

## Welcome to the webinar!

- The webinar will start the top of the hour.
- To type in a question, use the q and a box on your control panel. We'll read the questions aloud after the presentation for 30 minutes.
- A recording will be available in our archive (see below) and on the eOrganic YouTube channel within 1-2 weeks
- Find more upcoming and archived webinars at <https://articles.extension.org/pages/25242>
- Find all eOrganic resources at [http://www.extension.org/organic\\_production](http://www.extension.org/organic_production)



# Identifying Birds on the Farm

Olivia Smith  
School of Biological  
Sciences, Washington State  
University, Pullman, WA



## About the Presenter

- BS in Biology from Siena Heights University
- MS Fisheries and Wildlife from The Ohio State University
- PhD candidate at Washington State University



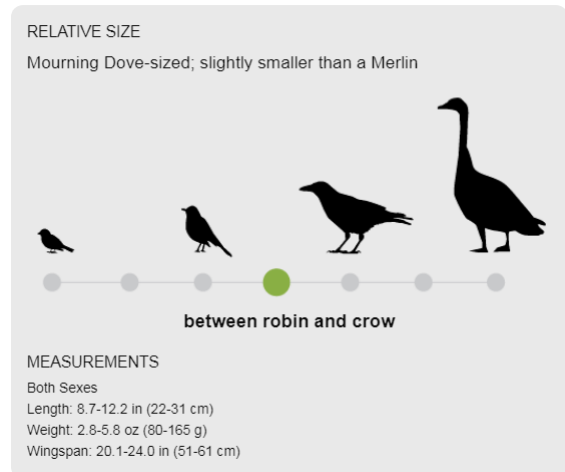
## Overview

- Mostly bird identification
  - 43 most common species
- Some management tips throughout
- 10 min Q&A at end



## Tips for Identifying Birds

- Range and time of year
- “Four Keys to ID” from Cornell Lab of Ornithology
  - Size and shape
    - Beak, wing, tail shape
  - Color pattern
    - Color, streaking, spotting
  - Behavior
    - Flight pattern, vertical strata, tail bobs, gregarious or solitary
  - Habitat
- Song and calls



From [www.allaboutbirds.org](http://www.allaboutbirds.org) modified from Merlin Bird ID app

## Overview on Managing Birds

- Remember: don't ever harm native birds or their nests without a pest permit
  - Invasive species can be controlled with lethal means
- Attract by providing food, a safe nesting space, and suitable habitat



## Overview on Managing Birds

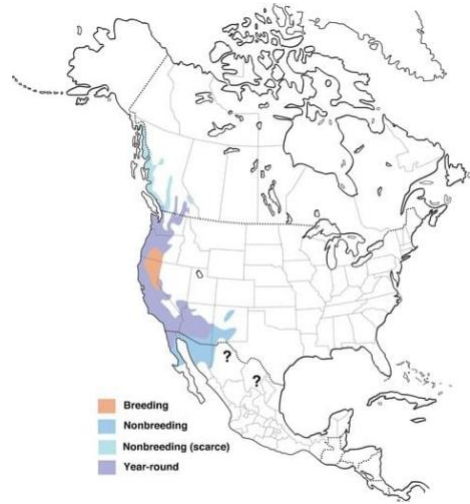
- Most deterrence mechanisms aren't well studied but common ones include
  - Netting off trees or structures
  - Noise makers or laser beams
  - Mylar/reflective tape
  - Habitat removal near crops
  - Gas guns/band-bangers
  - Use predator decoys or promote raptors
  - Lethal control for invasives
  - Use more than one!



## Hummingbirds



## Anna's Hummingbird



Range map provided by [Birds of North America](#)

## Anna's Hummingbird

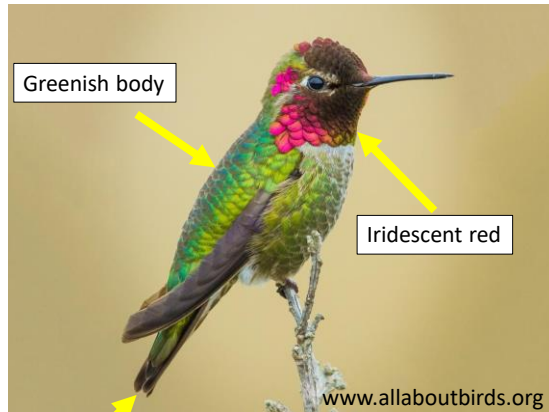


Male

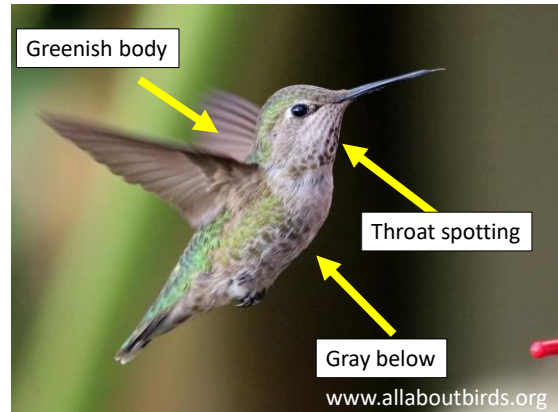


Female

## Anna's Hummingbird



Male



Female

## Anna's Hummingbird

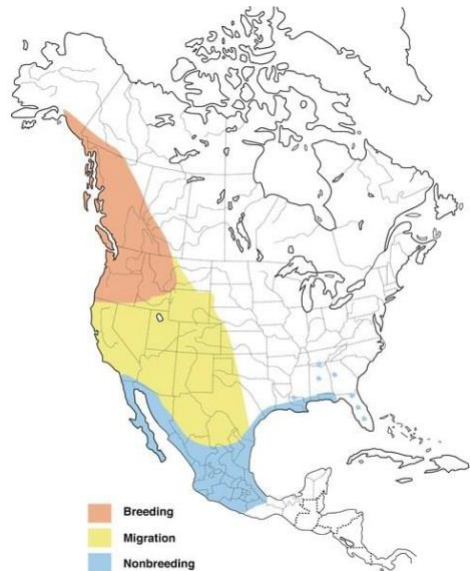
- Metallic, scratchy song
  - zrrr jika jika jika jika jika
  - Scrrrr zveeee, street street



Sound file: Charles A. Sutherland/Macaulay Library at the Cornell Lab of Ornithology (ML6122)



## Rufous Hummingbird



Range map provided by [Birds of North America](#)

## Rufous Hummingbird

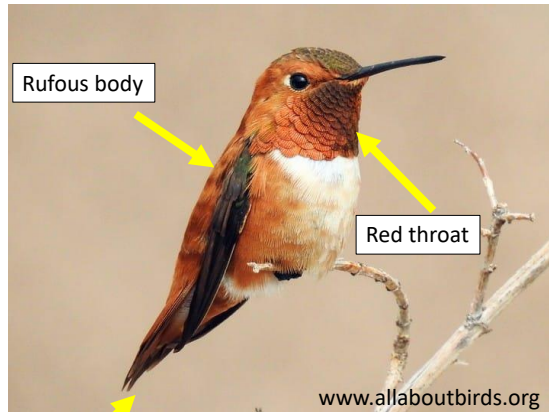


Male

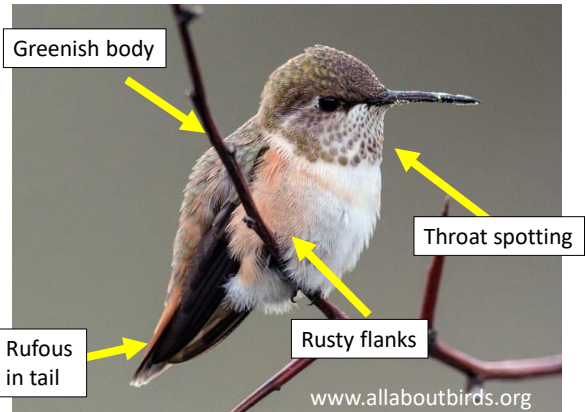


Female

## Rufous Hummingbird



Male



Female

## Rufous Hummingbird

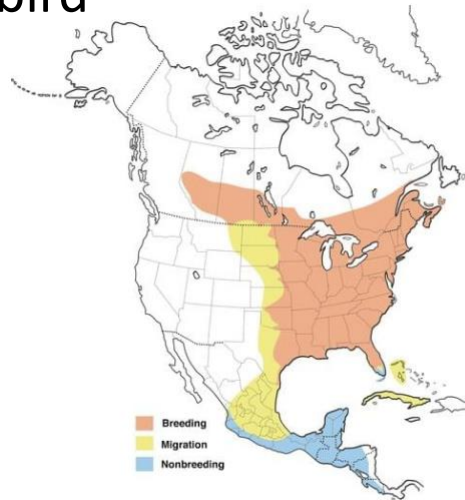
- Three syllable phrases in call
  - Tzzew tzupity tzupity tzup
  - High, buzzy trill of wings



Sound file: Geoffrey A. Keller/Macaulay Library at the Cornell Lab of Ornithology (ML50107)



## Ruby-throated Hummingbird



Range map provided by [Birds of North America](#)

