



“Be a Bird Buddy”



Raising Awareness About
Birds in Connecticut



UConn
UNIVERSITY OF CONNECTICUT

 Natural Resources Conservation
Academy



THE MARVELWOOD
SCHOOL



Welcome to the “Be a Bird Buddy” Project!

This project was created by Laurie Doss and Lillian Steinmayer, along with the help of many other people! This project was started because we both think that birds are really cool, and we want to do our part to help them. We want you to do your part, too!

We want you to look at some of these activities that we made, learn about birds, and share some of these facts with your family and friends. Some of these things you will need your parents help for, or you could do with your whole family.

HAVE FUN!!

Learn Before You Begin...

Throughout the coloring pages, we use something called **Quick Response Codes** (aka **QR codes**). Basically this is a code that a scanning device on a cell phone can read and then quickly link you to information on the internet.

For example, this one will lead you to the Hermit Thrush's song on *Cornell Lab of Ornithology's All About Birds* page.



We used the app “QR Reader for iPhone” by TapMedia Ltd. This particular app is only available for iPhone, but any QR reading app will work. If you don't have a phone, ask your parent/guardian if they could download it so you can use their phone to go to the pages provided. ***Remember to thank them if they do this for you.***

Enjoy listening and learning the songs of different birds found in your town!

Learn Before You Begin...

(continued)

This is the *International Union for Conservation of Nature's (IUCN)* symbol for an animal's status in the wild.

EX = Extinct

EW = Extinct in Wild

CR = Critically Endangered

EN = Endangered

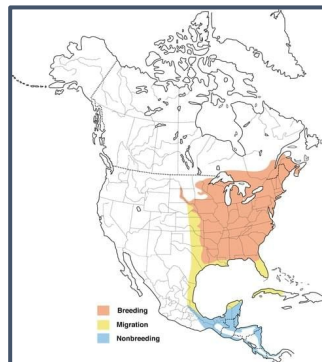
VU = Vulnerable

NT = Near Threatened

LC = Least Concern



A *Range Map* is a map where you can expect to find birds during the different seasons (Breeding, Migration, Non-breeding).



A *RED FLAG* is symbol to remind you of some of the birds in your backyard who are in trouble and which need special conservation attention. It is our RESPONSIBILITY to help protect these birds for future generations!



Near Threatened means “may be considered **threatened** with extinction in the **near** future, although it does not currently qualify for the **threatened** status.” (http://www.iucnredlist.org/static/categories_criteria_2_3#definitions).



Vulnerable means “likely to become endangered unless the circumstances that are threatening its survival and reproduction improve” (http://www.iucnredlist.org/static/categories_criteria_2_3#definitions).

Learn Before You Begin...

(continued)

Deciduous Forests are forests that get their leaves in the spring and loose them every autumn after the leaves change colors.



Winter/Spring



Summer



Autumn

Coniferous or Evergreen Forests are forests that look like different types of Christmas Trees where the trees have needle-like leaves and stay green throughout the year.



Shrub/Early Successional Habitat refers to forests with different layers of plants such as young trees, very small trees (under 20 feet (6 meters), grasses, ferns, flowers,etc..). Think of forest areas where it is not easy to walk through.



Learn Before You Begin...

(continued)

Handkerchief = small white patch sticking out of a bird's folded wing just like a handkerchief sticks out of a man's suit pocket. An identification aid in some bird species.



Flank = side area of a bird that sometimes has unique colors used in identification.



Wingbars = rows of stripes across a bird's folded wing.



Spectacles = an eye-ring that extends toward the bill of a bird giving the appearance that the bird is wearing glasses or "spectacles".



Source(s):

<https://www.allaboutbirds.org/>
<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/pa/programs/farmbill/rcpp/?cid=nrcseprd888823>
<https://www.wikihow.com/Fold-a-Handkerchief>

Learn Before You Begin...

(continued)

Crown = Top of the head of a bird that sometimes has colored feathers and can be used to identify some birds.

Eyepatch or Auricular = Colored areas around the ear of a bird often used to help in the identification of some birds.

Eyebrow/Eye Stripe/Supercilium = The area above the eyeline of a bird that is often colored and used to help in the identification of some birds.

Eyeline = This is a line that appears to run through and behind the eye of a bird that is often colored and used to help in the identification of some birds.

Eyering = The colored ring around the eyes of some birds often used to help with identification of some birds.



Source(s):

<https://www.allaboutbirds.org/>

<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/pa/programs/farmbill/rcpp/?cid=nrcseprd888823>

<https://neotropical.birds.cornell.edu/Species-Account/nb/species/yebfly/multimedia/photos>

Migration and Stopover Sites

First of all, what is migration? ***Migration***, is when animals move to different places in different seasons on a regular basis. There are a lot of birds that spend their summer and have babies in Connecticut and when it gets cold go down to Mexico, or even South America. We will be talking about some of these birds.

Another important thing about Connecticut is that sometimes birds use areas as “***stopover sites***” especially those that breed further north like Maine or Canada. What are stopover sites? Well, imagine this. Every year your parents, you, and your pets go on the same road trip. It’s a long road trip, and every year you stop at the same places to eat and rest before continuing your road trip in the morning. You like these locations, and every year you remember that one place which has really good ice cream; the hotel that has the really comfy beds, and the hotel with the fun pool! So, every year you count on stopping at the same places to eat and rest during your road trip. Stopping at your favorite places is called ***site fidelity***.

That’s what stopover sites for birds are; places with food and shelter where they can stop to rest and refuel during their long journey. Scientists are discovering that birds, like humans, have site fidelity. Each year they count on stopping at their favorite locations to raise families and/or to reset and refuel during migration. Stopover site doesn’t have to be much area. Do you want to make one and get a bunch of cool birds to come to your backyard? Learn how to make your very own stopover site in the next activity!!!

Different Types of Migrants

We talked about migration, it is an important process that many bird species go through. There are 4 main types of migratory patterns:

- ★ ***Resident birds*** - birds that do not migrate but rather stay in the same yard or forest all year long. Examples: Northern Cardinal, Downy Woodpecker
- ★ ***Short Distance Migrants*** - birds that stay within the same region, but will move a few hundred miles at a time, often to a higher or lower elevation. Example: American Tree Sparrow
- ★ ***Medium Distance Migrants*** - birds that usually stay within the same country, but will move one or a few states seasonally. Examples: White-crowned Sparrow, Eastern Bluebird
- ★ ***Long Distance or Neotropical Migrants*** - will move very long distances, across countries, seasonally. Examples: Cerulean Warbler, Wood Thrush

We've had all of these types of migrants in our patch!

Activity #1

**COLORING BOOK TO
TEN BIRD SPECIES
COMMONLY FOUND
IN KENT, CT**

MEET A FEW BIRDS IN KENT

IN CONNECTICUT, THERE ARE LOTS OF DIFFERENT KINDS OF BIRDS. SCIENTISTS TRY REALLY HARD TO REMEMBER ALL THE NAMES OF THE BIRDS.

ONE WAY SCIENTISTS REMEMBER BIRDS IS TO SEPARATE BIRDS BY FAMILY. IN BIRDS, FAMILIES ARE A BIT DIFFERENT THAN HOW WE SEE THEM AS PEOPLE.

FOR YOU, YOUR FAMILY MIGHT BE YOUR PARENTS, GRANDPARENTS, SIBLINGS, OR COUSINS, BUT FOR BIRDS, IT'S A LITTLE BIT DIFFERENT. BIRD FAMILIES ARE LARGE GROUPS OF BIRDS WHO HAVE A LOT OF SIMILARITIES.

WE'RE GOING TO TALK ABOUT MEMBERS FROM 3 OF THESE FAMILIES.

Meet Some Thrushes!



Thrush's eat insects and build cup-shaped nests, they are small to medium sized, they can be lighter than a AA battery or heavier than a baseball.

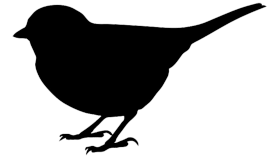
There are lots of different types of birds in the Thrush family, we're only going to talk about 2 of the members of this family you might see in the northwest corner of Connecticut.

Hermit Thrush

Catharus guttatus



American Robin
23 - 28 cm long



Size: **SLIGHTLY SMALLER (14 to 18 cm)** than an American Robin

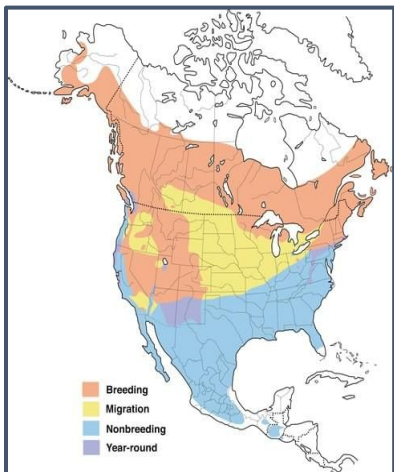
Appearance: Males and females have the same plumage color. They have a sturdy frame and long tail.



A Closer Look:

- ✓ Reddish tail with a brown body.
- ✓ White bellies with brown spots.
- ✓ A bit chubbier than other thrushes.
- ✓ Pale eye-ring.

If you want to go out and find a Hermit Thrush in Connecticut, use the following tips:



- Look in forests, often near openings in the trees, like at the edge of a meadow.
- Males will protect the nest by singing, often in the morning or evening.
- These birds could spend the summer or winter in Kent, but it is more common for them to pass through Kent on their way to Massachusetts or Canada in the summer, and Georgia or Mexico in the Winter.

Sources:

<https://web.stanford.edu/~kendric/birds/birdsong.html>

https://www.allaboutbirds.org/guide/Hermit_Thrush/id

<http://moziru.com/explore/Robin%20clipart%20silhouette/>

<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>



COLOR ME! I AM A HERMIT THRUSH!!!



Have your parents use their smartphone or tablet to scan here so you can learn the Hermit Thrush's song!

Remember this phrase :
"veer-veer-veer-veer-
Why don'tcha come to me?
Here I am right near you"



Sources:

<http://www.fernbank.edu/Birding/mnemonics.htm>

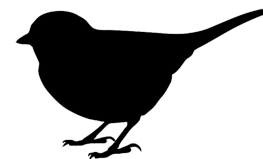
<https://www.allaboutbirds.org>

<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>

Wood Thrush

Hylocichla mustelina

American Robin
23 - 28 cm long



Size: Almost identical in size (19-21 cm) to an American Robin

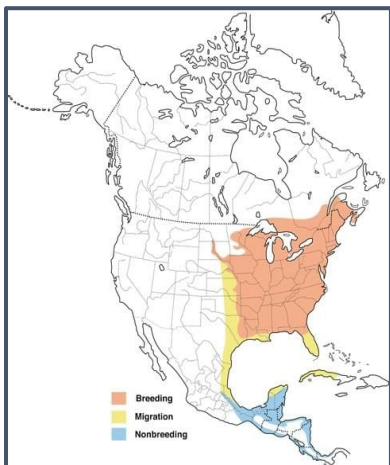
Appearance: Males and females have the same plumage color. They have shorter tails than many thrushes, and pot-bellies.



A Closer Look:

- ✓ A big pot-belly.
- ✓ Reddish-brown above, with a pale belly, and very dark black spots.
- ✓ White eye ring.
- ✓ Long pink legs.

If you want to go out and find a Wood Thrush in Connecticut, use the following tips:



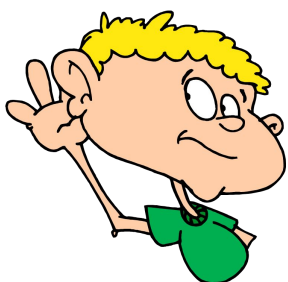
- Look in deciduous forests, that's where Wood Thrushes like to breed.
- Wood Thrushes hop along the ground to look for food to eat.
- They will add bits of paper or trash to their nests.
- Wood thrushes like to spend the summer breeding along the East Coast, from Mississippi to Maine, and spend the Winter in Southern Mexico.

Sources:

<http://www.fernbank.edu/Birding/mnemonics.htm>
https://www.allaboutbirds.org/guide/Wood_Thrush/id
<http://moziru.com/explore/Robin%20clipart%20silhouette/>
<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>



COLOR ME! I AM A WOOD THRUSH!!!



Have your parents use their smartphone or tablet to scan here so you can learn the Wood Thrush's song!

Remember this phrase :
"Ee-o-lay"



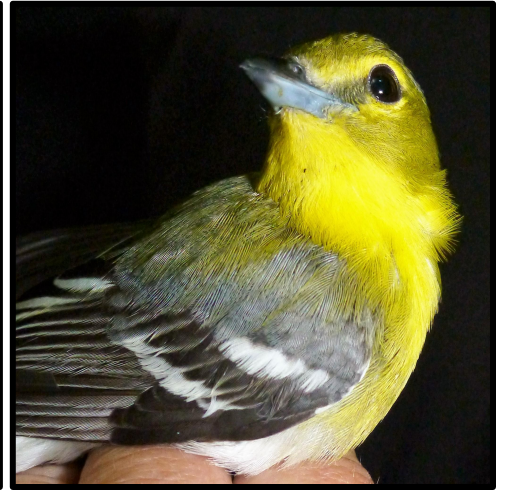
Sources:

<http://www.fernbank.edu/Birding/mnemonics.htm>

<https://www.allaboutbirds.org/>

<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>

Meet Some Vireos!



Vireo's eat insects and build cup shaped nests that hang from branches. They are small to medium sized, they can be the same as two dice or almost two mice.

There are lots of different types of birds in the Vireo family.

We're only going to talk about 3 of the members of this family you might see in the northwest corner of Connecticut.

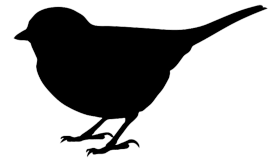
Spacing Page for Printing

Red-Eyed Vireo

Vireo olivaceus



American Robin
23 - 28 cm long



Size: **SMALLER (12-13 cm long)** than an American Robin.
Roughly half the size of a Robin.

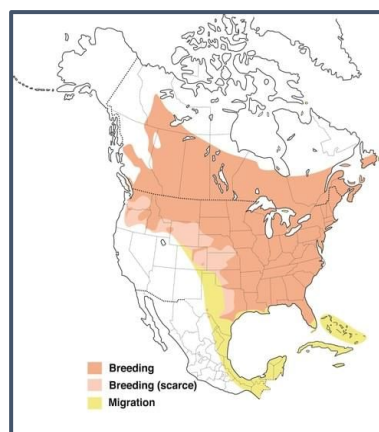
Appearance: Males and females have the same plumage color. They are named after the distinctive eye color found in the adults of this species.



