



Count Your Birds Instructions

BirdSleuth

Student Stationary Count Instructions

WHAT DO WE MEAN BY A STATIONARY COUNT?

A Stationary Count is a method of counting birds from a fixed area. During a Stationary Count, observers stand in a designated count area for a certain period of time and record all the birds seen or heard from there.

STEP 1: Identify the Stationary Count area.

- With your teacher, define the boundaries of a count area that is 30 yards in diameter (that's about the size of a tennis court).
- Give each Stationary Count area a unique name.

STEP 2: Record where, how, and when you count birds on the Tally Sheet.

- Fill in the information in Boxes 1 and 2 on the Tally Sheet.

STEP 3: Look and listen for birds to identify and count.

- Remember, you can count birds that are inside or outside the area as long as you see or hear them while YOU are in the area.
 - Count time should be between 5 and 15 minutes long.
 - Identify the bird species you see and hear, and count how many of each species are in the area.
 - * Be careful not to count the same bird twice!

STEP 4: Record your bird data..

- Record what you've seen on the Tally Sheet in Box 3.
 - WHICH species you counted.
 - HOW MANY of each species you counted.
 - Whether you reported all the birds you identified.

STEP 5: Submit your data.

- Visit the eBird website at www.eBird.org to submit your data.

WHY ARE STATIONARY COUNTS IMPORTANT?

Scientists use repeated stationary counts to study how the species and numbers of birds in an area change over time. Thank you for helping our Lab of Ornithology researchers, and our continent-wide bird monitoring efforts, by becoming citizen scientists and submitting your data!

I JUST SAW A COOL BIRD—BUT NOT DURING A STATIONARY COUNT! CAN I RECORD IT?

YES! It's called a CASUAL observation, and reporting that bird is as easy as 1-2-3!

1. Note the species of the bird.
2. Record the DATE when and LOCATION where you saw the bird.
3. Submit your data via the eBird site at www.eBird.org. Let us know it is a casual observation.



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Stationary Count Tally Sheet

LOGIN AND REGISTRATION INFORMATION

Teacher (User Name): _____ Email: _____

1: LOCATION INFORMATION - WHERE DID YOU BIRD?

City: _____ ZIP/Post Code: _____
 State/Province: _____ Name of Count Site: _____

2: OBSERVATION INFORMATION - HOW & WHEN DID YOU BIRD?

Observation Type (circle one): Casual Observation Stationary Count

Observation Date: _____ Start Time: _____ AM / PM

Number of People in Group: _____ Total Birding Time: _____

Weather Made it Hard to Count Birds Accurately (circle one): Yes No

3: CHECKLIST INFORMATION - WHAT DID YOU SEE?

Are You Reporting All the Species You Identified?(circle one): Yes No

Describe Habitat (circle all that apply): rural suburban urban scrub grassland
 agricultural freshwater saltwater deciduous woods coniferous woods

The checklist below includes many of the most common birds you are likely to see. The birds are grouped together taxonomically, according to their relationship to one another. Most field guides order the birds in much the same way. Enter the number of each species you saw below. To record any additional species not listed in the checklist, enter them in the "Write-in Species" table on the back.

CORMORANTS

Double-crested Cormorant: _____

WADING BIRDS, VULTURES AND CONDORS

Great Blue Heron: _____ Black Vulture: _____ Turkey Vulture: _____

SWANS, GEESE AND DUCKS

Canada Goose: _____ Mallard: _____

DIURNAL RAPTORS

Sharp-shinned Hawk: _____ Cooper's Hawk: _____ Red-tailed Hawk: _____

SHOREBIRDS

Killdeer: _____ Spotted Sandpiper: _____

GULLS, TERNS AND SKIMMERS

Ring-billed Gull: _____ Herring Gull: _____

PIGEONS AND DOVES

Rock Pigeon: _____ Mourning Dove: _____

WOODPECKERS

Red-bellied Woodpecker: _____ Yellow-bellied Sapsucker: _____ Downy Woodpecker: _____