Eastern US's only breeding hummingbird

## Ruby-throated Hummingbird

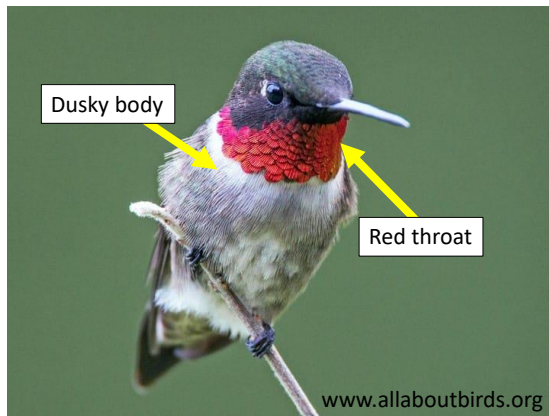


Male

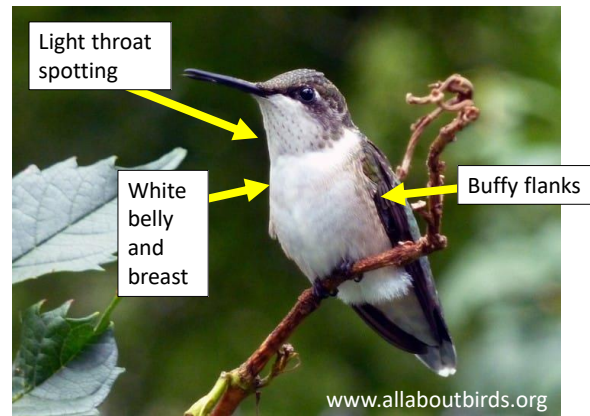


Female

## Ruby-throated Hummingbird



Male



Female

## Attracting hummingbirds

- Estimated to pollinate 3-5% of crops globally
- Plant flowers interspersed in crop fields
- Provide feeders
  - $\frac{1}{4}$  cup table sugar to 1 cup water



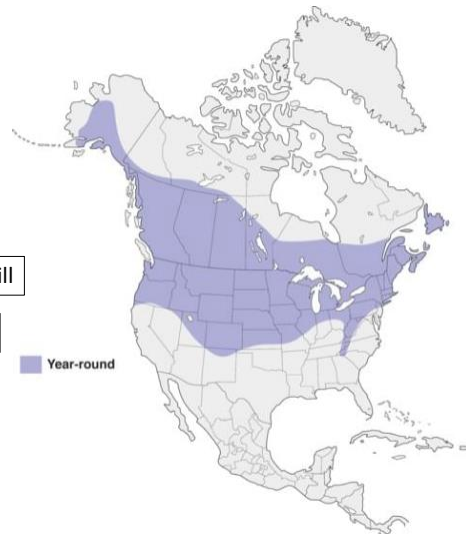
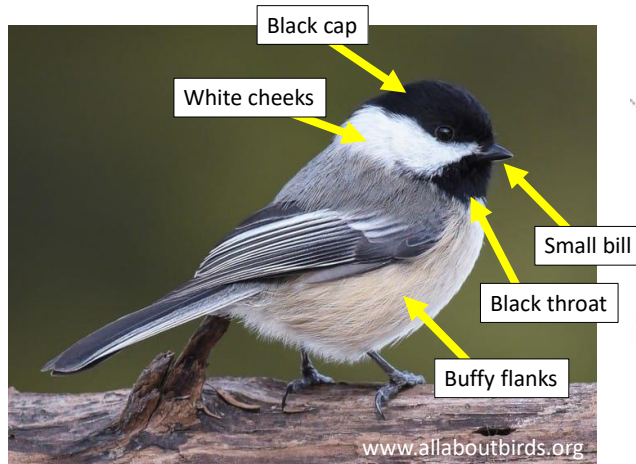
# Chickadees and Warblers



## Black-capped Chickadee



## Black-capped Chickadee

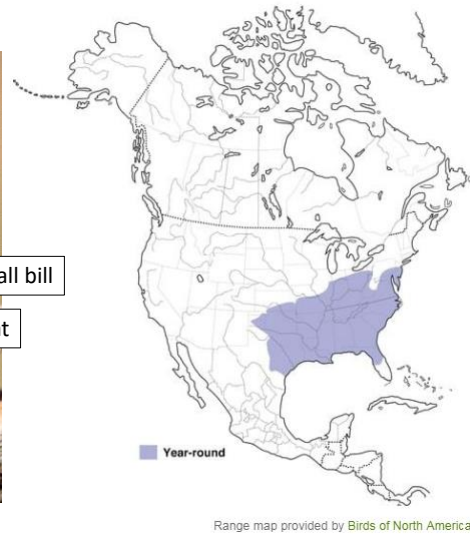
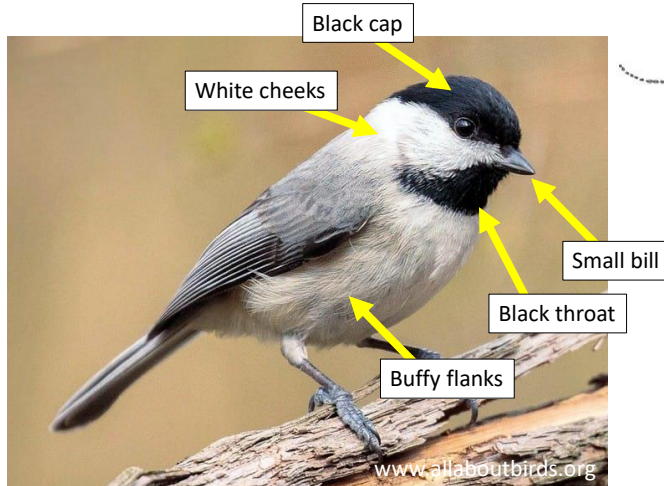


## Carolina Chickadee

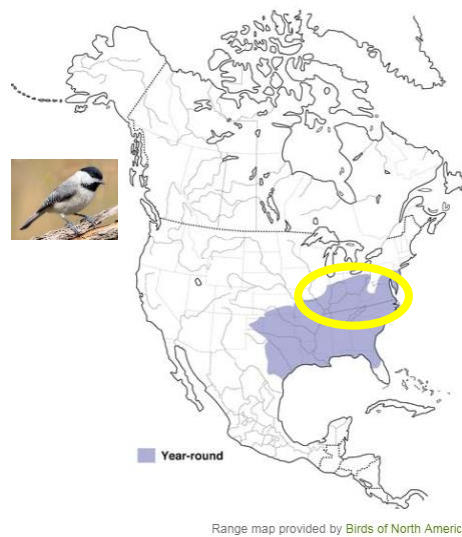
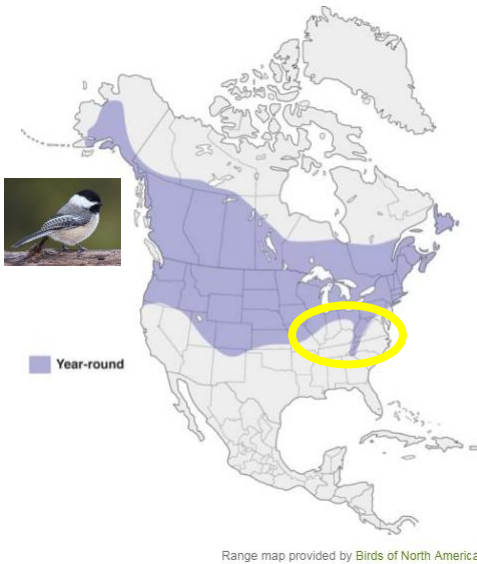




## Carolina Chickadee



## Black-capped vs. Carolina Chickadee



## Black-capped vs. Carolina Chickadee

- Black-capped Chickadee
  - Song pure 2 or 3 note whistled *fee-bee*
  - Call *chickadee-dee-dee*
  - Gargled alarm call
- Carolina Chickadee
  - Song four-note whistle *fee-bee-fee-bee*
    - Notes 1 and 3 higher
  - Call *chickadee-dee-dee* faster than Black-capped
  - Gargled alarm call



Sound file: Jay W. McGowan/Macaulay Library at the Cornell Lab of Ornithology (ML202239)



Sound file: Wilbur L. Hershberger/Macaulay Library at the Cornell Lab of Ornithology (ML94222)



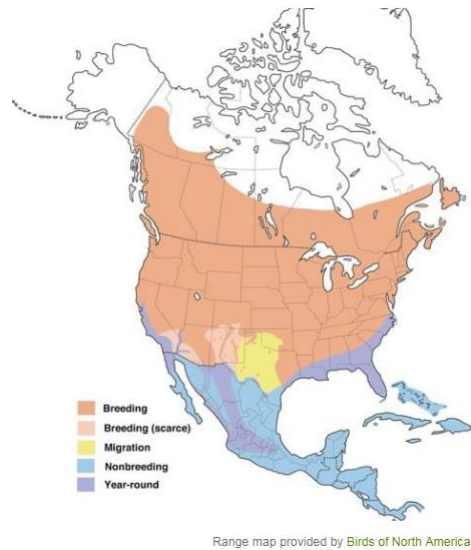
## Chickadees

- Cavity nesters
  - Leave snags or provide nest boxes
- Arboreal – plant crops near trees
- Insectivores
  - Can help control caterpillars
  - Will eat fruits when available