A Closer Look:

- ✓ Olive gray on top.
- ✓ Clean white belly.
- ✓ White stripe on the eyebrow, lined with black lines.
- ✓ Gray crown.
- ✓ Adults have red eyes.

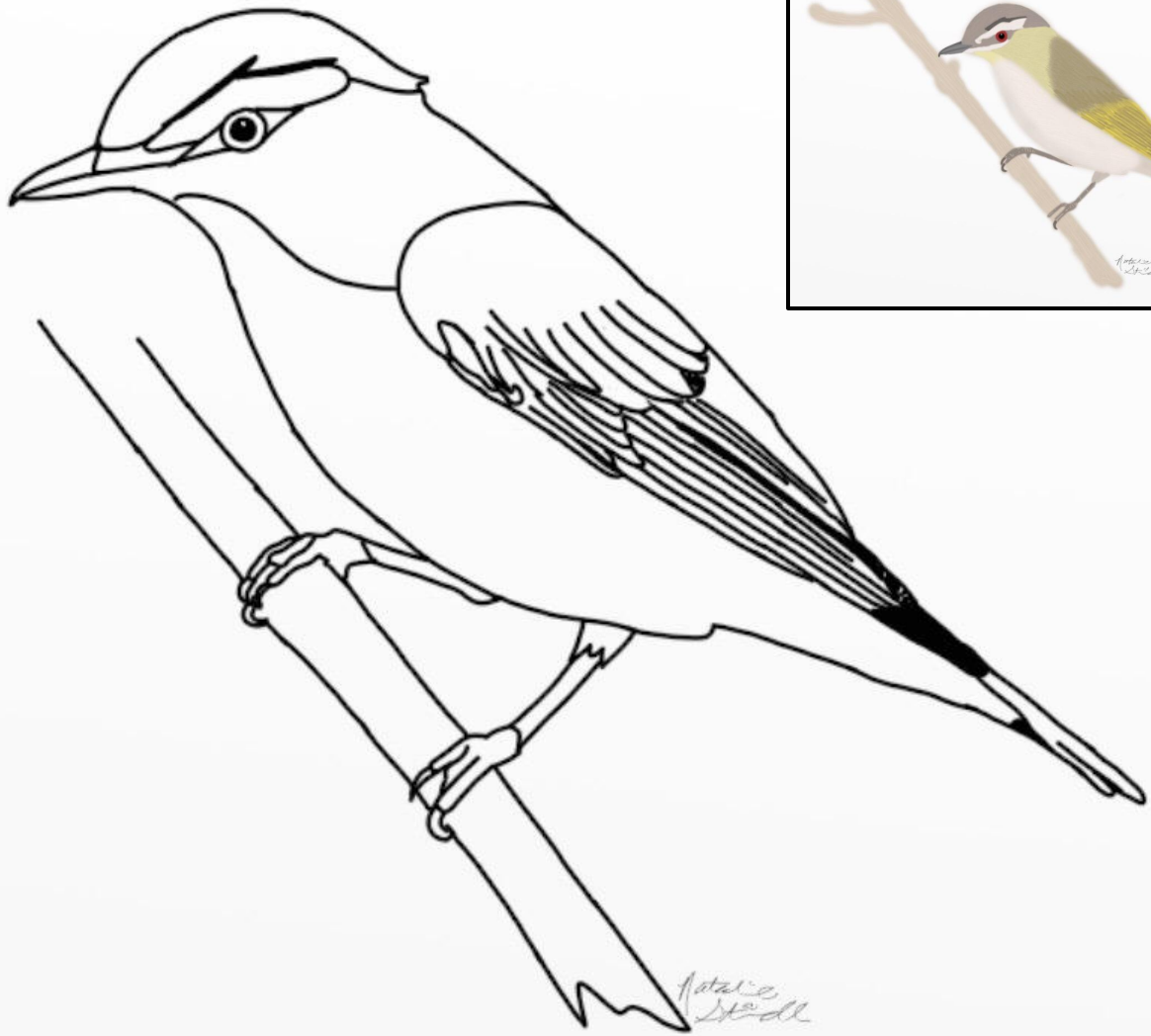
If you want to go out and find a Red-Eyed Vireo in Connecticut, use the following tips:



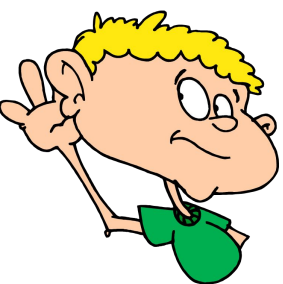
- Look in woodlots or parks, often in deciduous trees, like Maples.
- Red-Eyed Vireos like to eat caterpillars, and will search the canopies, top layer, of the trees for them.
- The Red-Eyed vireo will spend summers in the east coast, including in Connecticut to breed, but spend their winter in South America.

Sources:

<http://www.fernbank.edu/Birding/mnemonics.htm>
https://www.allaboutbirds.org/guide/Red-eyed_Vireo/id
<http://moziru.com/explore/Robin%20clipart%20silhouette/>
<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>



COLOR ME! I AM A RED-EYED VIREO!!!



Have your parents use their smartphone or tablet to scan here so you can learn the Red-eyed Vireo's song!

Remember this phrase :
"look-up, over-here, see-me, up-here"



Sources:

<http://www.fernbank.edu/Birding/mnemonics.htm>

<https://www.allaboutbirds.org>

<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>

Blue-Headed Vireo

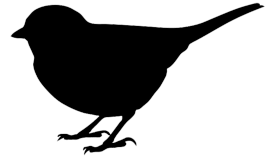
Vireo solitarius

IUCN Status:



American Robin
23 - 28 cm long

Size: **SMALLER (13-15 cm long)** than an American Robin.
Roughly half the size of a Robin.



Appearance: Males and females have the same **plumage** color. They have a distinct bluish head that stands out against their yellowish backs.

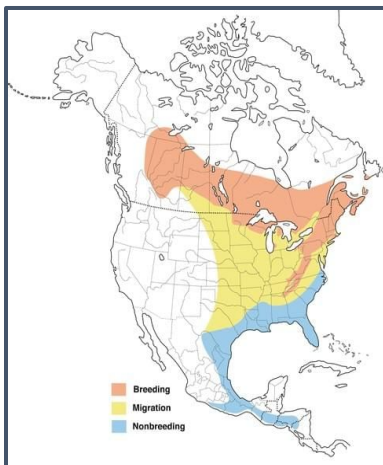


A Closer Look:

- ✓ White spectacles.
- ✓ Two white wingbars.
- ✓ White belly with a bit of yellow near the flank (side of bird above leg).
- ✓ Bluish-gray head.
- ✓ Yellowish grayish back.



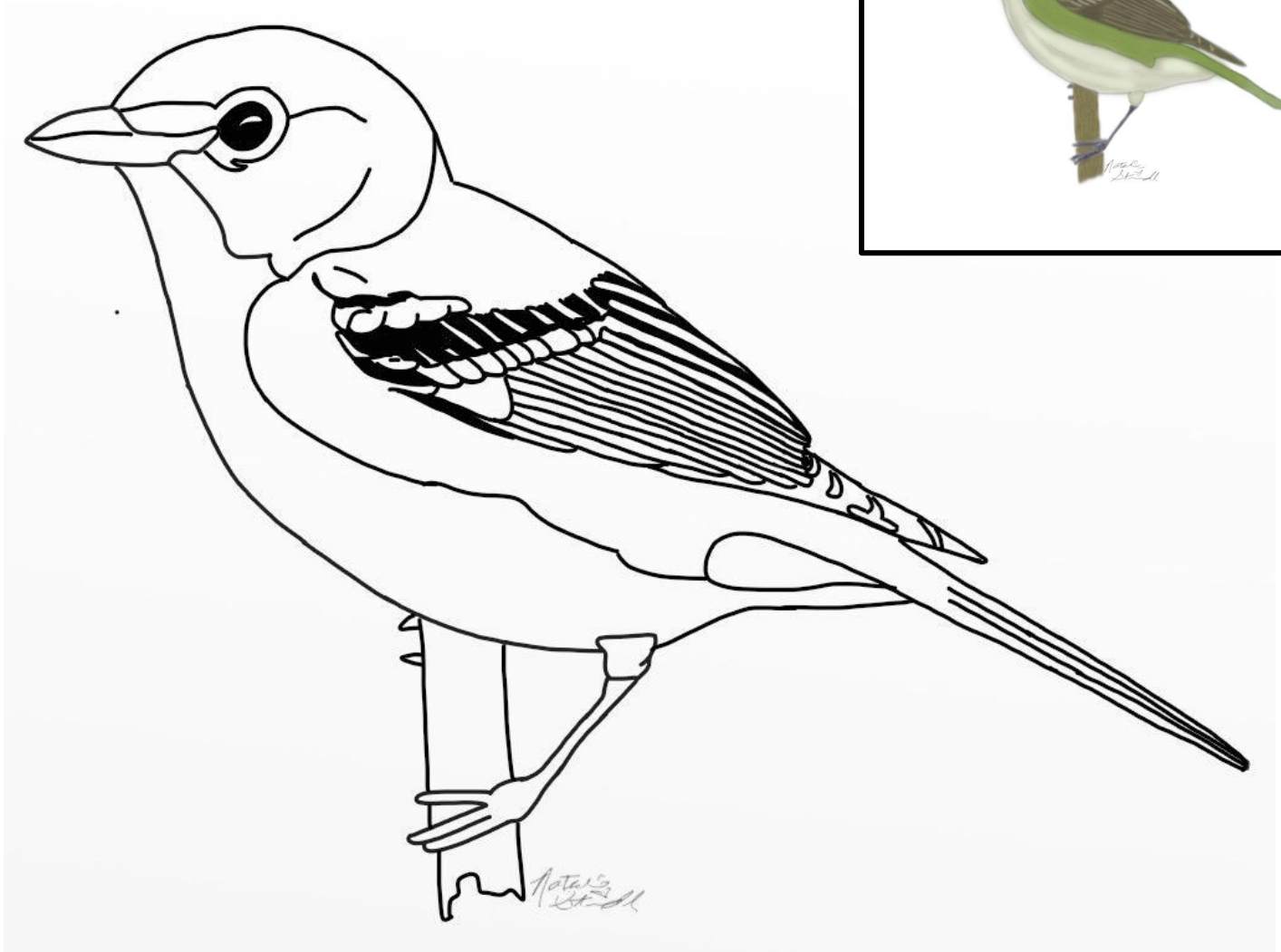
If you want to go out and find a Blue-Headed Vireo in Connecticut, use the following tips:



- Look in areas with both deciduous and coniferous trees (especially birch and hemlock trees).
- Blue-Headed Vireos look for insects in the middle levels of forests.
- The Blue-Headed Vireo is a migratory species. It will spend its breeding season in the Northern U.S. and Canada, including Connecticut. They will spend the winter in the southern U.S. and Mexico.

Sources:

<https://web.stanford.edu/~kendric/birds/birdsong.html>
https://www.allaboutbirds.org/guide/Blue-headed_Vireo/lifehistory
<http://moziru.com/explore/Robin%20clipart%20silhouette/>
<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>



COLOR ME! I AM A BLUE-HEADED VIREO!!!



Have your parents use their smartphone or tablet to scan here so you can learn the Blue-Headed Vireo song!

Remember this phrase :
"See you, be-seeing ya, so long"



Sources:

<https://web.stanford.edu/~kendric/birds/birdsong.html>

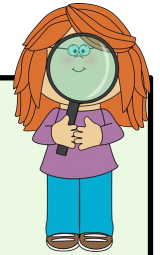
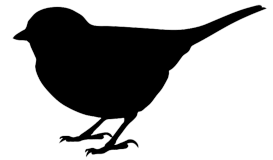
<https://www.allaboutbirds.org>

<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>

Yellow-Throated Vireo

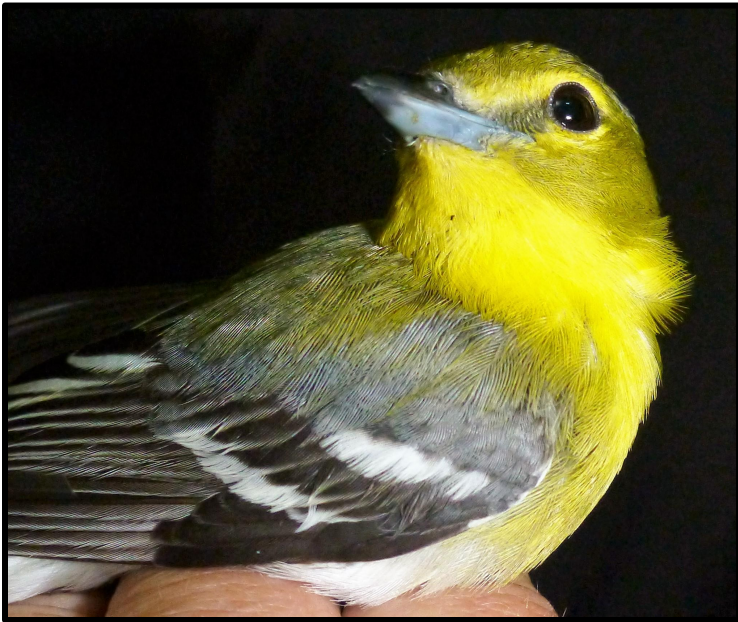
Vireo flavifrons

American Robin
23 - 28 cm long



Size: **SMALLER (12-13 cm long)** than an American Robin.
Roughly half the size of a Robin.

Appearance: Males and females have the same plumage color. They have a similar pattern to the Blue-Headed Vireo, but they're yellow instead of blue and white.

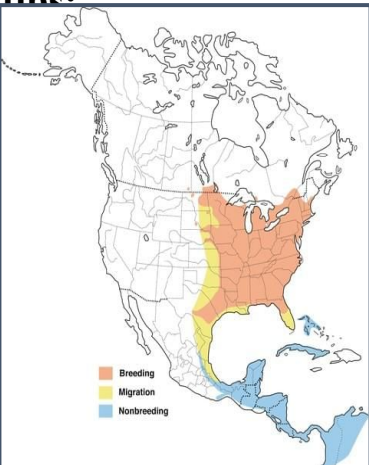


A Closer Look:

- ✓ Yellow spectacles
- ✓ 2 white wingbars
- ✓ White lower belly
- ✓ Grayish back and wings
- ✓ Bright yellow head and neck
- ✓ Yellowish grayish back

If you want to go out and find a Yellow-Throated Vireo in Connecticut, use the following tips:

- Look in forests, typically around the edges of the forest, though that's not the only part of a forest they are found.
- The Yellow-Throated Vireo eats insects off the trunks of trees in the middle or upper level of forest.
- The Yellow-Throated Vireo will spend its breeding season from the east coast to the middle of the U.S. They winter in the southern Central America and Northern South America.