Hairy Woodpecker: _____ Northern Flicker: _____ Pileated Woodpecker: _____

JAYS, MAGPIES, CROWS AND RAVENS

Stellar's Jay: _____ Blue Jay: _____ Western Scrub Jay: _____

American Crow: _____ Common Raven: _____



Checklist continued

SWALLOWS

Purple Martin: _____ Tree Swallow: _____

CHICKADEES AND TITMICE

Black-capped Chickadee: _____ Carolina Chickadee: _____ Tufted Titmouse: _____

NUTHATCHES AND CREEPERS

Red-breasted Nuthatch: _____ White-breasted Nuthatch: _____ Brown Creeper: _____

WRENS

Carolina Wren: _____ House Wren: _____

OLD WORLD WARBLERS, GNATCATCHERS AND THRUSHES

Ruby-crowned Kinglet: _____ Eastern Bluebird: _____ Western Bluebird: _____

Mountain Bluebird: _____ American Robin: _____

CATBIRDS, MOCKINGBIRDS AND THRASHERS

Gray Catbird: _____ Northern Mockingbird: _____

STARLINGS

European Starling: _____

WOOD-WARBLERS AND TANAGERS

Yellow-rumped Warbler: _____ Pine Warbler: _____

TOWHEES, SPARROWS AND BUNTINGS

Spotted Towhee: _____ Eastern Towhee: _____ American Tree Sparrow: _____

Chipping Sparrow: _____ Fox Sparrow: _____ Song Sparrow: _____

White-crowned Sparrow: _____ White-throated Sparrow: _____ Dark-eyed Junco: _____

CARDINALS AND GROSBEAKS

Northern Cardinal: _____ Rose-breasted Grosbeak: _____

BLACKBIRDS, COWBIRDS AND ORIOLES

Red-winged Blackbird: _____ Common Grackle: _____ Brown-headed Cowbird: _____

FINCHES AND OLD WORLD SPARROWS

Purple Finch: _____ House Finch: _____ Common Redpoll: _____

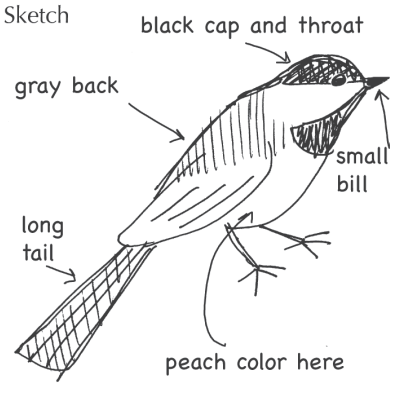
American Goldfinch: _____ House Sparrow: _____

"WRITE IN" SPECIES: Enter any additional species not listed above, below.

SPECIES	TOTAL NUMBER OF INDIVIDUALS	NOTES

Bird Identification Chart

(page 1 of 2)

Name	Black-capped Chickadee	Size	Smaller than a sparrow
Sketch		Shape	It's a small bird with a long tail. Its bill is small and black.
		Field marks	The bird has a black cap and a black throat. The sides of the face are white.
		Behavior(s)	It was with several others of its kind. The bird held a seed between its feet and pounded the seed with its bill.
		Song(s) or call(s)	heard a "fee-bee" and a "chick-a-dee-dee-dee" call.
Color(s)	Black on head, grey back, white belly, peach flanks	Habitat/Other comments	I saw several flocks of these birds in different habitats

Hints for Bird Identification

What **color** pattern is the bird?

What **size** is the bird? Is it larger than, smaller than, or same size as

- a House sparrow?
- an American Robin?
- an American Crow?

What **shape** is the bird?

- Is it chunky or long and slender?
- Does it have a crest?
- Is its tail long or short compared with its body?
- How long are its legs compared with its body?
- How long is its beak compared with the size of its head?
- What is the bird's posture? For example, how does it sit on its perch? Does it sit upright? Does it stick its tail in the air?

What are the bird's **field marks**? For example,

- Does the bird have wing bars?

- An eyebrow?
- What about stripes?
- Are there tail bands?

How does the bird **behave**? For example,

- Does it eat at the feeder, or does it take seed back to the cover of a tree or shrub?
- Does it eat only from the ground?
- Does it bob its tail when it perches or walks?
- Is the bird usually seen by itself or does it hang out with a group?
- Are the nearby birds of the same species or different species?
- Does it chase away other feeder birds or does it share the feeder food?
- Is its flight distinctive in any way?

Can you hear **songs or calls**? What do they sound like?

What habitat was it in? What other interesting features did you observe?