## Common Yellowthroat



## Common Yellowthroat

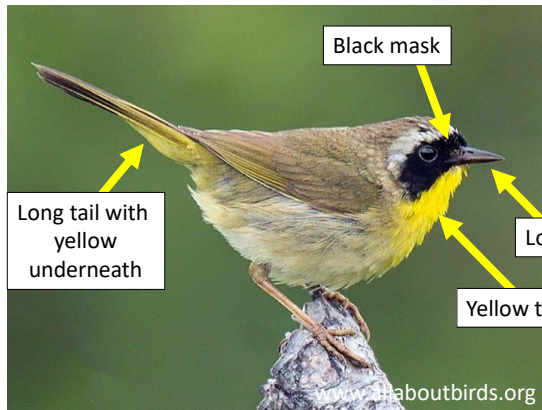


Male

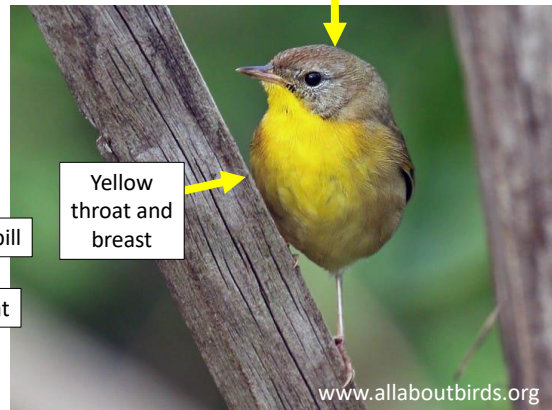


Female

## Common Yellowthroat



Male

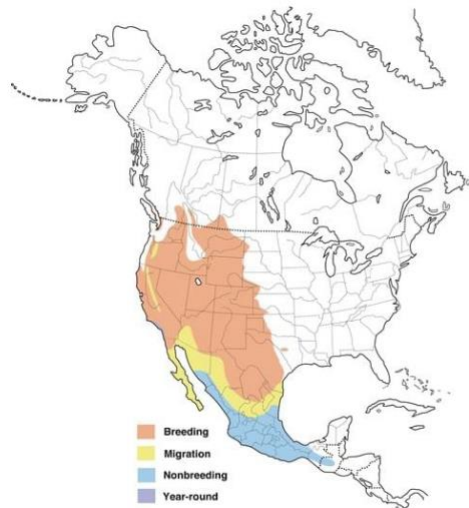


Female

## Fruit eaters



## Bullock's Oriole



## Bullock's Oriole

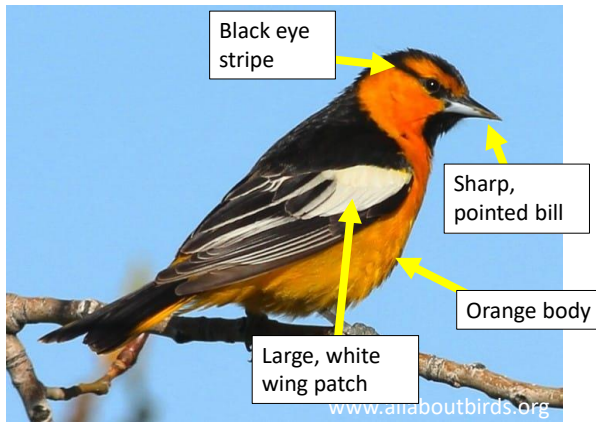


Male

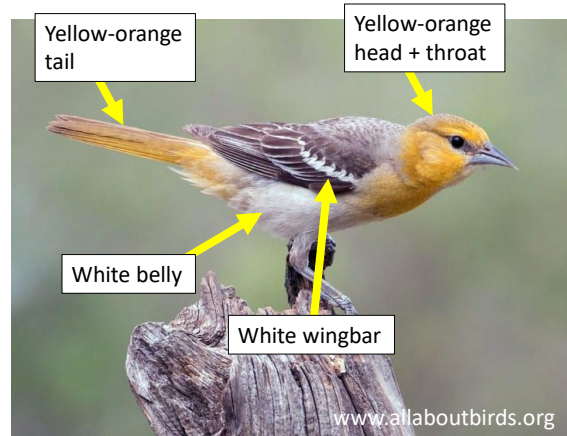


Female

## Bullock's Oriole

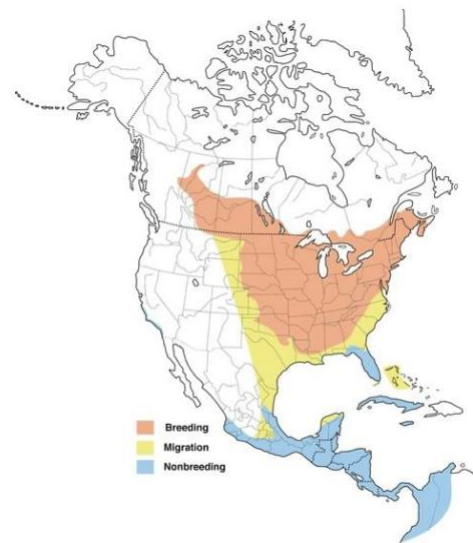


Male



Female

## Baltimore Oriole



Range map provided by Birds of North America



## Baltimore Oriole



Male

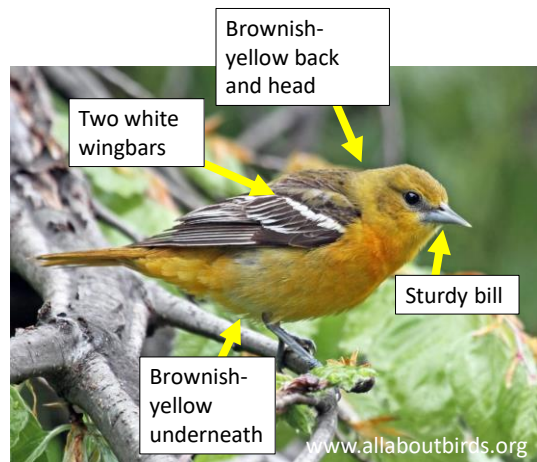


Female

## Baltimore Oriole



Male



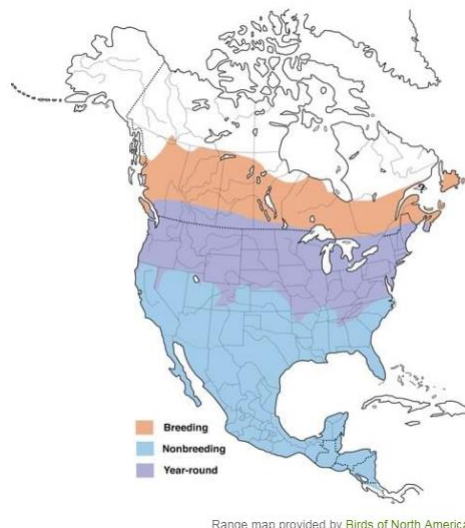
Female

## Orioles

- Pendulum nests
- Eat fruits, nectar, and insects
  - Use “gaping” method to eat fruit, causing holes
  - Place out orange slices, half water/half grape jelly mixture in shallow dish, or an oriole nectar feeder

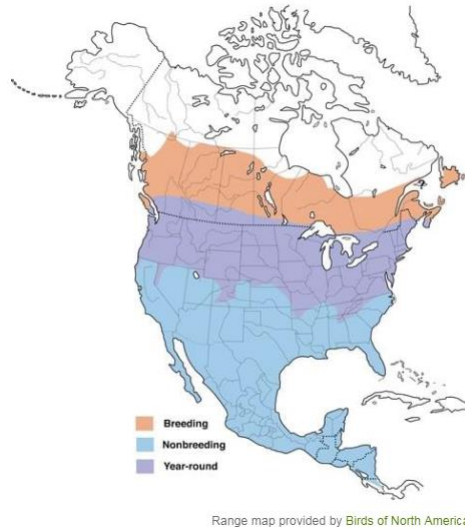
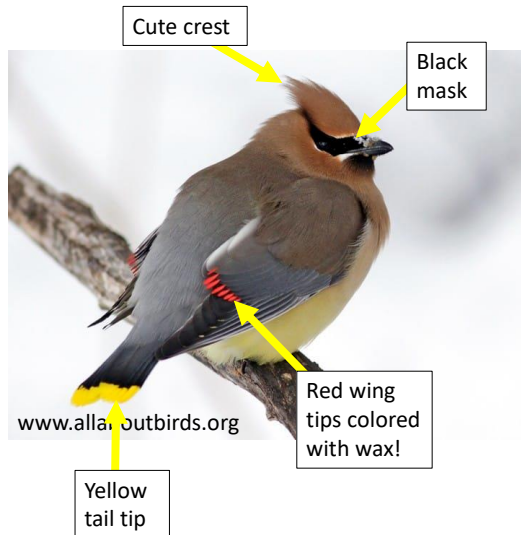