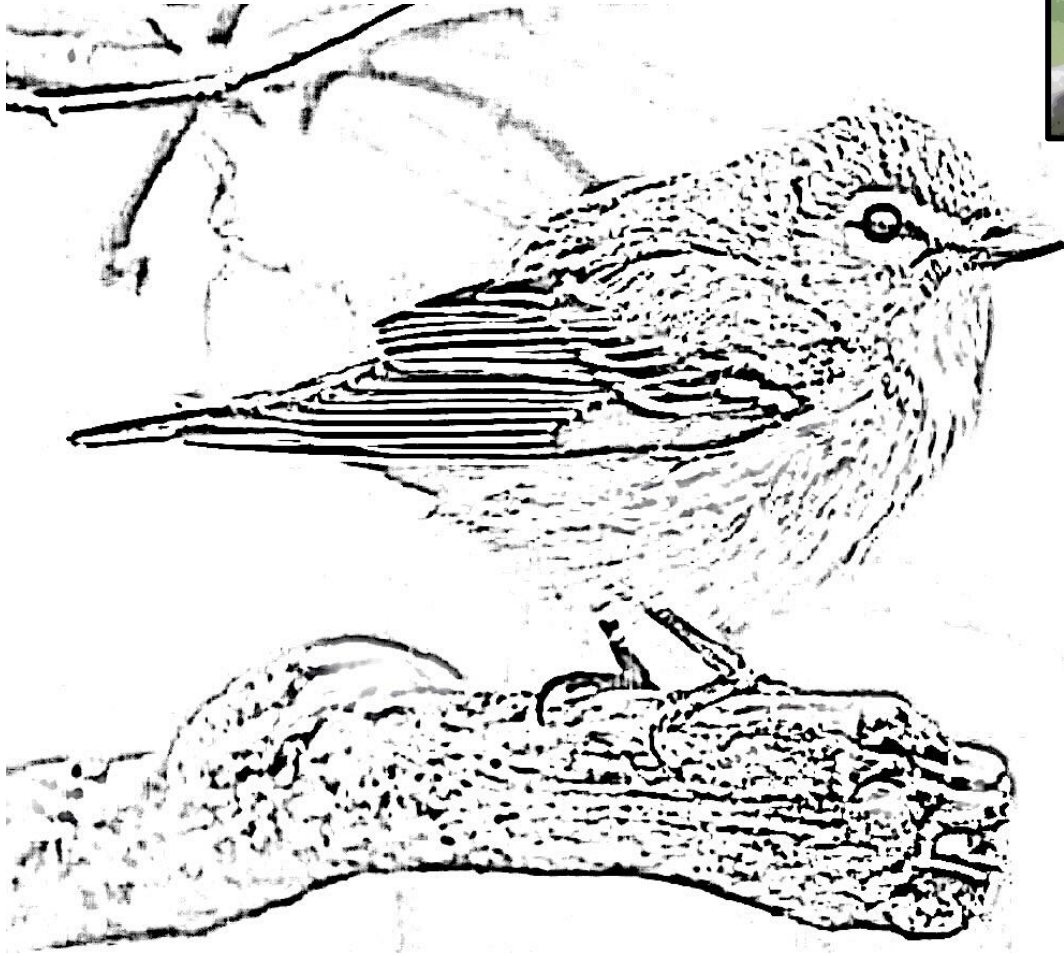
Sources:

<http://www.fernbank.edu/Birding/mnemonics.htm>

https://www.allaboutbirds.org/guide/Yellow-throated_Vireo/id

<http://moziru.com/explore/Robin%20clipart%20silhouette/>

<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>



COLOR ME! I AM A YELLOW-THROATED VIREO!!!



Have your parents use their smartphone or tablet to scan here so you can learn the Yellow-Throated Vireo's song!

Remember this phrase :

"look-up, over-here, see-me, up-here"
It is the same as the Red-Eyed Vireo's song, but buzzier.



Sources:

<http://www.fernbank.edu/Birding/mnemonics.htm>

<https://www.allaboutbirds.org>

<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>

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Meet Some Warblers!



Warblers are small birds that usually live in high in the treetops. There are a lot of them in North and South America. Most of them eat insects.

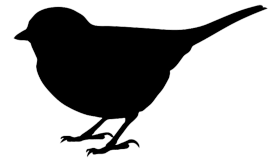
There are lots of different types of Warblers that you may see in Connecticut, however we are only going to talk about 5 of the warblers you might be able to see breeding in the forests of Kent and/or migrating through Kent in the late summer/fall.

Blue-Winged Warbler

Vermivora cyanoptera



American Robin
23 - 28 cm long



Size: **SMALLER (11-12 cm long)** than an American Robin.
Less than half the size of a Robin.

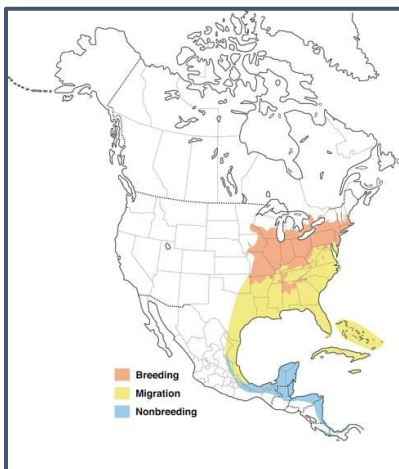
Appearance: Males and females have the same plumage color.



A Closer Look:

- ✓ Small bird.
- ✓ Yellow body, with a yellow/green lower back.
- ✓ Blueish gray wings.
- ✓ Black line through eye.s
- ✓ Two white wingbars.

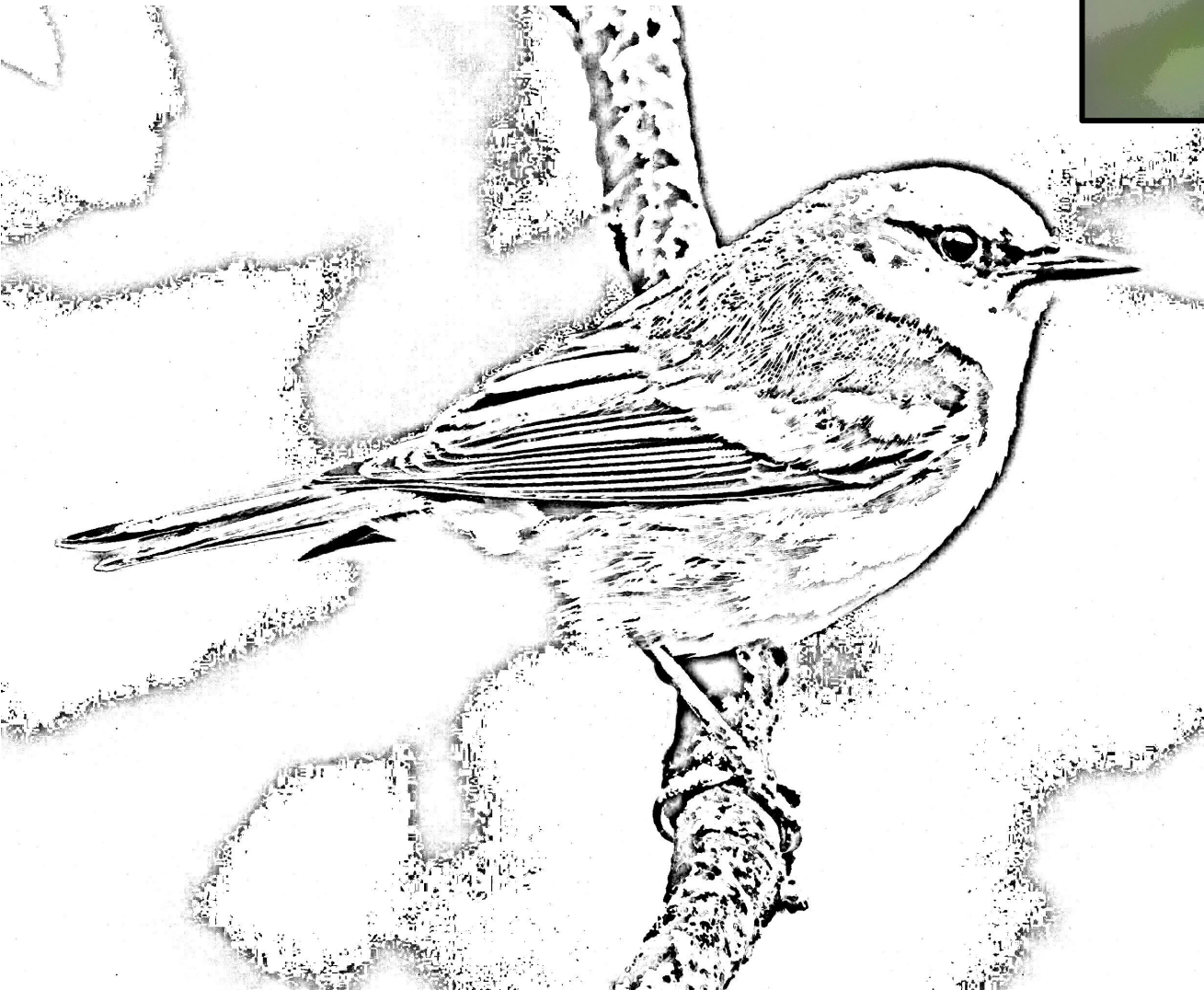
If you want to go out and find a Blue-Winged Warbler in Connecticut, use the following tips:



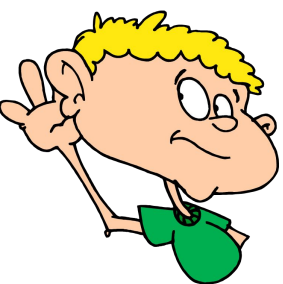
- Blue-Winged Warblers spend their summers in Connecticut to breed.
- Blue-Winged Warblers build their nests on the ground.
- Look in clearings of forests or the edges of meadows, usually in the shade of larger trees.
- They eat spiders and insects from the tops of trees and shrubs

Sources:

<http://www.audubon.org/field-guide/bird/blue-winged-warbler#>
https://www.allaboutbirds.org/guide/Blue-winged_Warbler/id
<http://moziru.com/explore/Robin%20clipart%20silhouette/>
<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>



COLOR ME! I AM A BLUE-WINGED WARBLER!!!



Have your parents use their smartphone or tablet to scan here so you can learn the Blue-Winged Warbler's song!

Remember this phrase :
"Bzz-bzz" or "Bee-buzz"



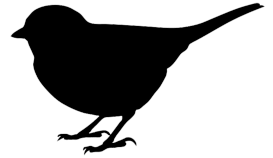
Sources:
<http://www.fernbank.edu/Birding/mnemonics.htm>
<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>
<https://www.allaboutbirds.org>

Chestnut-Sided Warbler *Setophaga pensylvanica*



American Robin
23 - 28 cm long

Size: **SMALLER (11-13 cm long)** than an American Robin.
Less than half the size of a Robin.



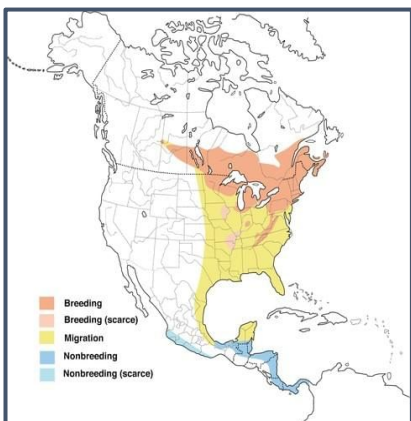
Appearance: Males and females have a differentiation in plumage. Males have more extensive chestnut sides, females have a more greenish yellow head. Females duller in color.



A Closer Look:

- ✓ Two thick yellowish-white wingbars.
- ✓ White cheek patch.
- ✓ Dark line from beak through eye.
- ✓ Top of their head yellow.
- ✓ Chestnut (brownish) coloring on sides.

If you want to go out and find a Chestnut-Sided Warbler in Connecticut, use the following tips:



- Makes nests in shrubs.
- Breeds in deciduous forests with shrubs in it.
- Eats insects from the bottoms of leaves.
- Breeds in Connecticut and Southern

Sources:

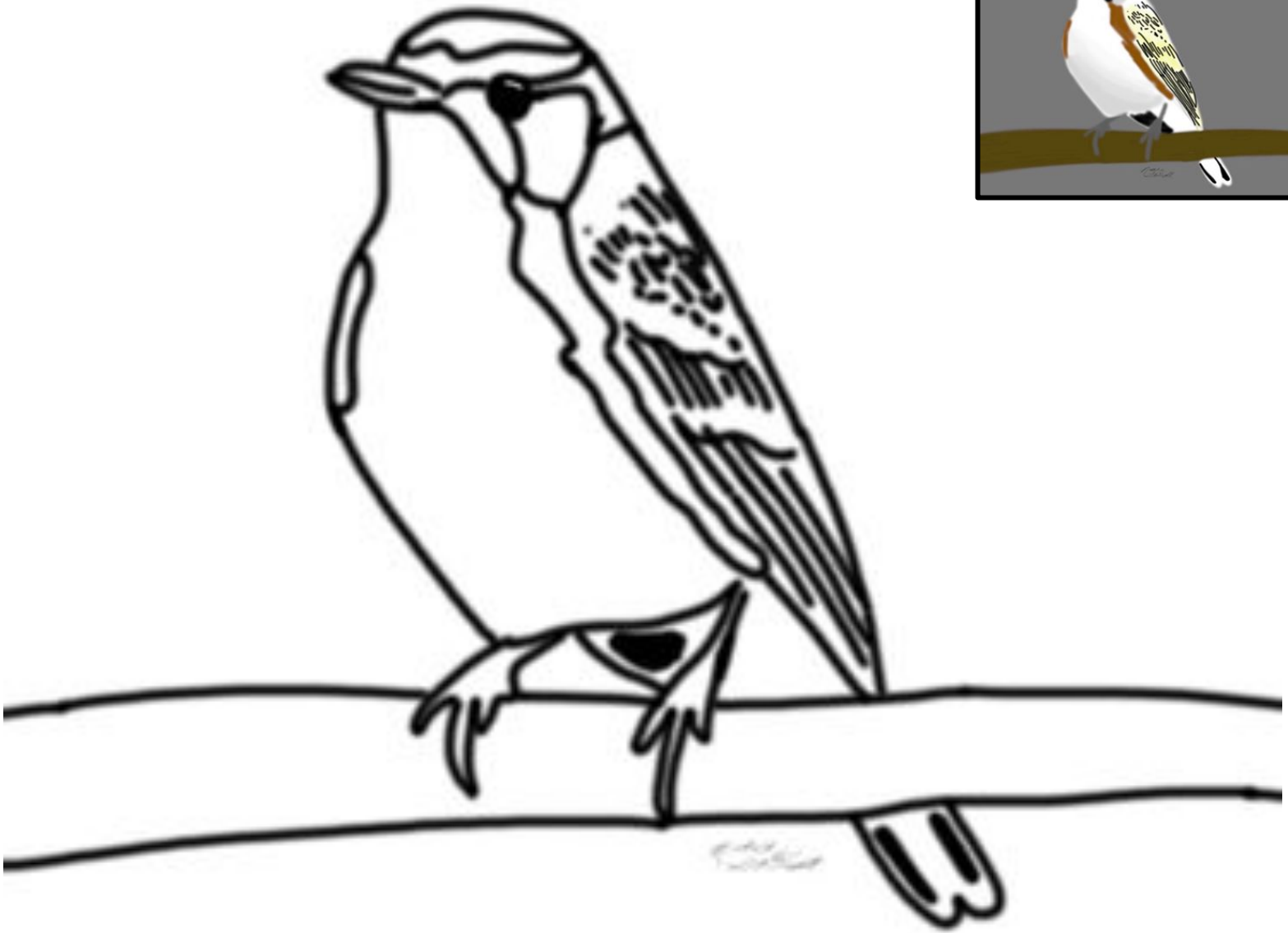
<http://www.audubon.org/field-guide/bird/black-throated-blue-warbler>

<https://www.allaboutbirds.org/guide/Black-throated-Blue-Warbler/id>

<http://moziru.com/explore/Robin%20clipart%20silhouette/>

<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>

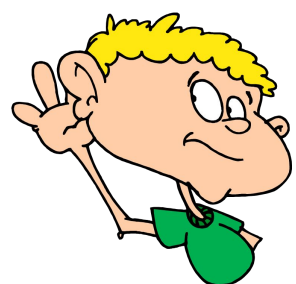
Canada.