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Bird Identification Chart

(page 2 of 2)

Name	Size
Sketch	Shape
	Field marks
	Behavior(s)
	Song(s) or call(s)
Color(s)	Habitat/Other comments

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Sketch	Shape
	Field marks
	Behavior(s)
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BirdSleuth. Cornell Lab of Ornithology

SIX CLUES TO BIRD IDENTIFICATION

Courtesy of the Cornell Lab of Ornithology's "All About Birds" web site
www.allaboutbirds.org

1: SILHOUETTE

Birds in the same general group often have the same body shape and proportions, although they may vary in size. Silhouette alone gives many clues to a bird's identity, allowing birders to assign a bird to the correct group or even the exact species. In the illustration at right are 23 different birds. How many can you recognize just by their silhouettes? Look carefully—don't miss the ones hiding in the leafy tree!

Pay attention to the following:

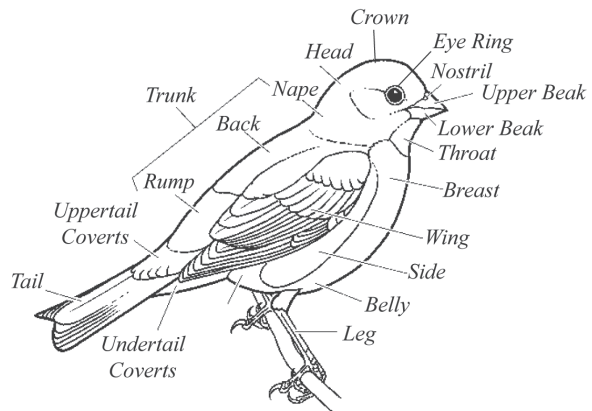
- **body shape**
- **proportions of the head, legs, wings, and tail**
- **shape and length of the bill**



2: FIELD MARKS

In order to describe a bird, ornithologists divide its body into topographical regions: beak (or bill), head, back, wings, tail, and legs. To help with identification, many of these regions are divided still further. This diagram of **regions of the bird's body** shows some of the commonly used descriptive terms.

Birds display a huge variety of patterns and colors, which they have evolved in part to recognize other members of their own species. Birders can use these features - known as **field marks** - to help distinguish species.

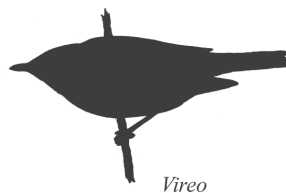


Pay particular attention to the **field marks of the head** and the **field marks of the wing**.

3: POSTURE

Vertical Posture

Certain bird groups have distinctive vertical posture when perched on a branch. Flycatchers, hawks, and owls typically sit in an upright pose with tails pointing straight down.

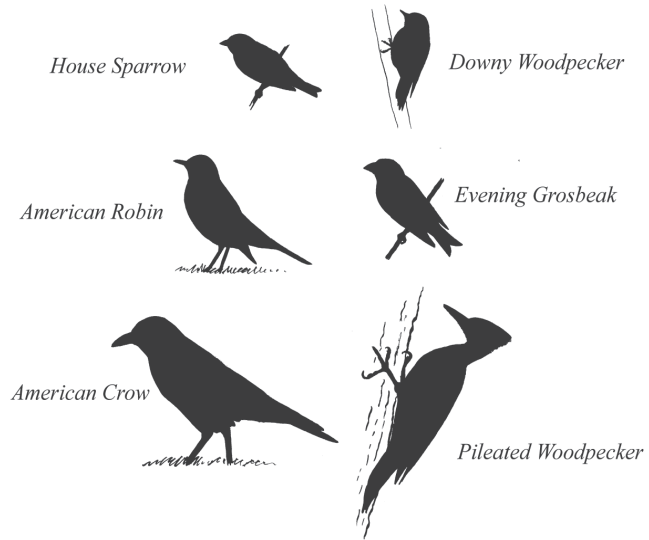


Horizontal Posture

Other birds perch horizontally on vegetation with tails pointing out at an angle, for instance vireos, shrikes, crows, and warblers.

4: SIZE

Once you have assigned a bird to its correct group, size can be a clue to its actual species. Be aware, though, that size can be difficult to determine in the field, especially under poor lighting conditions or at a distance. Size comparisons are most useful when the unknown bird is seen side-by-side with a familiar species. In the absence of that, you can use the sizes of well-known birds, such as the House Sparrow, American Robin, and American Crow, as references when trying to identify an unfamiliar bird.