## Cedar Waxwing





## Cedar Waxwing



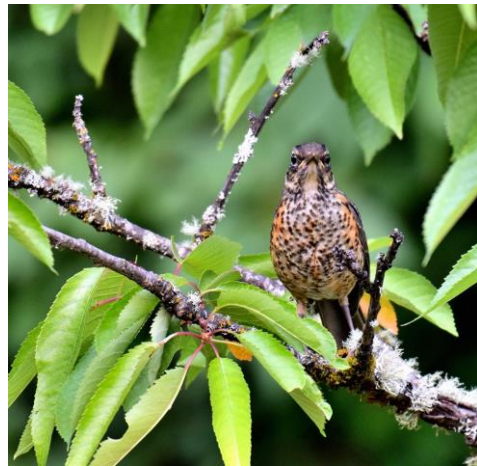
## American Robin



## American Robin



Adult

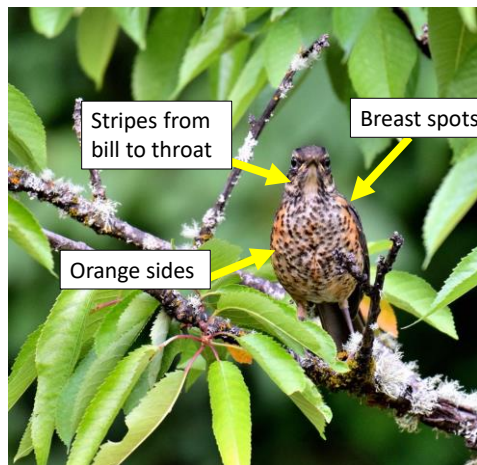


Juvenile

## American Robin



Adult



Juvenile

# Swallows



# Mud nest swallows



## Barn Swallow

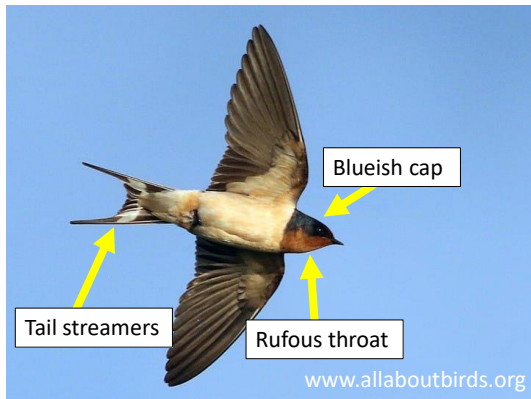


## Barn Swallow

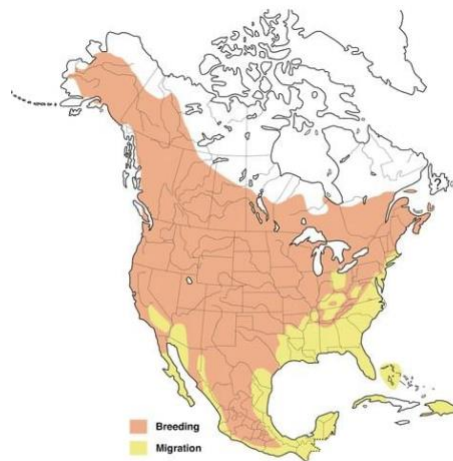




## Barn Swallow



## Cliff Swallow



Range map provided by Birds of North America

## Cliff Swallow

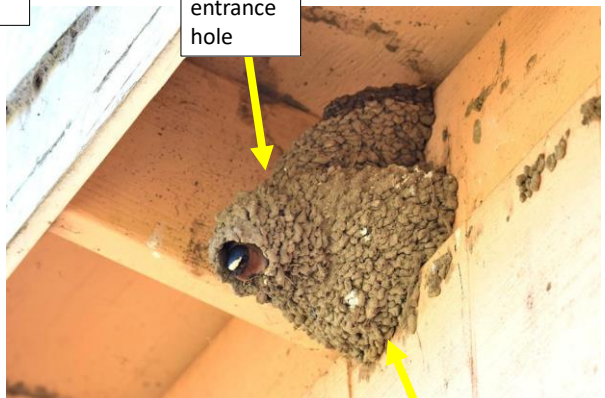


## Cliff Swallow



White  
forehead

No tail  
streamers



Closed  
top with  
entrance  
hole

No grasses



## Uh-oh!

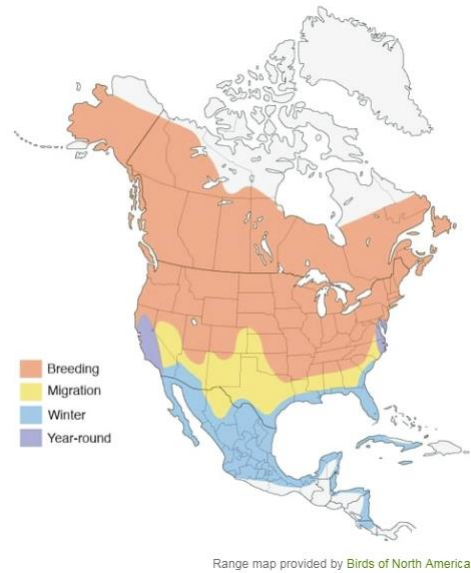
- Dirty under nests
- Try netting eaves that are inappropriate for nesting and adding wooden ledges where nesting is desired
  - <https://nestwatch.org/learn/all-about-birdhouses/birds/barn-swallow/>



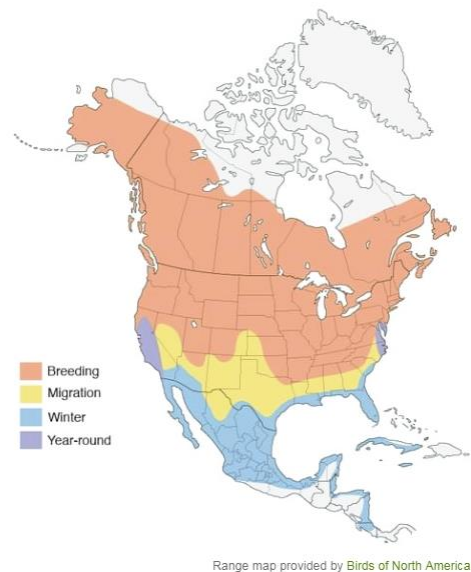
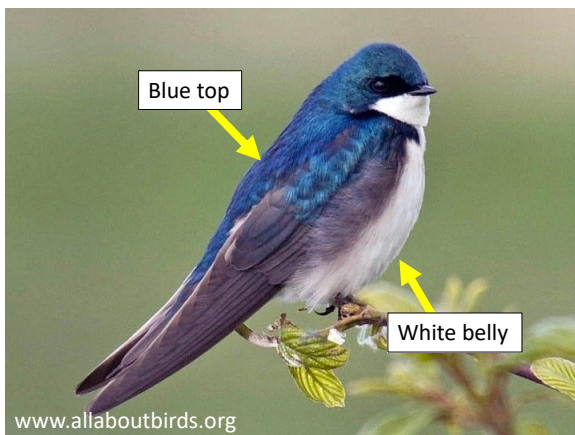
## Cavity nest/nest box swallows



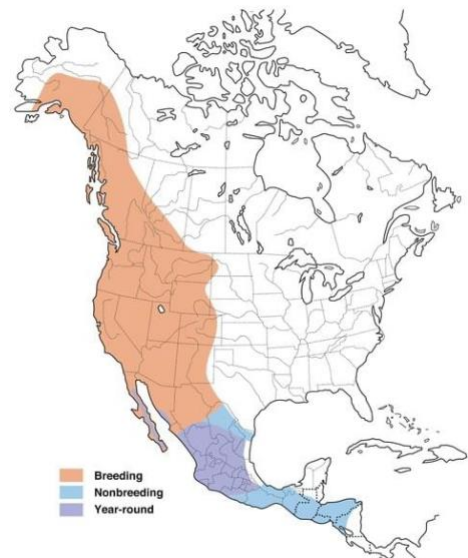
## Tree Swallow



## Tree Swallow

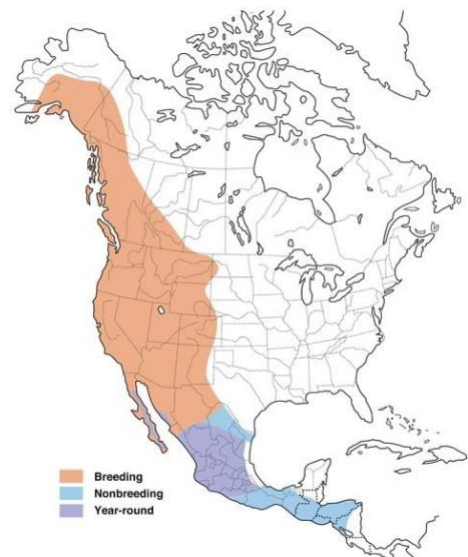
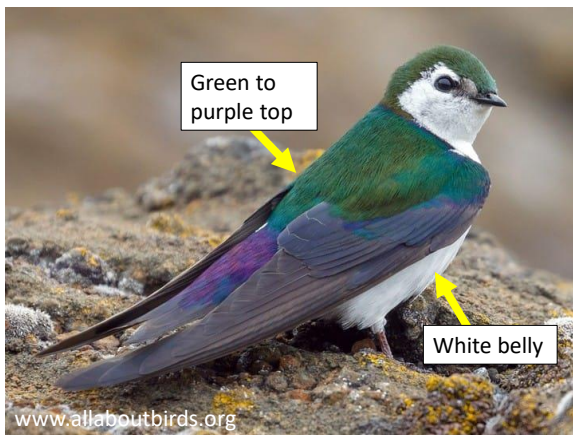