COLOR ME! I AM A CHESTNUT-SIDED WARBLER

Have your parents use their smartphone or tablet to scan here so you can learn The Chestnut-Sided Warbler's song!

Remember this phrase :
"Please, please, pleased to meet'cha"



Sources:
<http://www.fernbank.edu/Birding/mnemonics.htm>
<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>
<https://www.allaboutbirds.org>

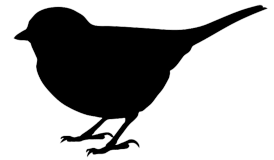
Black-Throated Blue Warbler

Setophaga caerulescens

American Robin
23 - 28 cm long



Size: **SMALLER (11-13 cm long)** than an American Robin.
Less than half the size of a Robin.



Appearance: Males and females have a large differentiation in plumage.

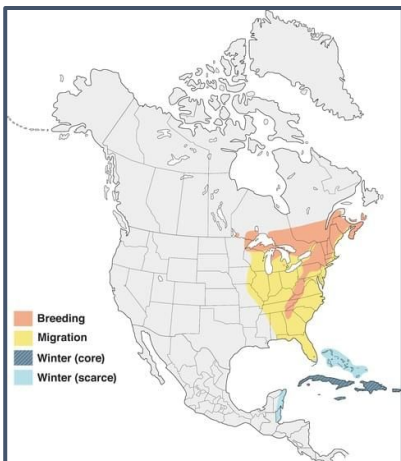


A Closer Look:

- ✓ Males
 - Back, tail, and head blue-gray.
 - Face and throat black.
 - Large white spots on wings (called a "handkerchief").
- ✓ Females
 - Back, tail, and head olive green.
 - Yellowish white stripe above eyes.
 - Lower eyelid white.
 - Brownish-Yellow belly.
 - White spot or "handkerchief" on wings



If you want to go out and find a Black-Throated Blue Warbler in Connecticut, use the following tips:



- Breeds in Connecticut.
- Breeds in deciduous and mixed coniferous and deciduous forests.
- Eats insects and fruit.
- Builds nests in shrubs.
- Eats insects off the undersides of leaves.

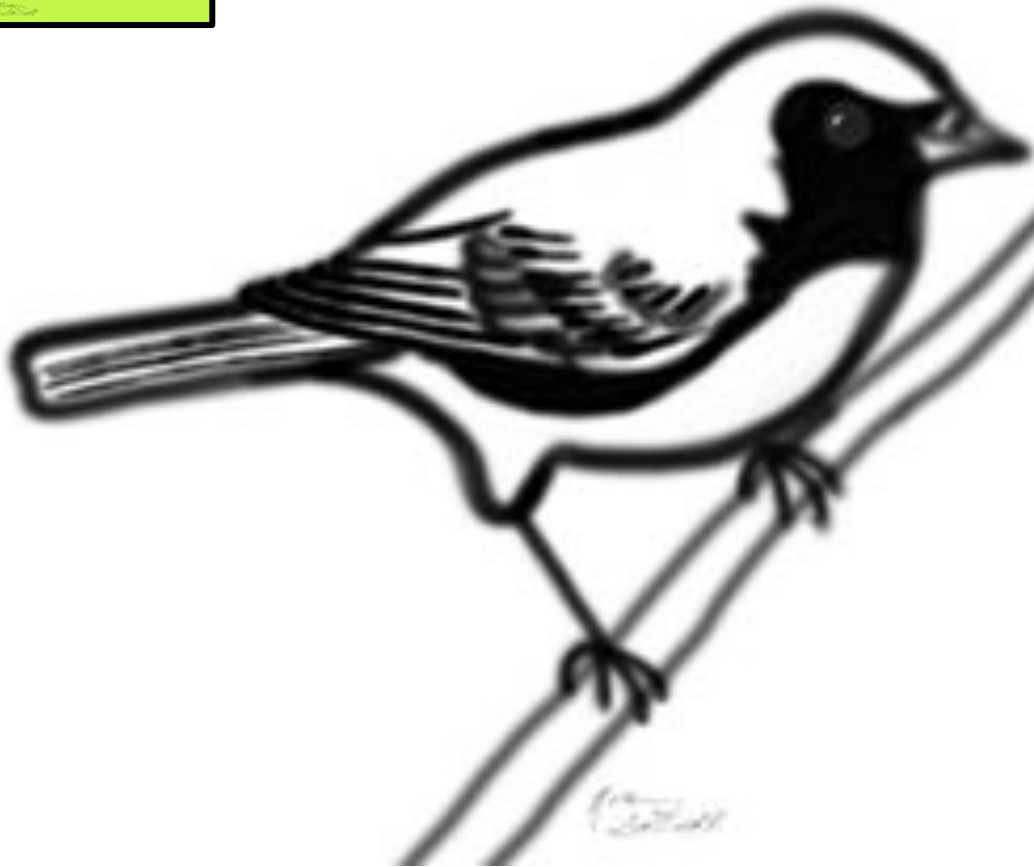
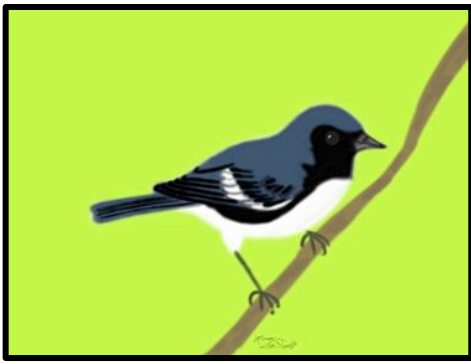
Sources:

<http://www.audubon.org/field-guide/bird/black-throated-blue-warbler>

https://www.allaboutbirds.org/guide/Black-throated_Blue_Warbler/id

<http://moziru.com/explore/Robin%20clipart%20silhouette/>

<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>



COLOR ME! I AM A BLACK-THROATED BLUE WARBLER!



Have your parents use their smartphone or tablet to scan here so you can learn the Black-Throated Blue Warbler's song!

Remember this phrase :

"I am lazeeeee" or "beer beer beer beeeee"



Sources:
<http://www.fernbank.edu/Birding/mnemonics.htm>
<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>
<https://www.allaboutbirds.org>

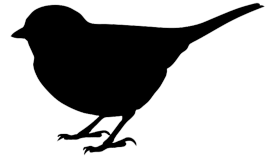
Black-and-White Warbler

Mniotilta varia



American Robin
23 - 28 cm long

Size: **SMALLER (11-13 cm long)** than an American Robin. Less than half the size of a Robin.



Appearance: Males and females have a noticeable differentiation in plumage.



A Closer Look:



Males

- Black and white overall
- Maybe a black ear patch
- Dark tail with white spots on outer feathers

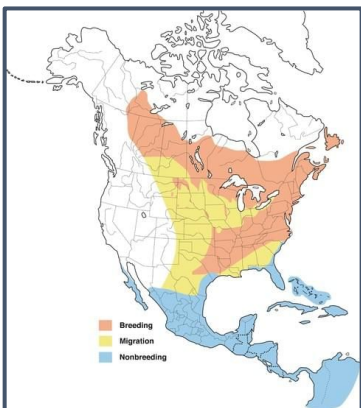


Females

- Like the males, but paler
- White throat
- Grayish ear patch



If you want to go out and find a Black-and-White Warbler in Connecticut, use the following tips:



- Breeds in Connecticut.
- Breeds in older deciduous and mixed coniferous and deciduous forests.
- Eats insects.
- Builds nests on the ground.
- Creeps along the trunks and limbs of trees searching for insects.

Sources:

<http://www.audubon.org/field-guide/bird/black-throated-blue-warbler>

https://www.allaboutbirds.org/guide/Black-and-white_Warbler/

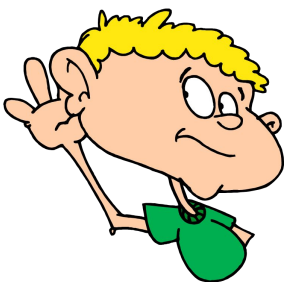
<http://moziru.com/explore/Robin%20clipart%20silhouette/>

<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>



COLOR ME! I AM A BLACK-AND-WHITE WARBLER!!!

Have your parents use their smartphone or tablet
to scan here so you can learn
the Black-and-White Warbler's song!



Remember this phrase :
"Wheezy, wheezy, wheezy"

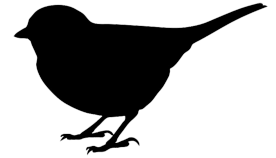


Sources:
<http://www.fernbank.edu/Birding/mnemonics.htm>
<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>
<https://www.allaboutbirds.org>



American Robin
23 - 28 cm long

Size: **SMALLER (11 cm long)** than an American Robin.
Less than half the size of a Robin.



Appearance: Males and females have a large differentiation in plumage.



A Closer Look:



Males

- Cerulean blue (deep blue) on top, white underparts.
- Two white wingbars.
- Dark stripes on wings and back.
- Faint black eyeline.
- Black "necklace" just under throat.

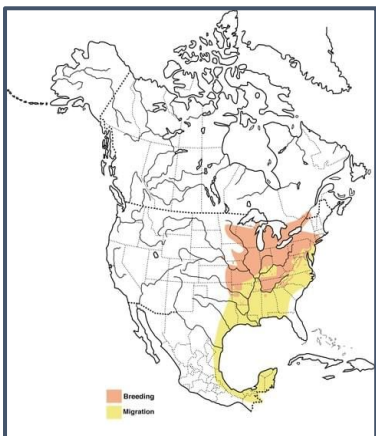


Females

- Blueish- green on top.
- White underparts with yellowish hue.
- Black eyeline with white "eyebrow".
- Two White wingbars.



If you want to go out and find a Cerulean Warbler in Connecticut, use the following tips:



- Breeds in Connecticut.
- Breeds in tall deciduous forests.
- Eats insect, with some plants.
- Builds nests in mid to upper canopy.
- Spends most of time in the tops of trees.
- Eats insects off the undersides of leaves.

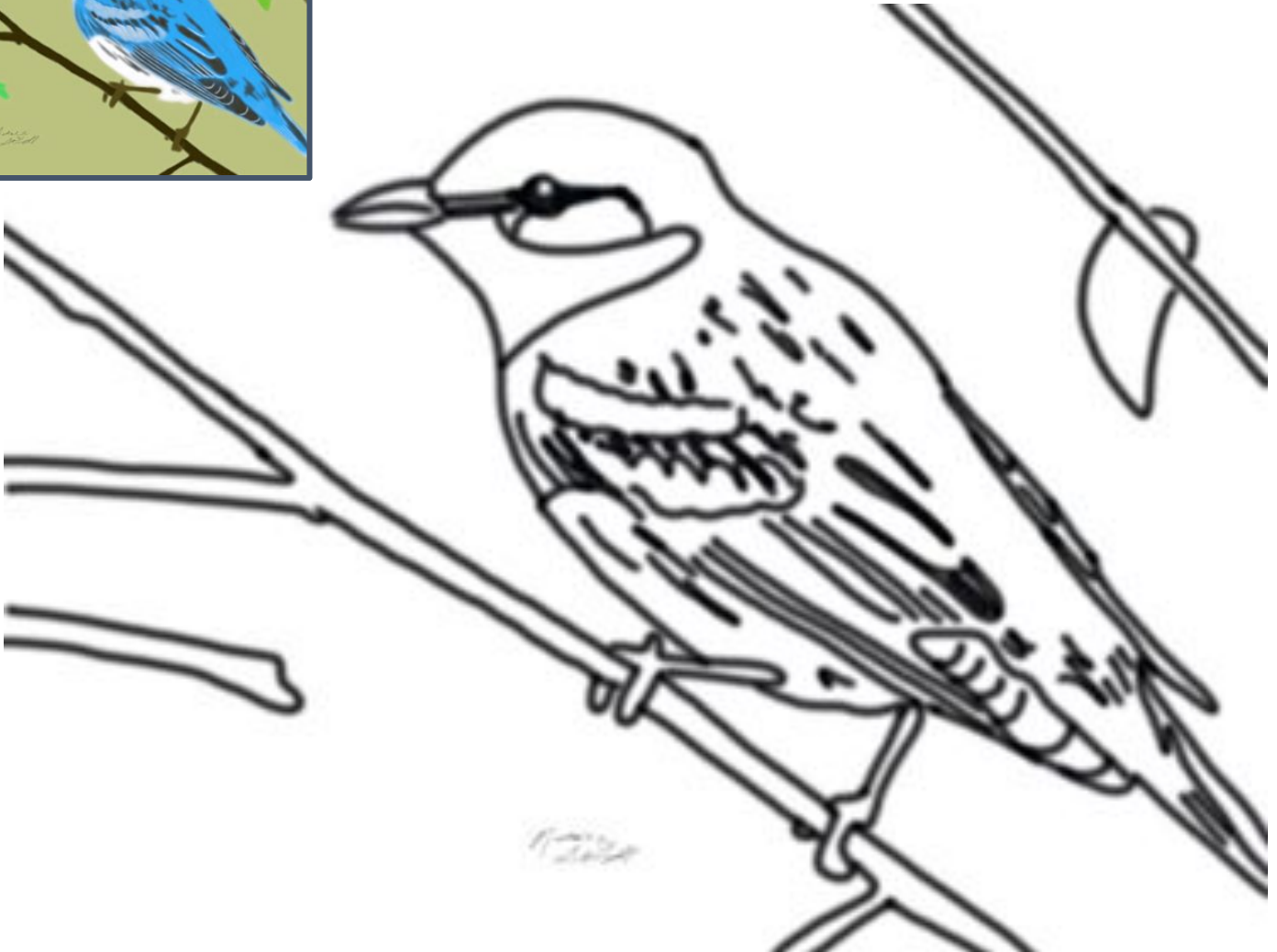
Sources:

<http://www.audubon.org/field-guide/bird/cerulean-warbler>

https://www.allaboutbirds.org/guide/Cerulean_Warbler/overview

<http://moziru.com/explore/Robin%20clipart%20silhouette/>

<https://www.mycutegraphics.com/graphics/kids/girl-holding-magnifying-glass.html>



COLOR ME! I AM A CERULEAN WARBLER!!!



