footer" from the "View" menu)
- 3) Include area specific information in the section on Data Sheets for "State/Providence" and "Survey Block Code"