## Violet-green Swallow



Range map provided by [Birds of North America](#)

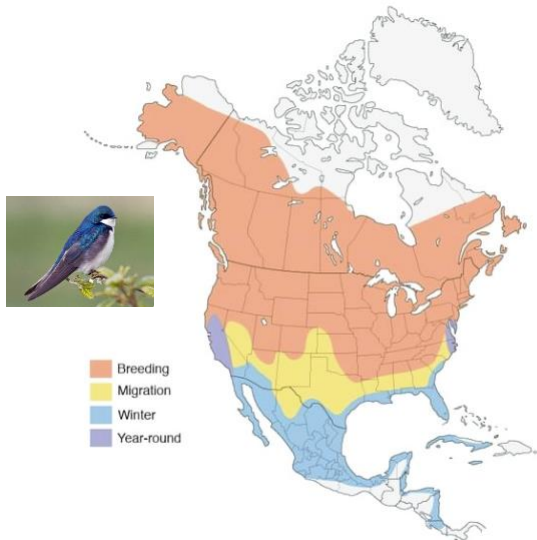
## Violet-green Swallow



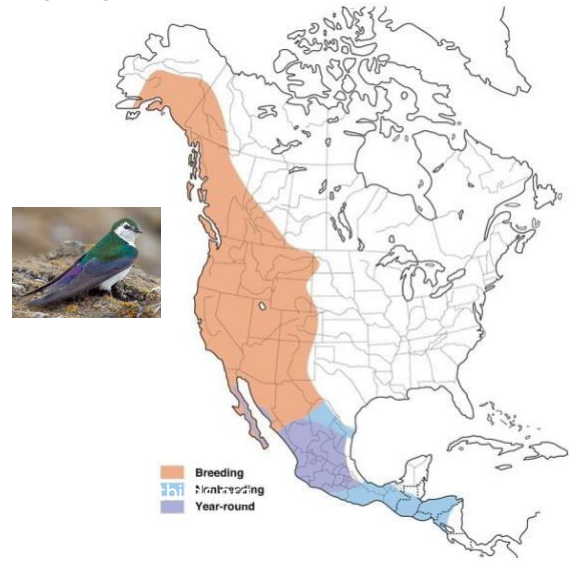
Range map provided by [Birds of North America](#)



## Tree vs. Violet-green Swallow



Range map provided by [Birds of North America](#)

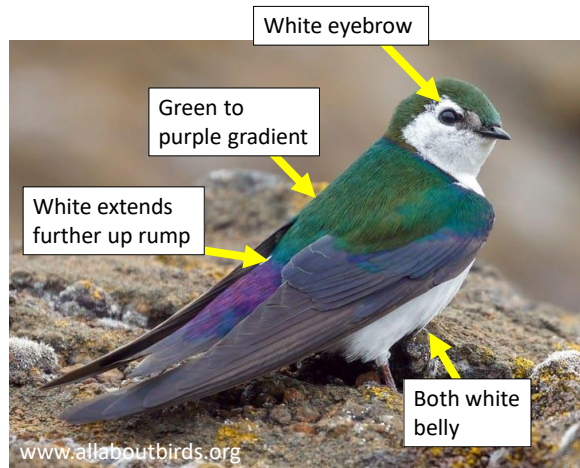
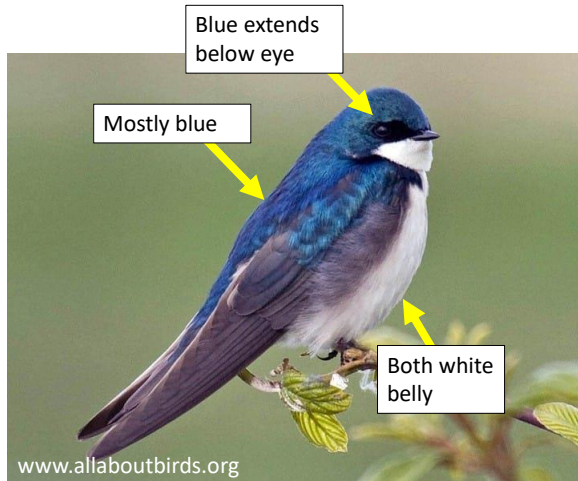


Range map provided by [Birds of North America](#)

## Tree vs. Violet-green Swallow



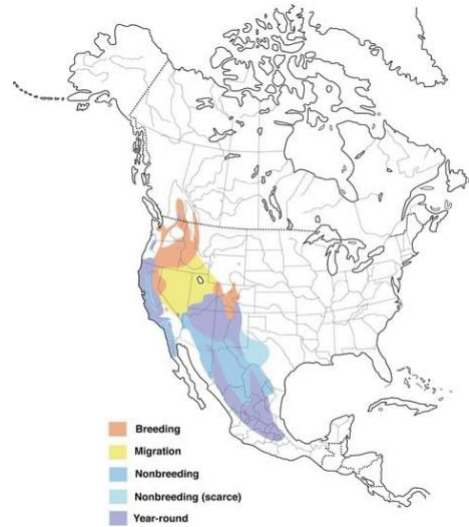
## Tree vs. Violet-green Swallow



## Bluebirds



## Western Bluebird



Range map provided by [Birds of North America](http://Birds of North America)