Have your parents use their smartphone or tablet to scan here so you can learn The Cerulean Warbler's song!

Remember this phrase :
"zee zee zee zizizi eeet."



Sources:
https://www.allaboutbirds.org/guide/Cerulean_Warbler/sounds
<http://www.uk-da.com/5309307/hear-free-download-clip-art-free-clip-art-on-clipart-library.html>
<https://www.allaboutbirds.org>

Activity #2

**TRACK THE
MIGRATION JOURNEY
OF A CERULEAN
WARBLER!**

This is a Cerulean Warbler



Do you know this lady? We certainly do! She is number 231068939 and was the first Cerulean Warbler (*Setophaga cerulea*) we ever banded! This female was originally banded on June 10, 2012 at one of our MAPS (Monitoring Avian Productivity and Survivorship) banding stations on Kent Land Trust's Skiff Mountain South Preserve! On June 13th, 2017 she was recaptured in the exact same net we originally captured her in five years previously! Incredible to think about how many miles this Cerulean Warbler has flown considering that she migrates to South America to spend the winter and then returns to the Central and Eastern United States (or in this case to Kent, CT) to breed every summer!

She's Traveled a Lot Hasn't She?

**I wonder how far
she has travelled?**

We can figure that out!

Or at least thereabouts...

We know about where Cerulean
Warblers spend their winters,
and some places they stop along
the way.

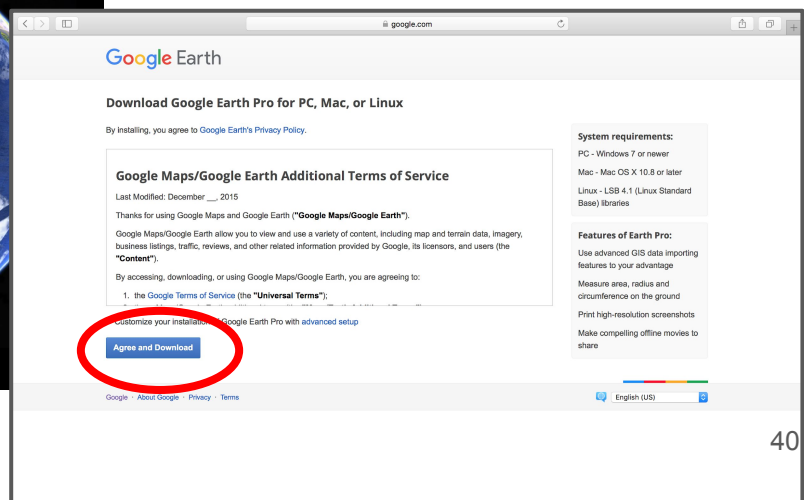
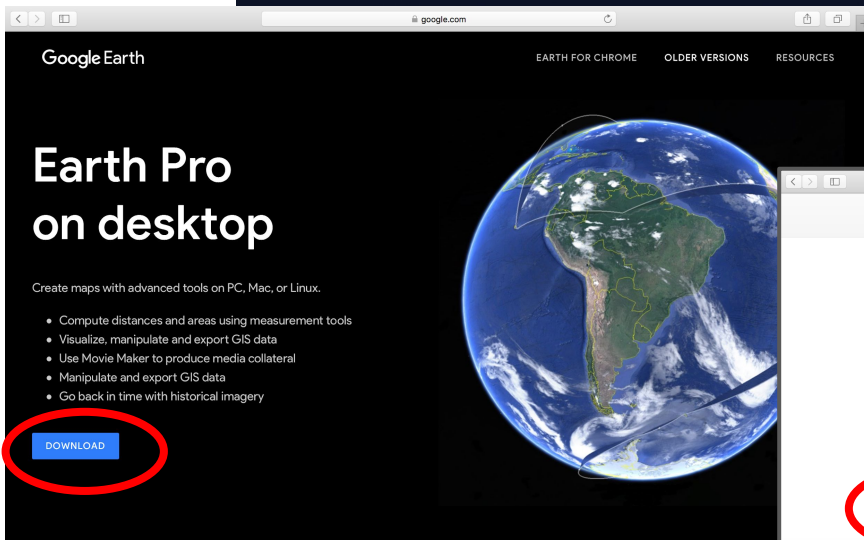
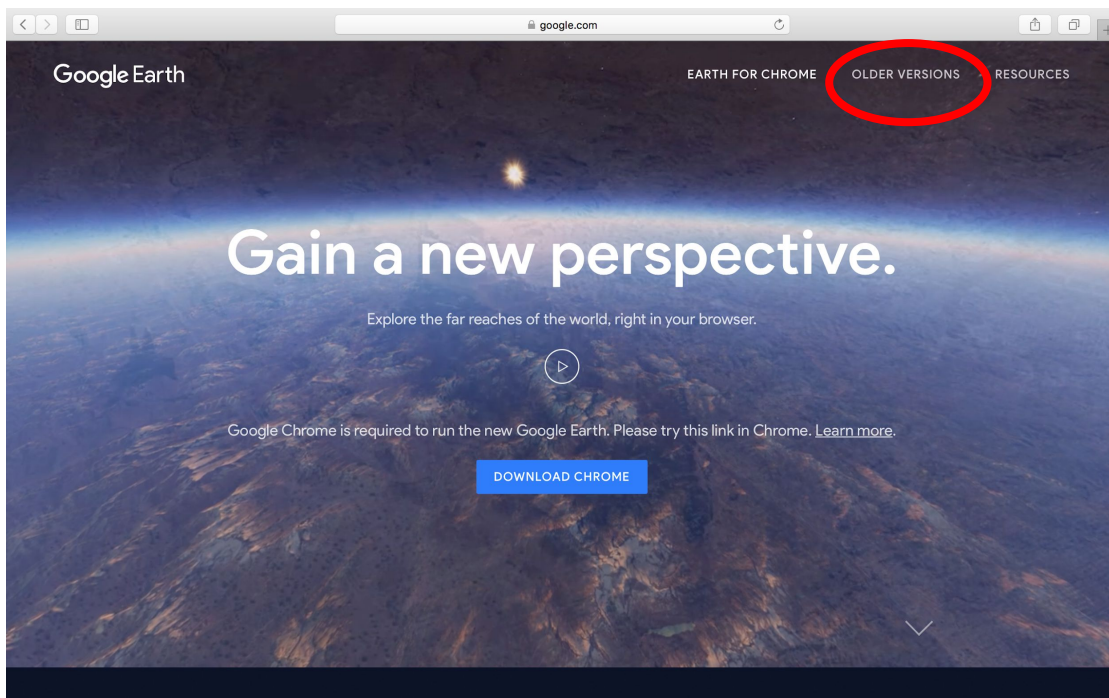


Let's map out their paths!!

Step 1: To do this activity, you will be using Google Earth Pro. You will need to download this software, so ask permission of a parent or guardian.

Step 2: Go to Google Earth,
<https://www.google.com/earth/>
and then click on **Older Versions**.

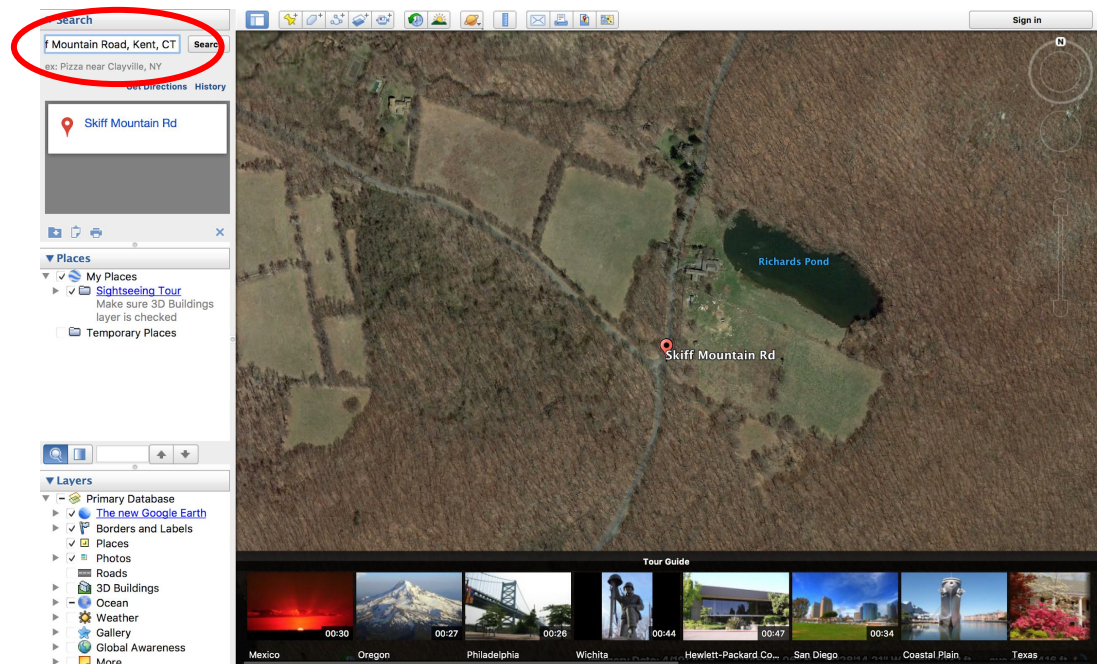
With a Parent's or Guardian's Permission, download Google Earth Pro.

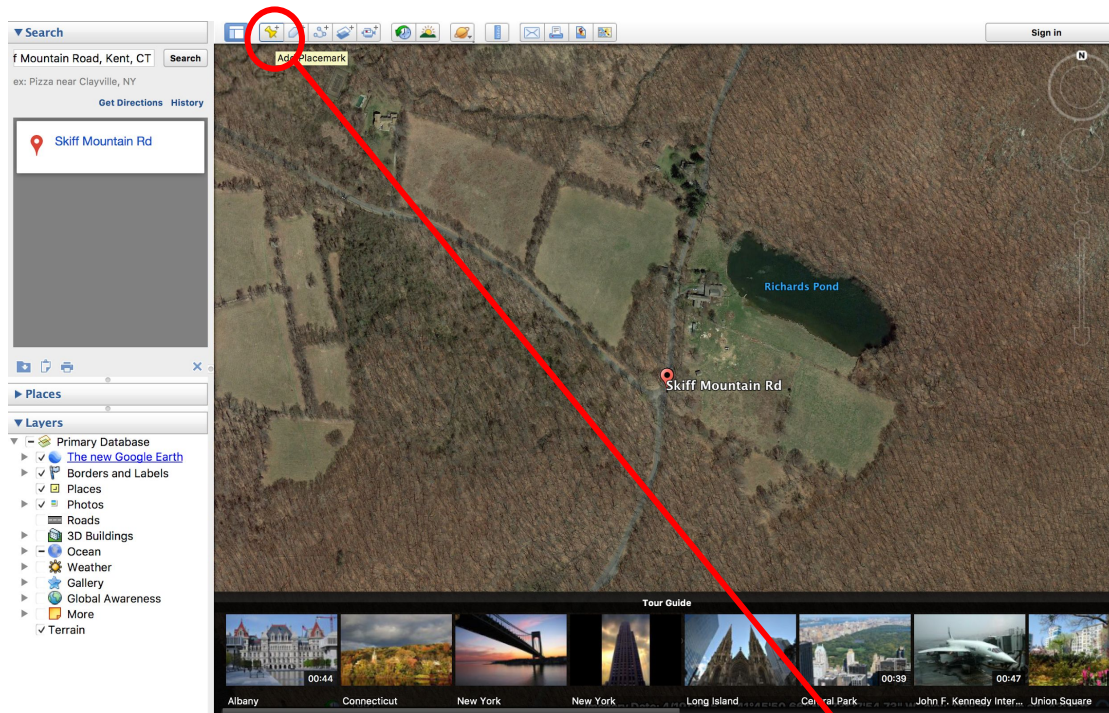


Step 3: When you open Google Earth, it will look like this:

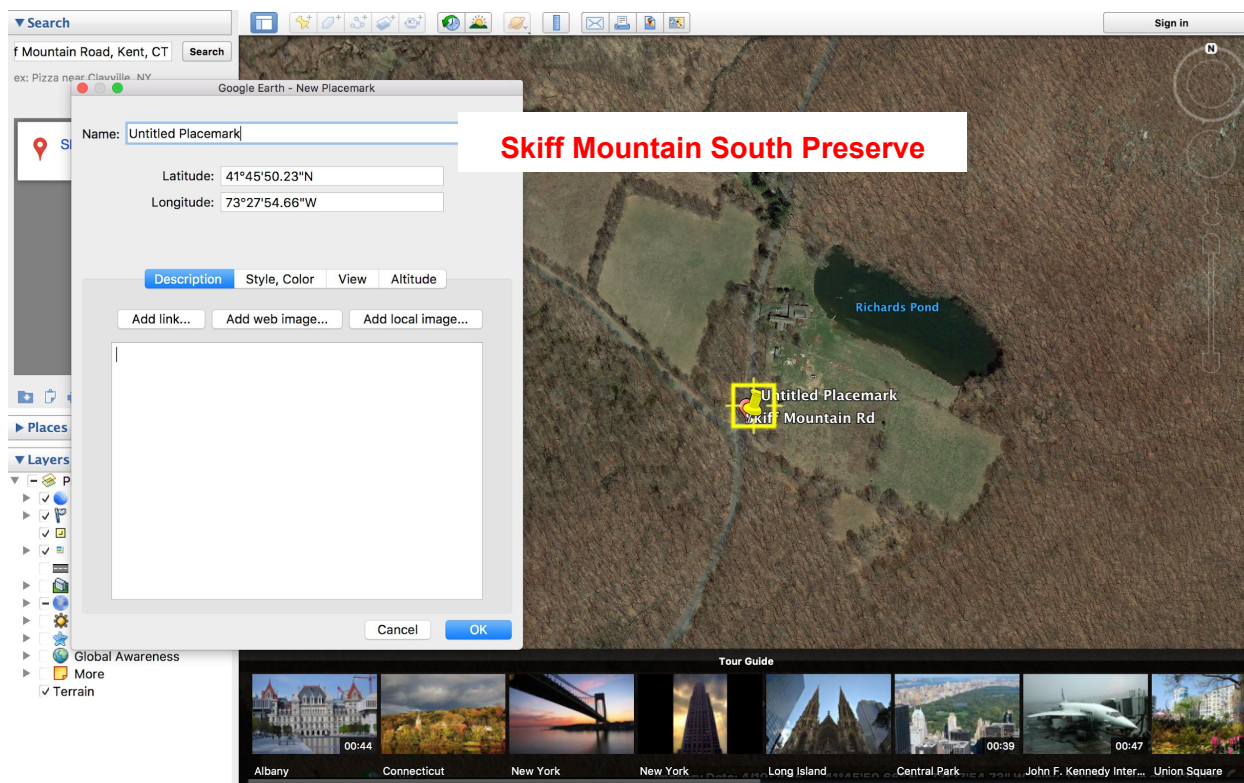


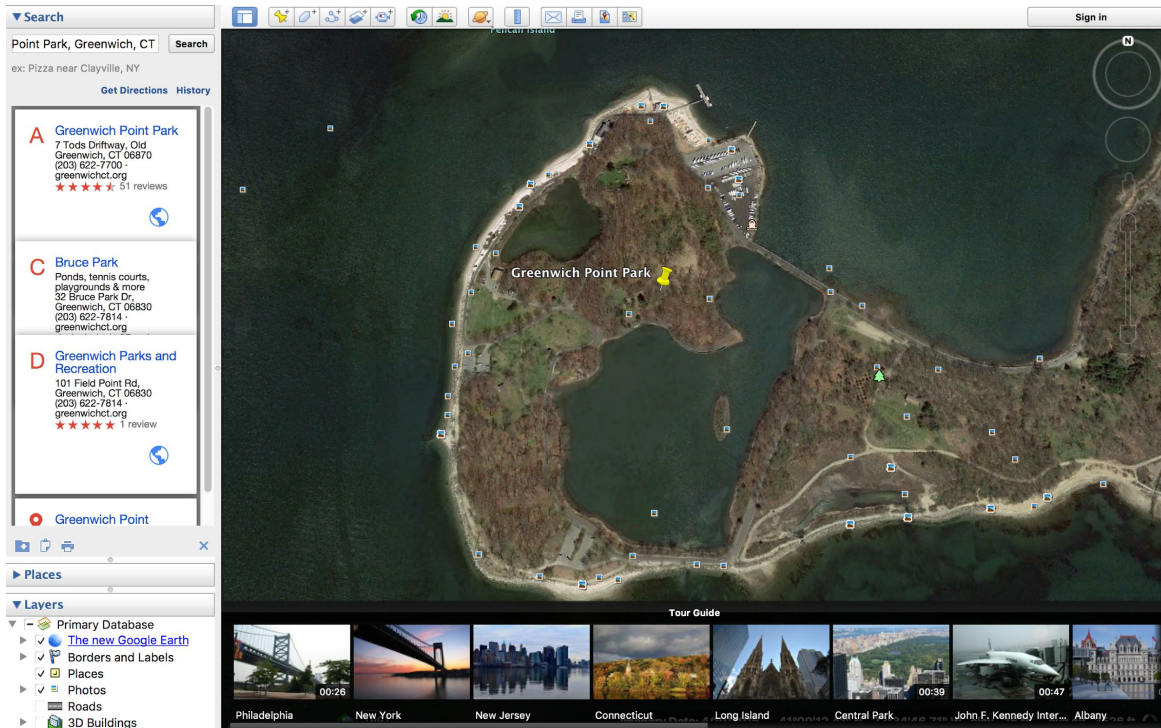
Step 4: Enter
the location
your first point
into the search
box.





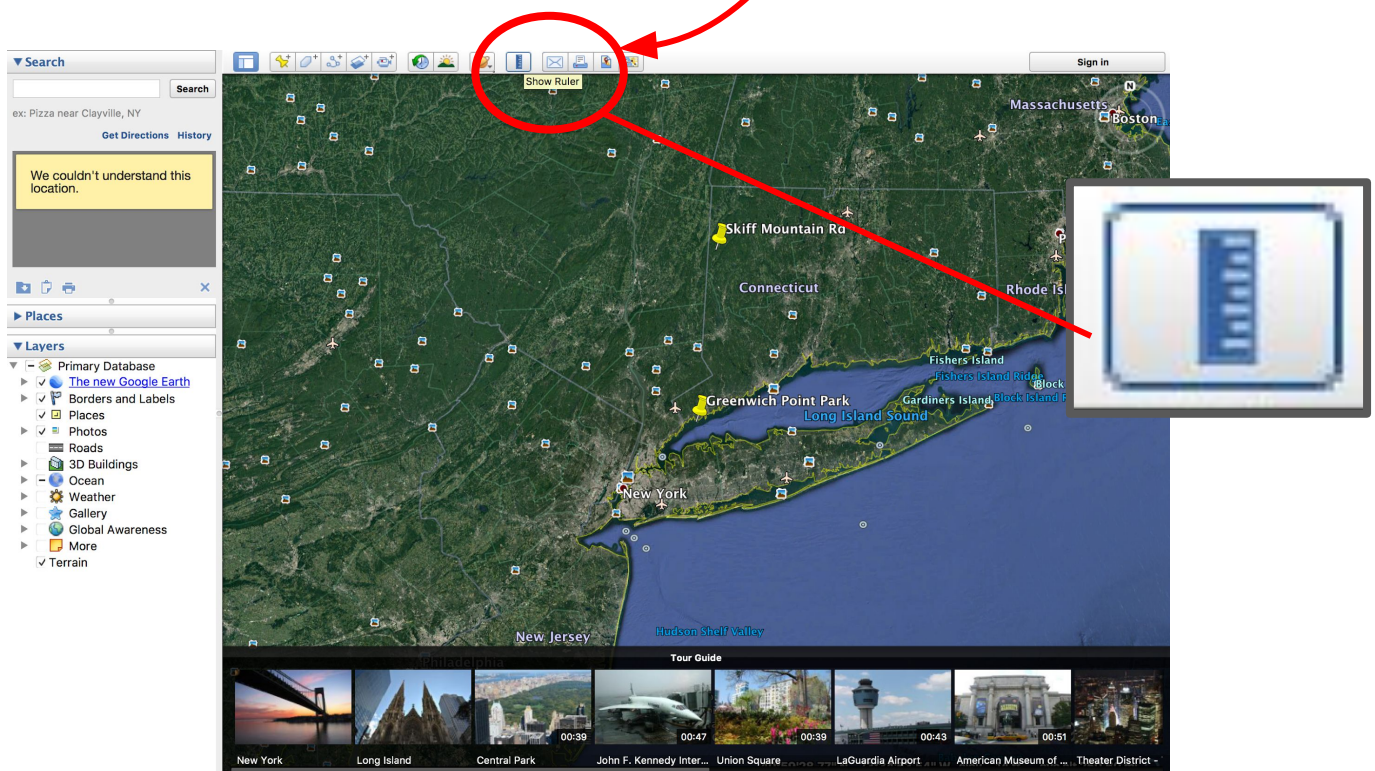
Step 5: Place a pin, click this pin symbol once and then drag it to the place you want. Remember to re-name it to the location you entered!



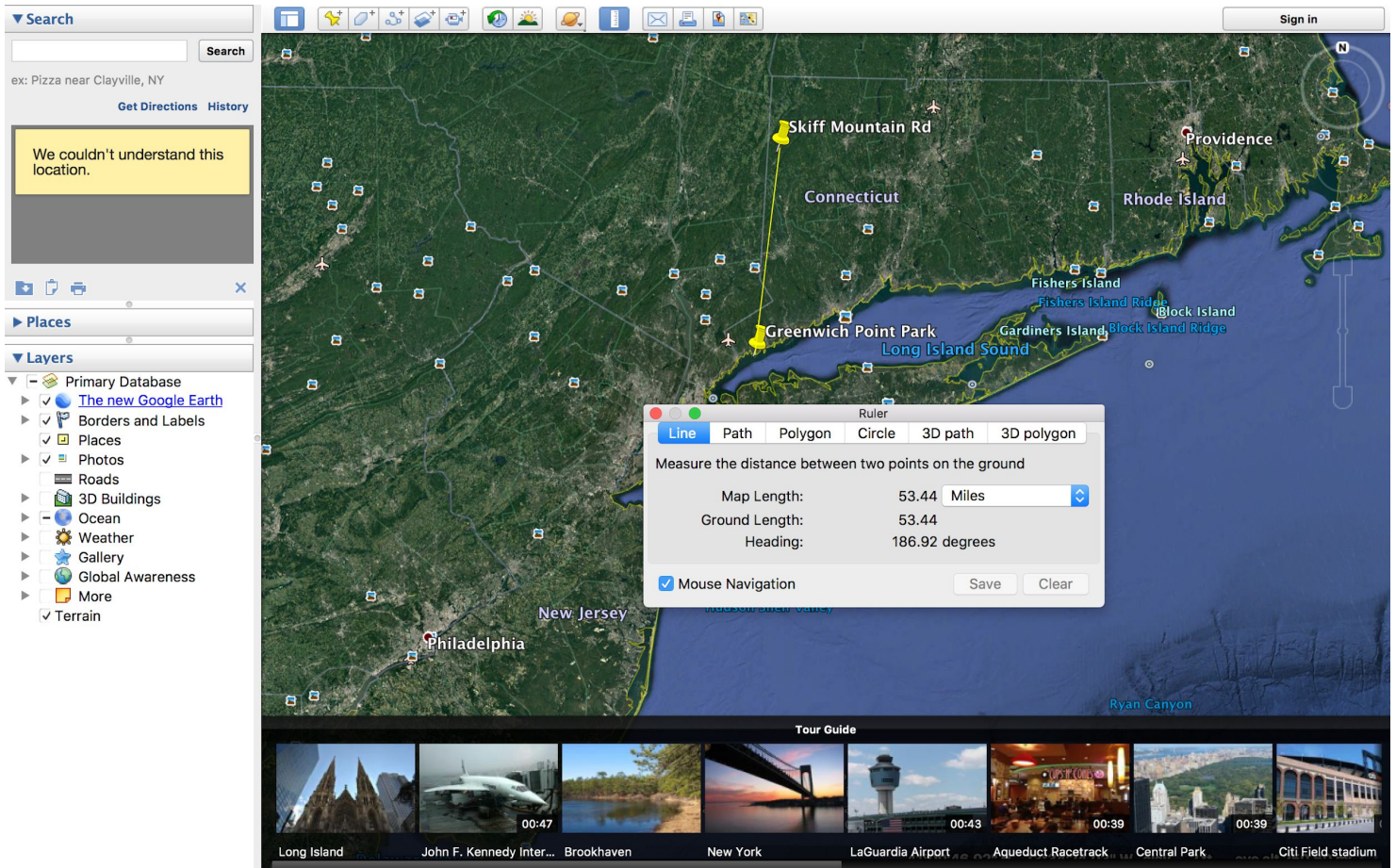


Step 6: Place a pin on the second point you want to measure. Greenwich Point Park is the second point on the list.

Step 7: Click the ruler in the upper bar



Step 8: Click on the first point, then move your mouse to the second point. Make sure it's in miles or kilometers. Just be sure to choose the same unit of measurement each time!



Record your results in the table
on the next page!!

Let's Test Your Knowledge!

Note: If measuring in kilometers just substitute this word for miles in the chart below:

Assume this bird has returned to Skiff Mountain South Preserve every year since 2012.

Assume this bird took the following route from Kent, CT to South America every summer/fall from 2012-2016.

(Total trips = 5)

- **Skiff Mountain South Preserve or Marvelwood School, Kent, CT - Left 7/30/12**
- **Greenwich Point Park Fairfield, CT - Detected 8/10/12**
- **Sandy Hook Monmouth, NJ 8/20/12**
- **Cape Charles Coastal Habitat Natural Area Preserve, Northhampton, US VA Detected 8/25/12**
- **Myrtle Beach State Park, Horry, US SC Detected 8/26/12**
- **Key West, Florida Detected 9/1/12**
- **Reserva Natural Punta Guaniquilla – Puerto Rico (near Boqueron) Detected 9/8/12**
- **Canopy Tower Panama (near Gamboa, Panama) Detected 9/15/12**
- **Finca La Siberia Columbia (near Zapatoca) Detected 10/5/12**

Miles from Kent CT to Fairfield CT	
Miles from Fairfield CT to Monmouth, NJ	
Miles from Monmouth, NJ to Northhampton, VA	
Miles from Northhampton, VA to Myrtle Beach, SC	
Miles from Myrtle Beach, SC to Key West, FL	
Miles from Key West, FL to Puerto Rico	
Miles from Puerto Rico To Panama	
Miles from Canopy Tower in Panama to Colombia	
Total Miles Fall	

Let's Test Your Knowledge (continued)!

Assume this bird has returned to SMSF every year since 2012.