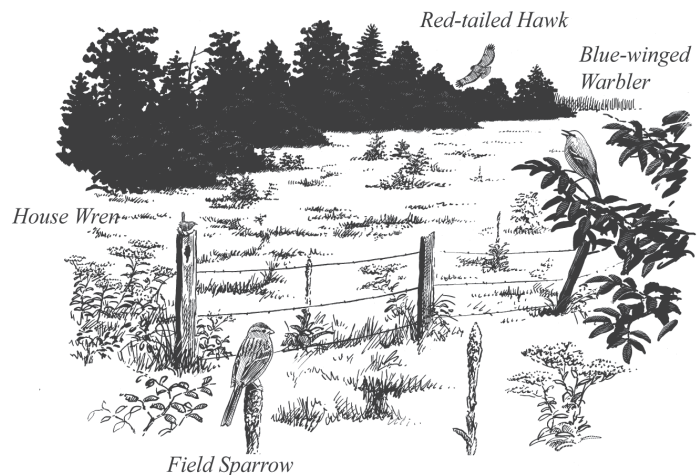
5: SOUND AND VOCALIZATIONS

Identifying birds by their call or song is very helpful when you can't actually see the bird. Experienced birders can identify a bird by sound just as accurately as if they were seeing it because each species has unique vocalizations. Becoming familiar with bird songs takes a lot of practice; usually birdwatchers first learn to identify the bird by sight, then by sound. When possible, try to track down a singing bird and watch it as it sings its song. Another good exercise is to listen to bird recordings on tape, CD, or video.

Identifying birds by sound is fun and challenging! Some birds such as the Winter Wren have several different songs of different lengths. Remembering calls is easier if we use phrases associated with our spoken language. For instance, when the Barred Owl calls it often sounds like it's saying "Who cooks for you?" The Eastern Tufted Titmouse's call sounds like "Peter, Peter, Peter." These kinds of phrases are called mnemonic devices and are helpful to remember bird songs you hear.

6: HABITAT

In general, each species of bird occurs only within certain types of habitat. And each plant community - whether abandoned field, mixed deciduous/coniferous forest, desert, or freshwater marsh, for instance - contains its own predictable assortment of birds. Learn which birds to expect in each habitat. You may be able to identify an unfamiliar bird by eliminating species that usually live in other habitats. (Be aware, though, that during spring and fall migration birds often settle down when they get tired and hungry, regardless of habitat.)





Resources About Birds and Bird Watching

The activity included here is from BirdSleuth, an inquiry-based curriculum for middle-school students. Classrooms involved in the full BirdSleuth curriculum:

- identify birds and learn the importance of habitat;
- participate in citizen science—observing, collecting, and submitting data;
- engage in the scientific process—investigating data and drawing conclusions;
- and take part in authentic inquiry by designing and conducting their own research projects.

To learn more about BirdSleuth, contact the project's leader at birdsleuth@cornell.edu or by calling (607) 254-2489.

Here are additional resources about birds and bird watching:

EDUCATOR'S GUIDE TO BIRD STUDY: Educator's resources (activities, bibliography, funding pointers), student research, and an overview of the Lab of Ornithology's Citizen Science projects.

- www.birds.cornell.edu/schoolyard/index.html

ALL ABOUT BIRDS: Online bird guide, binocular guide, general bird and bird ID information.

- www.allaboutbirds.org

BIRDSLEUTH: View and download the *BirdSleuth Reports* webzine (an online student research journal), discuss bird education issues with other educators on the discussion board, and find links to resources and information.

- www.birdsleuth.org

URBAN BIRD STUDIES: Learn about pigeons, gulls, crows, and other urban birds.

- www.celebrateurbanbirds.org

THAYER BIRDING SOFTWARE: Interactive software, photos, video clips, and quizzes.

- www.ThayerBirding.com

DISCOVERY TRUNKS may be available from a local nature center, zoo, or department of conservation office.

CORNELL LAB OF ORNITHOLOGY WEB SITE: www.birds.cornell.edu

BIRDSLEUTH BIRD ID CARDS: BirdSleuth Bird ID Cards are a great way to help students learn how to identify 36 common birds! The front of each card contains a beautiful, full-color 5x8" image, while the back describes the habitat, food preferences, range, and breeding biology of the bird featured. The cards come with password access to a bonus online quiz containing video, sound, and more photos of the focus card birds. It's a great way for students to quiz themselves on birds by sound or sight. (More information on the birds listed in the cards can be found at www.allaboutbirds.org.) Order the cards at www.birdsleuth.org.