## Western Bluebird



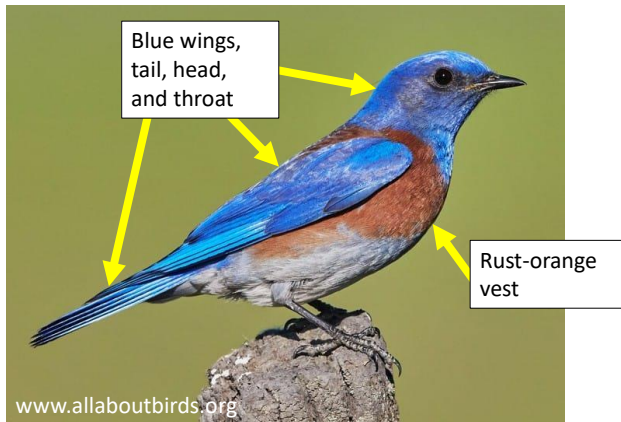
Adult male



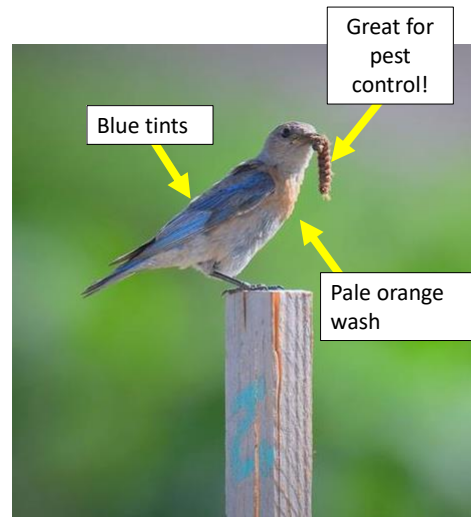
Juvenile



## Western Bluebird

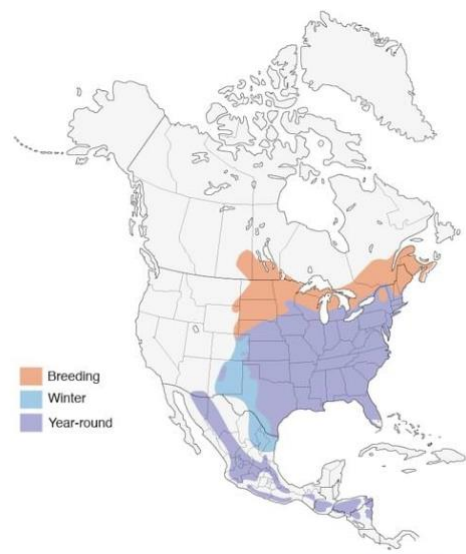


Adult male



Juvenile

## Eastern Bluebird



Range map provided by *Birds of North America*

## Eastern Bluebird



www.allaboutbirds.org

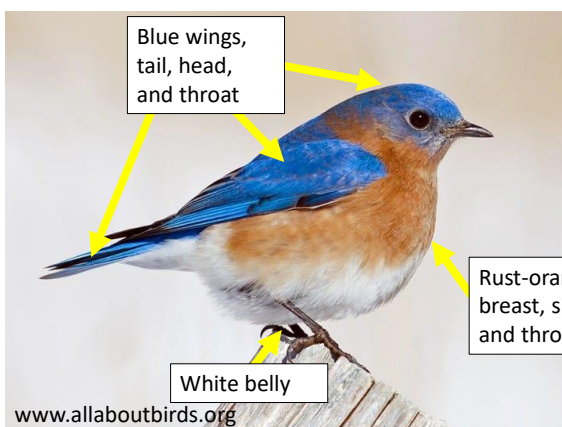
Adult male



www.allaboutbirds.org

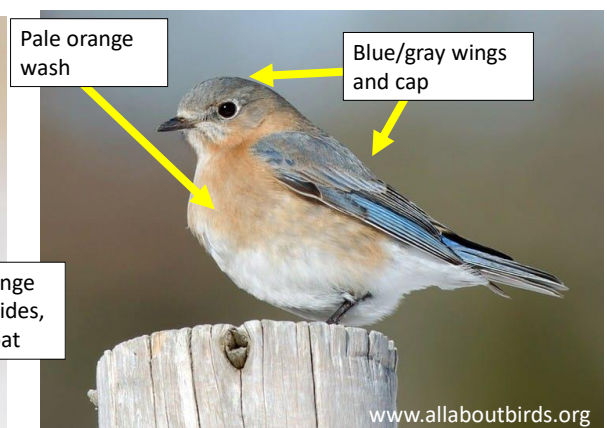
Juvenile

## Eastern Bluebird



www.allaboutbirds.org

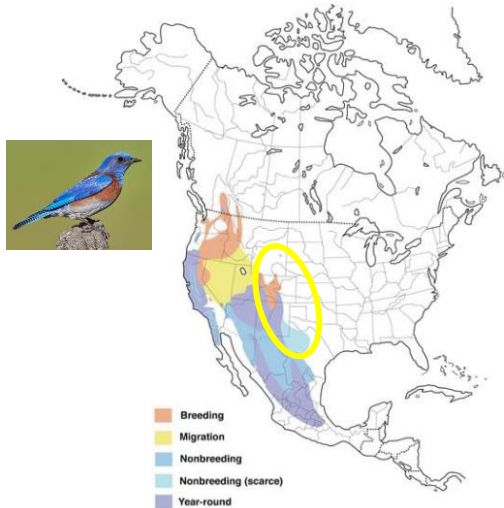
Adult male



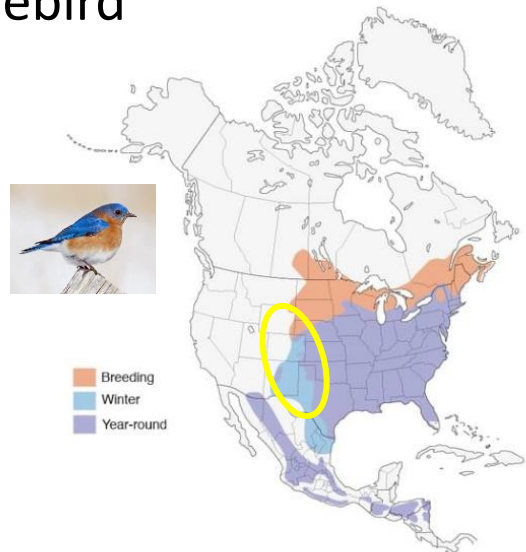
www.allaboutbirds.org

Juvenile

## Western vs. Eastern Bluebird



Range map provided by Birds of North America



Range map provided by Birds of North America

## Western vs. Eastern Bluebird

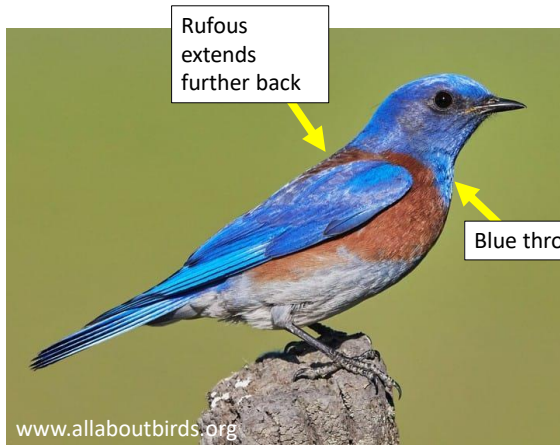


Western male

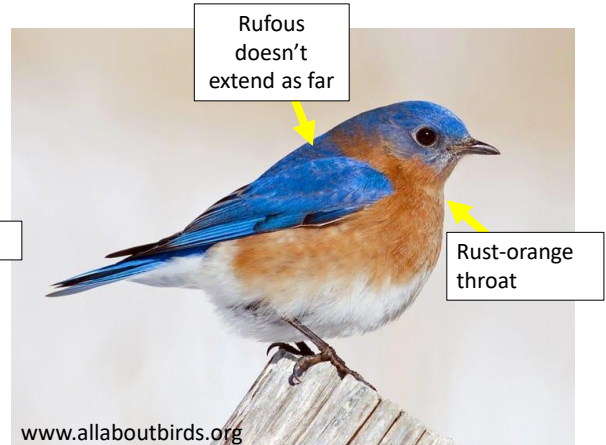


Eastern male

## Western vs. Eastern Bluebird



Western male



Eastern male

## Attracting Bluebirds

- Great at insect control
  - <https://articles.extension.org/pages/74434/western-bluebird-sialia-mexicana-identification-diet-and-management-for-organic-farmers>
- Provide nest boxes near crops
  - <https://nestwatch.org/learn/all-about-birdhouses/birds/western-bluebird/>





# Finches



## House Finch



## House Finch



## House Finch

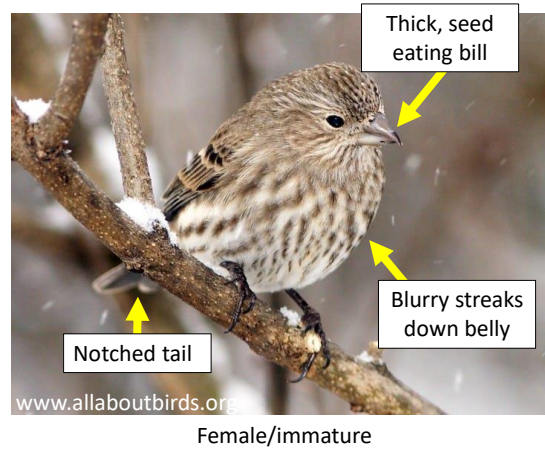
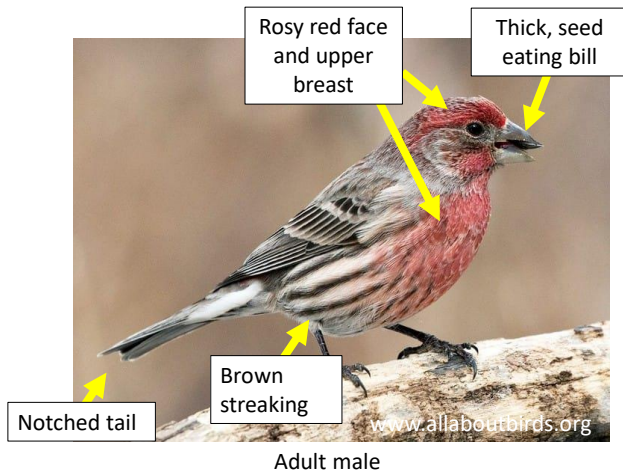