Assume the bird took this route back from South America back Kent each of the 6 springs from 2012-2017. (Total trips = 6)

- **Finca La Siberia Columbia (near Zapatoca) 3/20/12**
- **Darien National Park, Panama 3/30/12**
- **Colon Panama 4/5/12**
- **Cayman Islands 4/12/12**
- **Key West, Florida 4/12/12**
- **Gainesville Florida 4/15/12**
- **Savannah, Georgia 4/18/12**
- **Wilmington, Delaware 4/25/12**
- **Chesapeake Bay, Maryland 4/30/12**
- **Neshaminy State Park Bucks, US-PA Near Croydon, PA 5/3/12**
- **Skiff Mountain South Preserve/Marvelwood School, Kent, CT - 5/10/12**

Miles from Finca La Siberia Columbia to Darien National Park, Panama	
Miles from Darien National Park Panama to Colon Panama	
Miles from Colon Panama to Cayman Islands	
Miles from Cayman Islands to Key West, FL	
Miles from Key West, FL to Gainesville, FL	
Miles from Gainesville, FL to Savannah, GA	
Miles from Savannah, GA to Wilmington, DE	
Miles from Wilmington, DE to Chesapeake Bay, MD	
Miles from Chesapeake Bay MD to Neshaminy State Park (Croydon, PA)	
Miles from Neshaminy State Park (Croydon, PA) to Skiff Mountain South Preserve, Marvelwood School Kent, CT	
Total Miles Spring	

Total Miles ____ X **Total Trips Spring** ____ = ____ **Total Miles Travelled (Spring Seasons)**

____ + ____ = ____
Total Fall **Total Spring** **Total Miles Round Trip 2012 to 2017**

Cerulean Warbler Test Your Knowledge! (answers)

- Skiff Mountain Preserve Kent, CT
- Left 7/30/12
- Greenwich Point Park Fairfield,
CT 8/10/12
- Sandy Hook Monmouth, NJ
8/20/12
- Cape Charles Coastal Habitat
Natural Area Preserve,
Northhampton, US VA 8/25/12
- Myrtle Beach State Park, Horry,
US SC 8/26/12
- Key West, Florida 9/1/12
- Reserva Natural Punta
Guaniquilla – Puerto Rico (near
Boqueron) 9/8/12
- Canopy Tower Panama (near
Gamboa, Panama) 9/15/12
- Finca La Siberia Columbia (near
Zapatoca) 10/5/12

Miles from Kent to Fairfield	About 50 miles
Miles from Fairfield to New Jersey	About 50 miles
Miles from New Jersey to Northhampton	About 250 miles
Miles from Northhampton to Myrtle Beach	About 300 miles
Miles from Myrtle Beach to Key West	About 675 miles
Miles from Key West to Puerto Rico	About 1,050 miles
Miles from Puerto Rico To Panama	About 1,075
Miles from Panama to Colombia	About 400 miles
Total Miles (approximate)	3,850 miles

3,850 X5 (number of falls)

19, 250 Miles Travelled
during Fall

Cerulean Warbler Test Your Knowledge! (answers)

- Finca La Siberia Columbia (near Zapatoca) 3/20/12
- Darien National Park, Panama 3/30/12
- Colon Panama 4/5/12
- Cayman Islands 4/12/12
- Key West 4/12/12
- Gainesville Florida 4/15/12
- Savannah, Georgia 4/13/12
- Chesapeake Bay, Maryland 4/25/12
- Wilmington, Delaware 4/30/12
- Neshaminy SP Bucks, US-PA Near Croydon, PA 5/3/12
- Skiff Mountain Preserve Kent, CT - 5/10/12

Miles from Columbia to Darien National Park	About 250 mi
Miles from Darien National Park to Colon Panama	About 200 mi
Miles from Colon Panama to Cayman Islands	About 700 mi
Miles from Cayman Islands to Key West	About 375 mi
Miles from Key West to Gainesville, Florida	About 350 mi
Miles from Gainesville, Florida to Savannah, Georgia	About 200 mi
Miles from Savannah, Georgia to Maryland	About 500 mi
Miles from Maryland to Wilmington, Delaware	About 150 mi
Miles from Wilmington Delaware to Neshaminy	About 50 mi
Miles from Neshaminy to Kent, CT	About 150 mi
Total Miles	2925

2925 X6 (number of springs)

17,550 Miles Travelled during Fall

19,250 + 17,550 = 36,800 miles (approximate)
Total Fall Total Spring Total Miles

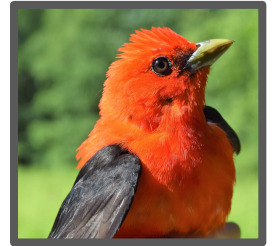
Activity #3

LEARN HOW TO
CREATE A BIRD
"BED + BREAKFAST"
IN YOUR
BACKYARD

Do You Want to Be a Bird Buddy?

Make your own Bird **Bed & Breakfast!**

If you plant just 25, mostly native plants, you can help create an area for resident and migratory birds in your own backyard. Have your parents help you choose your plants from the lists here, and remember to research into what they need to grow and thrive in your yard. Some plants need more sun or more water than others.



Photos by Laurie Doss.

Here are a 5 other tips to make your 5 Star B&B:

- ★ Plant in late spring/early summer.
- ★ Host a planting party at your house with your friends and family to quickly complete your patch.
- ★ Never eat any berries without permission from an adult as many berries are poisonous to people.
- ★ Never feed any berries to your pets; while wild animals may be able to eat these berries, our pets cannot!
- ★ Make a list of all the birds you see visiting your yard and enter your data into eBird!



LET'S COOK UP A Bed & Breakfast (B&B)!!!!

Pinch of this

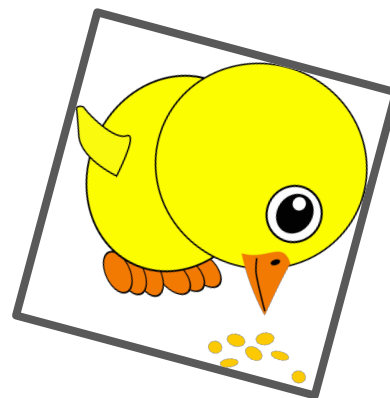
There are a lot of things that go into giving
a bird a B&B that it will rate 5 Stars.

This guide will help! Follow the
instructions to pick out the ingredients
you will need to make your B&B the best it
can be!!

Pinch of that

A lot of
caring

Good Food, All Year



To have a good B&B, you need something to eat whenever birds visit. Follow the guidelines on the following page to find some food for your feathered friends!!



Habitat Accommodations

To have a good B&B, you'll need some good rooms, follow these instructions to provide shelter for birds.

Shelter/Cover Trees

Choose ONE SPECIES from list below

Buy 3 plants of the chosen tree species for a total of 3 plants from this list

Eastern Red Cedar (*Juniperus virginiana*)

White Pine

Flowers & Grasses

Choose THREE DIFFERENT SPECIES from list below

Buy 2 plants for each species chosen for a total of 6 plants from this list

Blue-stemmed Goldenrod (*Solidago caesia*)

Common Milkweed (*Asclepias syriaca*)

Gray Goldenrod (*Solidago nemoralis*)

New England Aster (*Symphyotrichum novae-angliae*) (*Aster novae-angliae*)

Perennial Sunflower (*Helianthus Lemon Queen*)

Showy Goldenrod (*Solidago speciosa*)

Swamp Milkweed (*Asclepias incarnata*)

Thin-leaved Sunflower (*Helianthus decapetalus*)

Wild Bergamont (Bee Balm) (*Monarda fistulosa*)

Dotted Mint, Horsemint (*Monarda punctata*)

Early Spring Flowers Food Source

Choose **ONE RED SPECIES** from list below (Birds love these plants!)

Choose **ONE BLUE SPECIES** from list below (These are also some bird favorites!)

Buy 2 plants for each species chosen for a total of 4 plants from this list

Spicebush (*Lindera benzoin*)
Crab Apple/Apple Trees (many species)
Gray Dogwood (*Swida (Cornus) racemosa*)
Red Twig Dogwood (*Swida (Cornus) sericea*)
Silky Dogwood (*Cornus amomum*)
Speckled Alder (*Alnus incana*)

Late Spring/Early Summer Food Source

Choose **ONE RED SPECIES** from list below (Birds love these plants!)

Choose **ONE BLUE SPECIES** from list below (These are also some bird favorites!)

Buy 2 plants for each species chosen for a total of 4 plants from this list

Shadblow, Serviceberry (*Amelanchier canadensis*)
Elderberry (*Sambucus nigra (canadensis)*)
Red-berried Elderberry (*Sambucus racemosa (pubens)*)

Late Summer/ Fall Food Source

Choose **TWO RED SPECIES** from list below (Birds love these plants!)

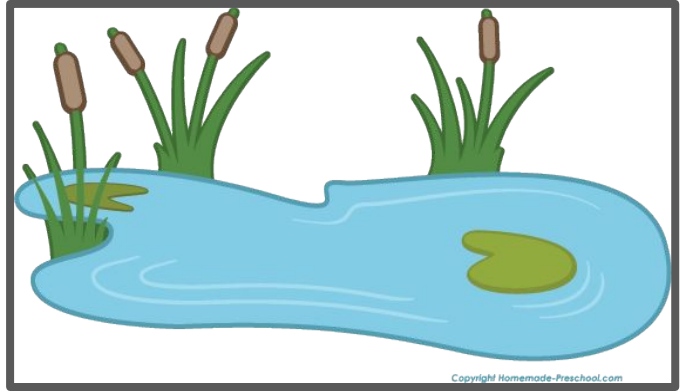
Choose **ONE BLUE SPECIES** from list below (These are also some bird favorites!)

Choose **ONE GREEN SPECIES** from list below (Other attractive species for birds)

Buy 2 plants for each species chosen for a total of 8 plants from this list

Arrowwood Viburnum (*Viburnum dentatum*)
Black Chokeberry (*Aronia melanocarpa (Photinia melanocarpa)*)
Downy Hawthorn (*Crataegus mollis*)
Flowering Dogwood (*Benthamidia (Cornus) florida*)
Fox Grape (*Vitis labrusca*)
Highbush Blueberry (*Vaccinium corymbosum*)
Hobblebush (*Viburnum alnifolium (lantanoides)*)
Mapleleaf Viburnum (*Viburnum acerifolium*)
Nannyberry viburnum (*Viburnum lentago*)
Summer Grape (*Vitis aestivalis*)
Virginia Creeper (*Parthenocissus quinquefolia*)
Winterberry - Kennebago (*Ilex verticillata Kennebago*)
Winterberry - Upright Red (*Ilex verticillata Upright Red*)
Witchhazel (*Hamamelis virginiana*)

Water



For a successful bird area, birds need a source of water.

If your bird B&B is not near a stream, river, or pond, you should add a water source such as a small man-made pond or a birdbath.



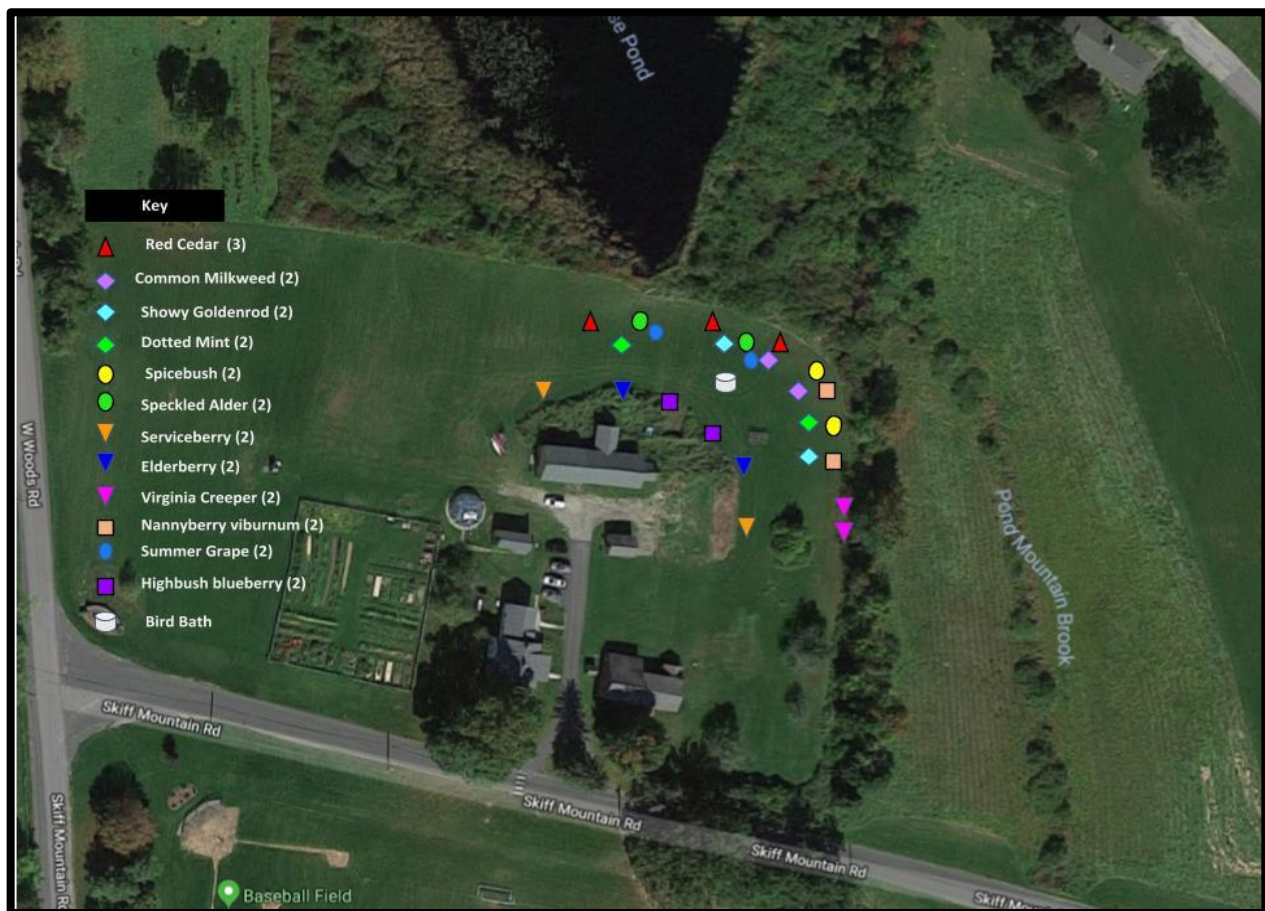
Organizing Your B&B

Birds prefer to have their habitat laid out in layers.

Trees are best on the outside creating a kind of wall.

For example, position Juniper and/or White Pines behind the rest of the plants preferably facing north to block the cold winds. Shrubs and grasses then go on the inside.

To do the best job, first make a map of your backyard or go on Google Earth and get a real picture of it! Then plan your garden using pictures or shapes to represent what you're going to plant and where. Have your parents help you out!!



You can make your map on a computer, or hand draw!!
 You don't have to start with 25, whatever you can do helps!!