Adult male

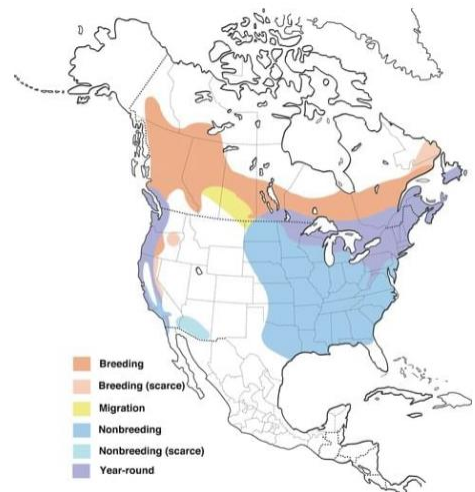


Female/immature

## House Finch



## Purple Finch





## Purple Finch



Adult male

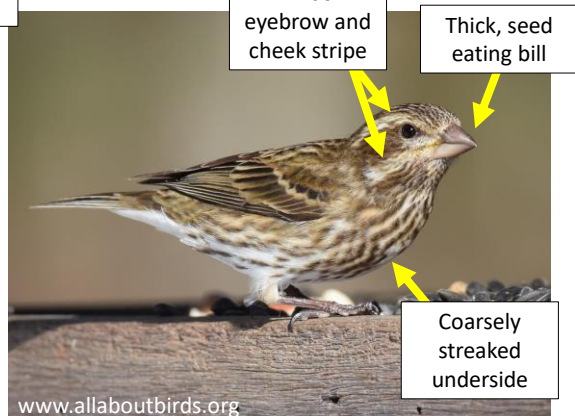


Female/immature

## Purple Finch



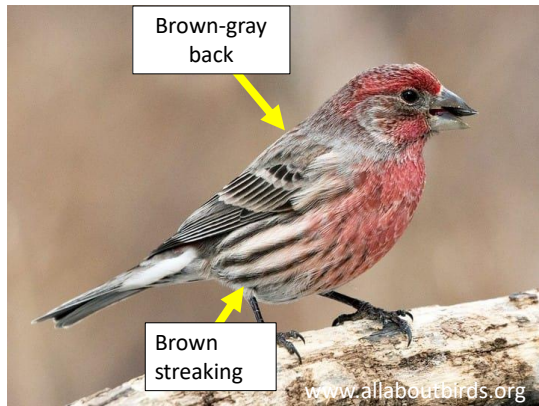
Adult male



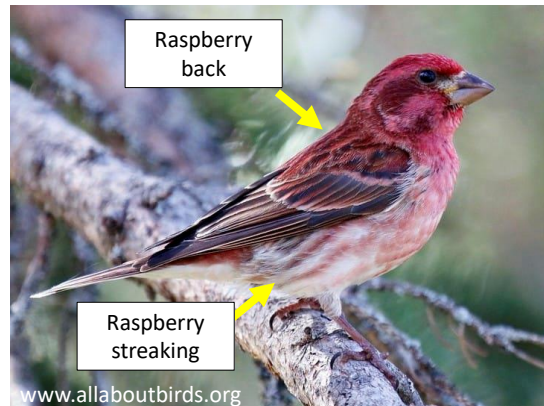
Female/immature



## House vs. Purple Finch

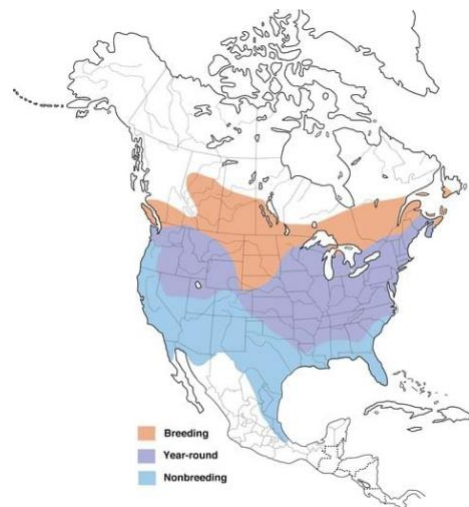


Adult male



Adult male

## American Goldfinch



Range map provided by [Birds of North America](#)

## American Goldfinch

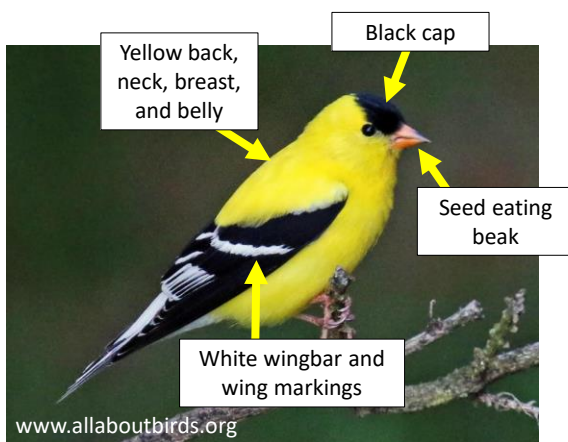


Breeding season male



Breeding season female

## American Goldfinch



Breeding season male



Breeding season female

## Lesser Goldfinch



Range map provided by *Birds of North America*

## Lesser Goldfinch



Western "green backed"



Eastern front and Central  
American "black backed"

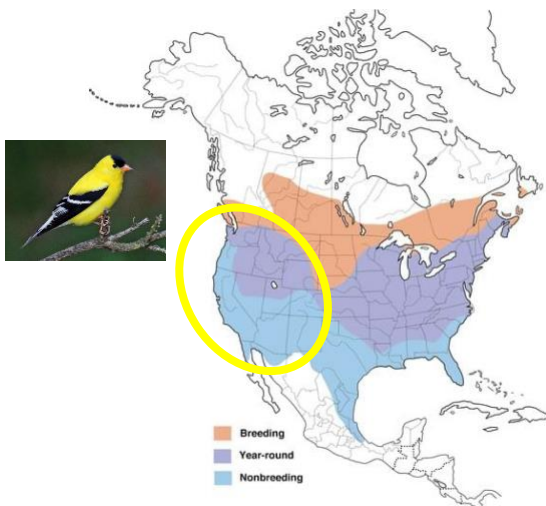


Female

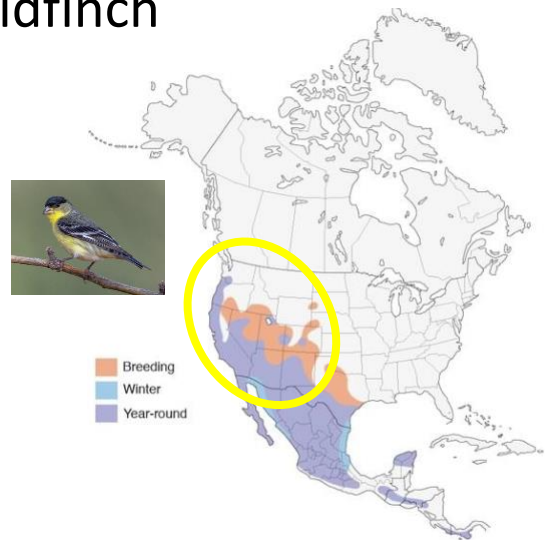
## Lesser Goldfinch



## American vs. Lesser Goldfinch



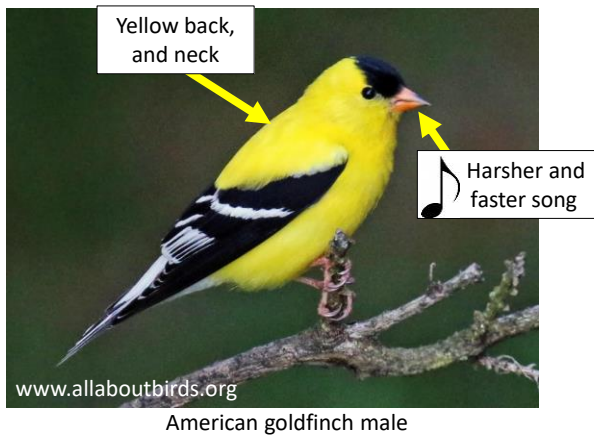
Range map provided by Birds of North America



Range map provided by Birds of North America



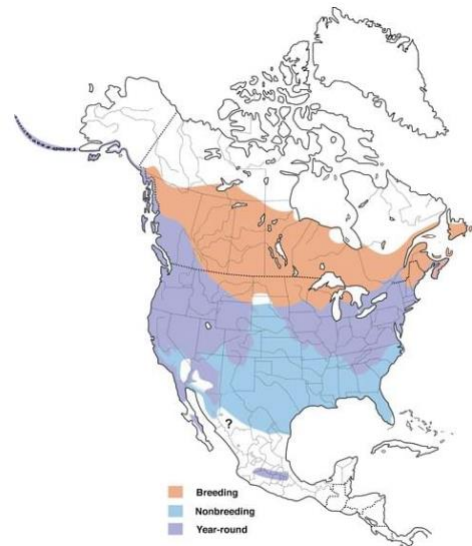
## American vs. Lesser Goldfinch



## North American Sparrows ("Little brown jobs")

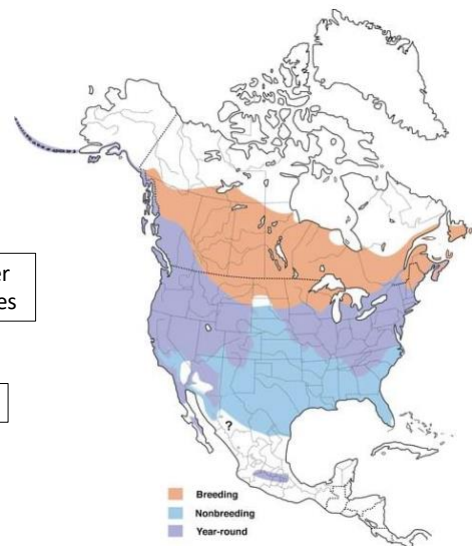
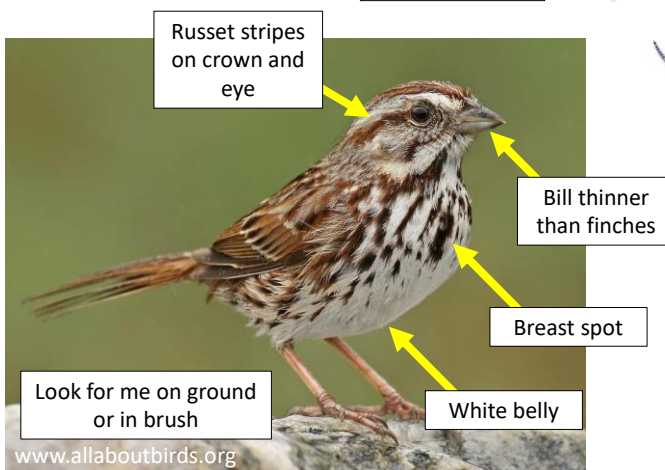