Spacing Page for Printing

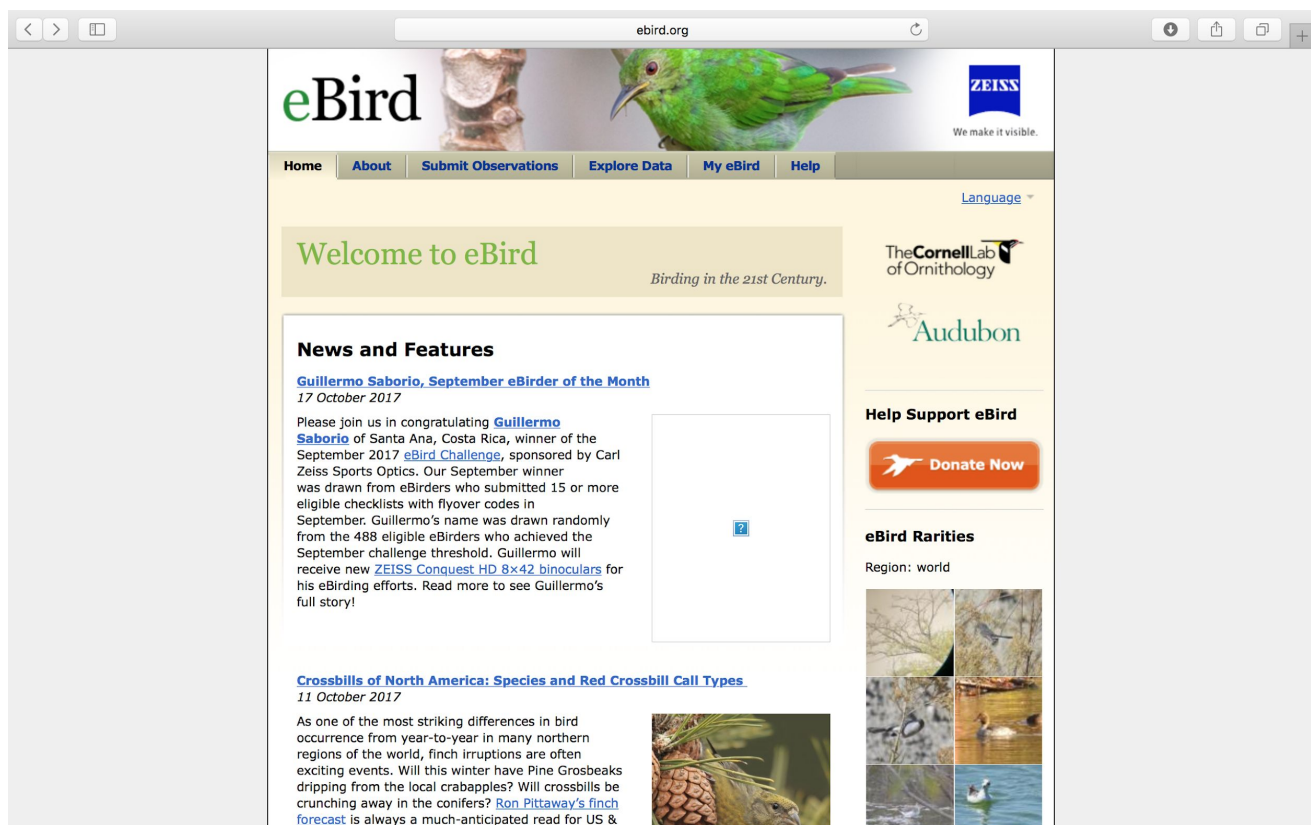
Activity #4

LEARN HOW TO BE A
BIRD DETECTIVE
USING THE
COMPUTER

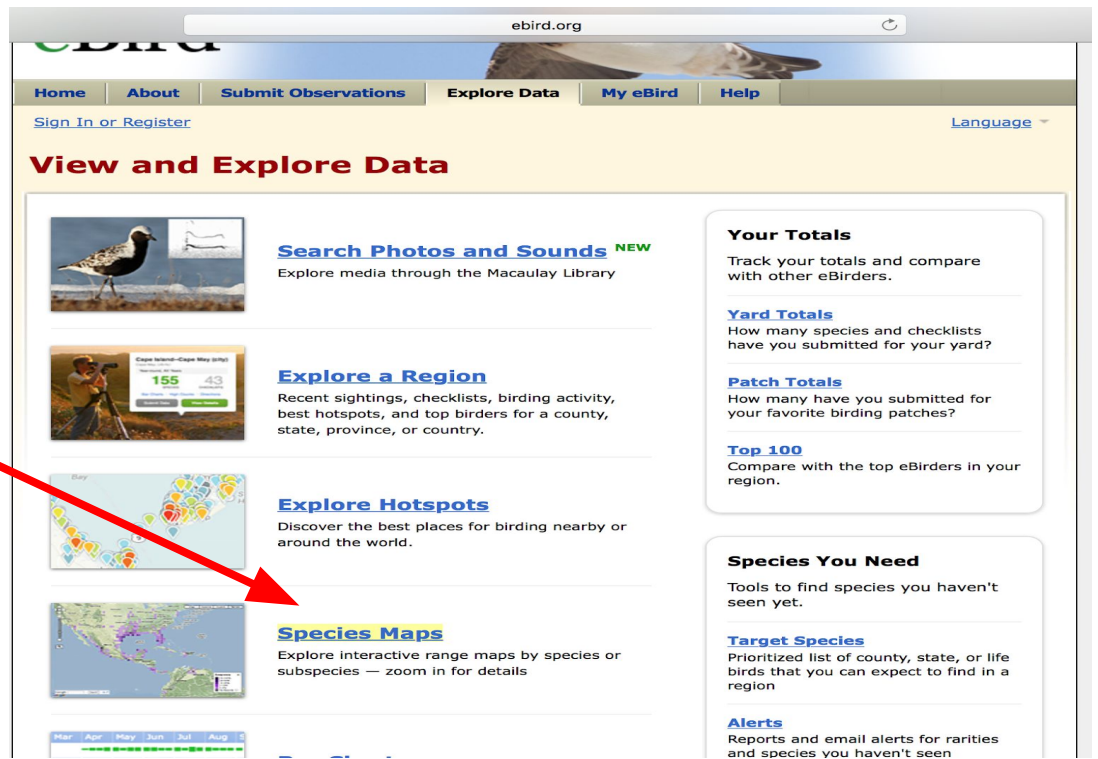
Be a Bird Detective, Where will they be?



Do you want to be a Bird Detective? To know where you might find birds before you even go outside? **eBird** is a website to help you do just that! First, you have to go to **eBird.org**.

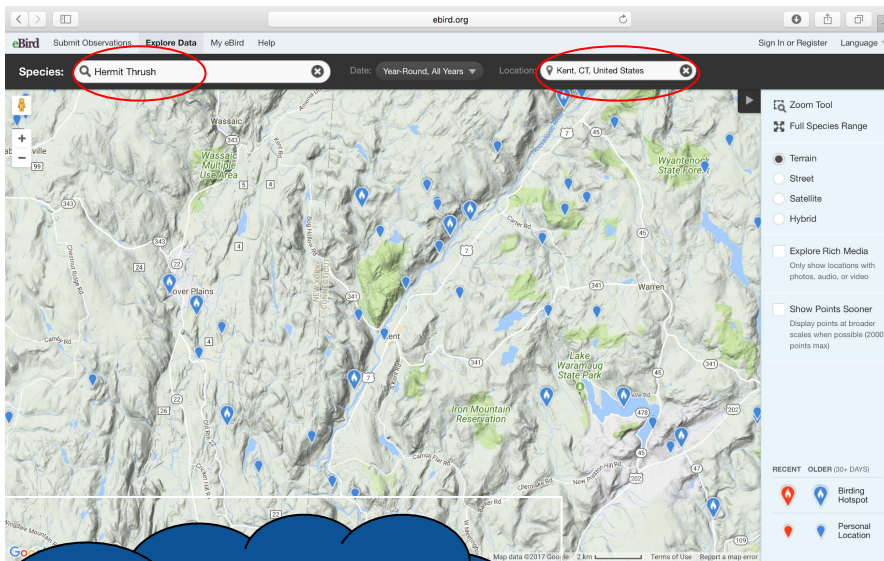


Then, go
to the
**View and
Explore
Data** tab,
and click
"Species
Maps".



This is
what it
will look
like.

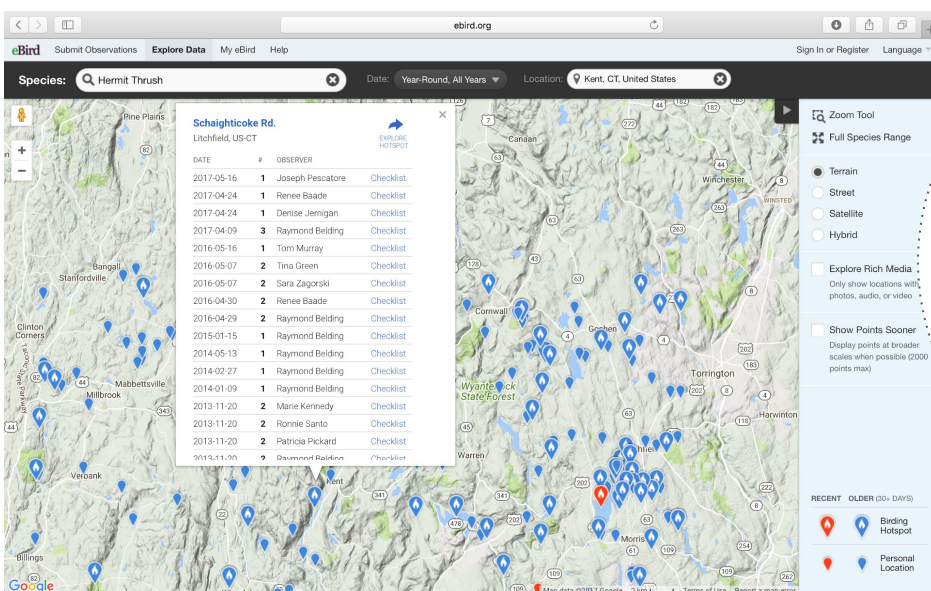




Enter in the species you're looking for and the town you're in or going to.

We're from Kent, and want to find a Hermit Thrush!!

If you click on any of the blue or red markers you will be able to see when the bird you entered visited there.



The red markers mean that the bird was seen in the past month, the red markers with fire means that a lot of people have seen bird species there, so it's a "hotspot". The blue markers means the observations are at least a month old.

RECENT OLDER (30+ DAYS)



Birding Hotspot

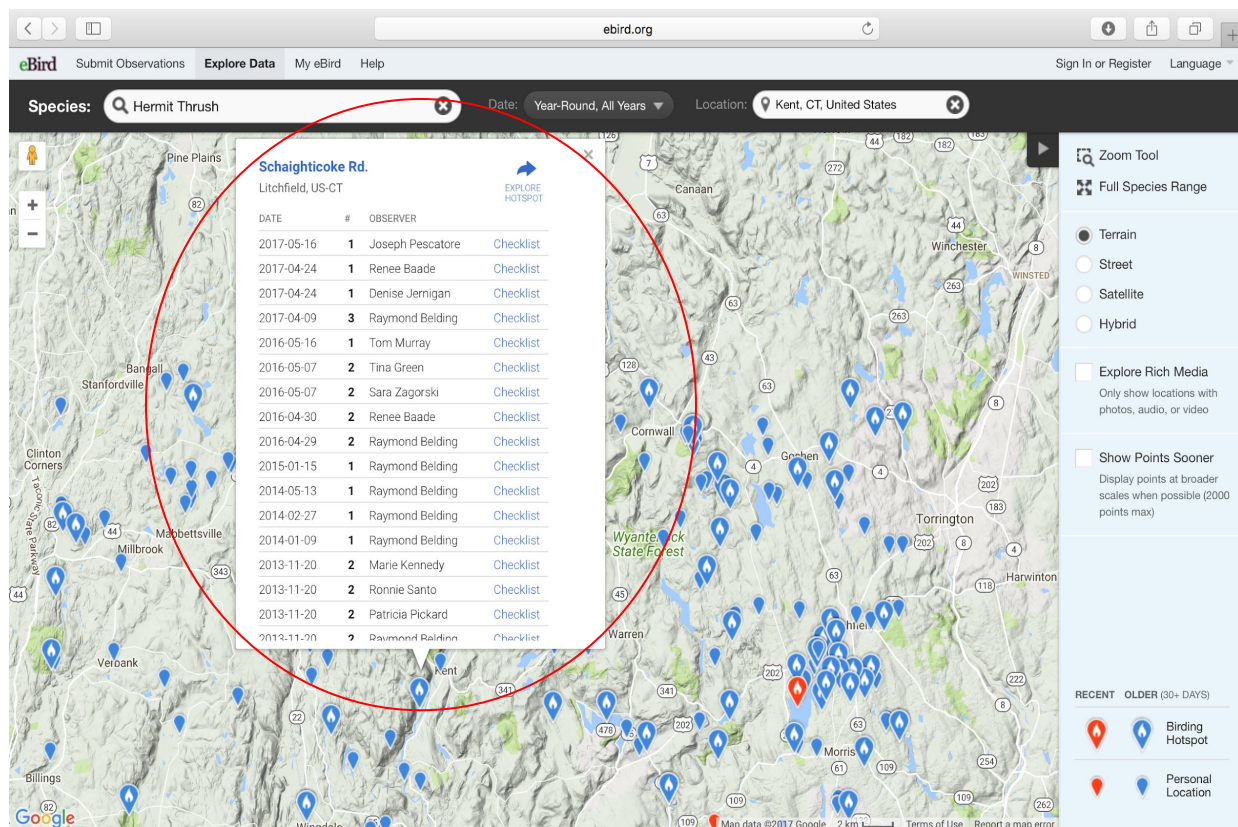


Personal Location



How do I use this to be a Bird Detective?

Well, if you look on **eBird** you can see when birds were where. Look back at the Hermit Thrush results. You'll see there were a lot of them near Schahticoke Rd. during April and May, so if you go to Schahticoke Rd. at that time, there's a bigger chance you'll find one!



Test Your Detective Skills!!!

Where might you find a Wood Thrush near you?

During what months are you most likely to see
a Blue-Headed Vireo?

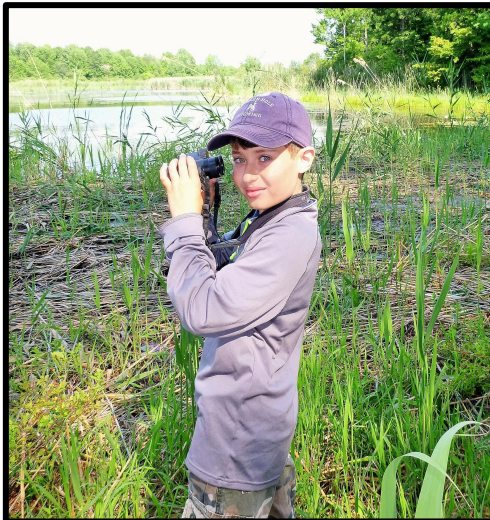
What is the closest Hotspot to your house?

If I'm in Kent, CT, and I'm looking for a
Veery, where should I go? When?

Are there any Eastern Bluebird sightings in
your town? When?

Go Outside!

**NOW YOU ARE READY TO TAKE
WHAT YOU LEARNED AND GO
OUTSIDE TO BECOME A CITIZEN
SCIENTIST AND HELP SCIENTISTS
TRACK POPULATIONS OF BIRDS!**



**Budding Ornithologists
Helping to Collect Data for
Kent Land Trust:
Aiden Cherniske, Fuller
Manes, Lillian Steinmayer,
Jared Ganeles, and Nathan
Winter.**