## Song Sparrow



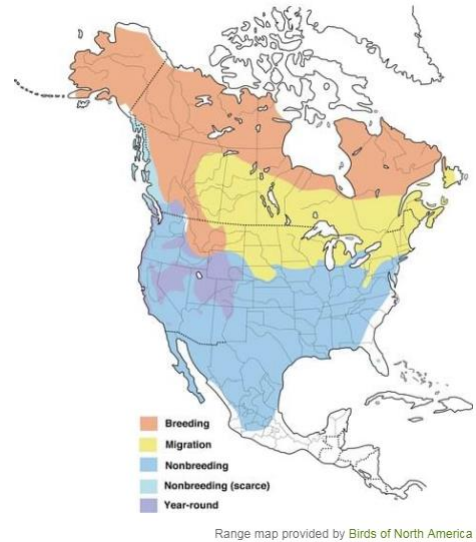
## Song Sparrow

🎵 Song often best cue

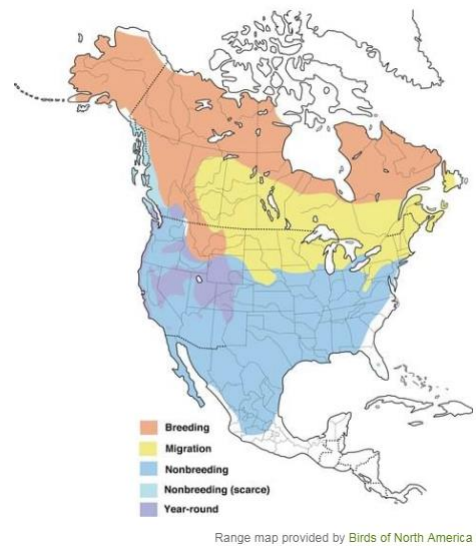
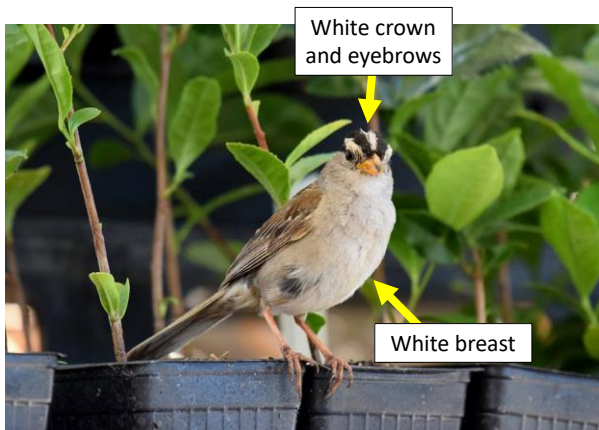


Sound file: Randolph S. Little/Macaulay Library at the Cornell Lab of Ornithology (ML222034)

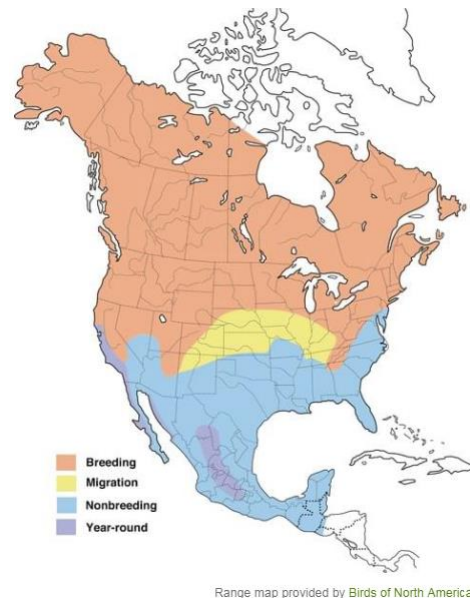
## White-crowned Sparrow



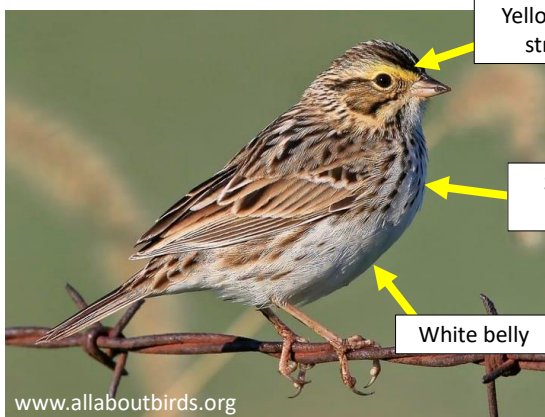
## White-crowned Sparrow



# Savannah Sparrow



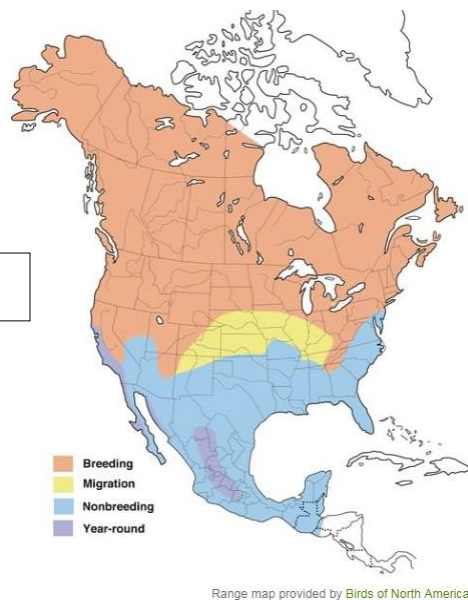
# Savannah Sparrow



Yellow eye stripe

Streaked breast

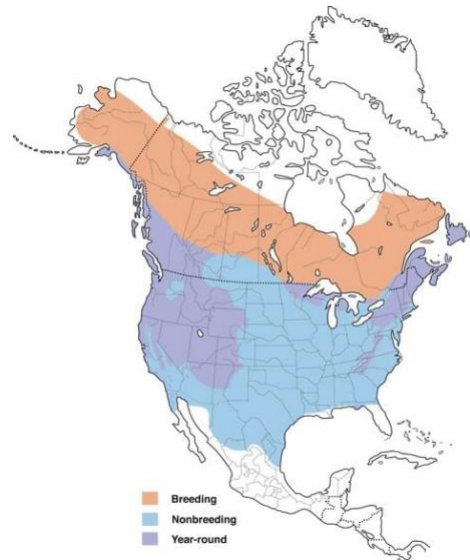
White belly



Sound file: Leonard J. Peyton/Macaulay Library at the Cornell Lab of Ornithology (ML49968)



## Dark-eyed Junco



Range map provided by *Birds of North America*

## Dark-eyed Junco



Slate-colored



Oregon



Juvenile Oregon



Red-backed



Pink-sided

## Dark-eyed Junco



www.allaboutbirds.org  
Slate-colored



www.allaboutbirds.org  
Oregon



www.allaboutbirds.org  
Juvenile Oregon



www.allaboutbirds.org  
Red-backed



www.allaboutbirds.org  
Pink-sided

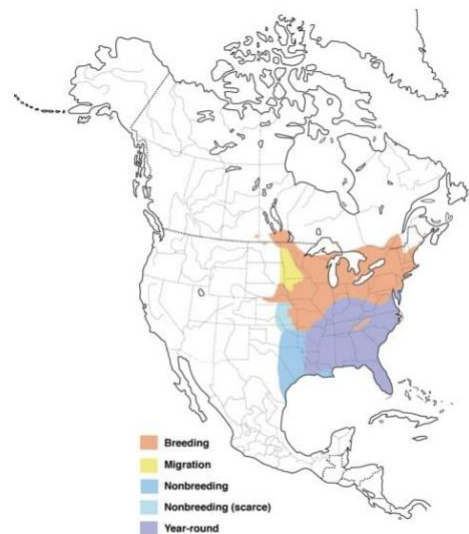


All have white  
outer-tail  
feathers

## Eastern Towhee



www.allaboutbirds.org



Range map provided by Birds of North America

## Eastern Towhee

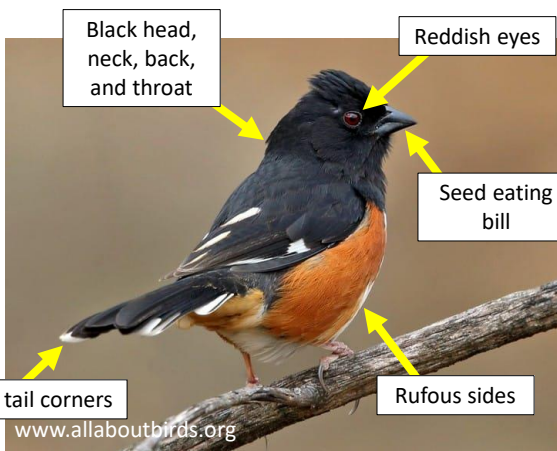


Male

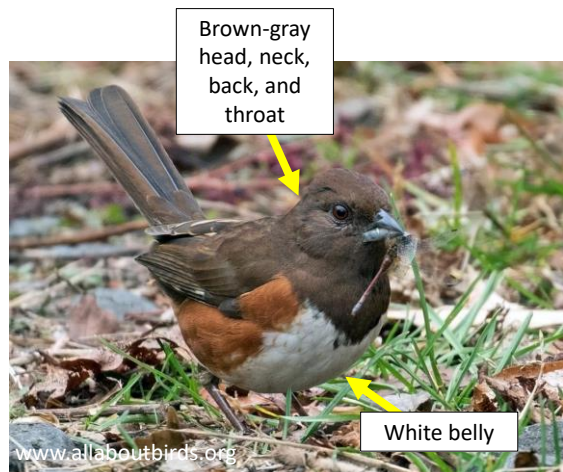


Female/immature

## Eastern Towhee



Male



Female/immature



## Spotted Towhee



## Spotted Towhee



Male



Female/immature



## Spotted Towhee



Male



Female/immature

## Sparrows

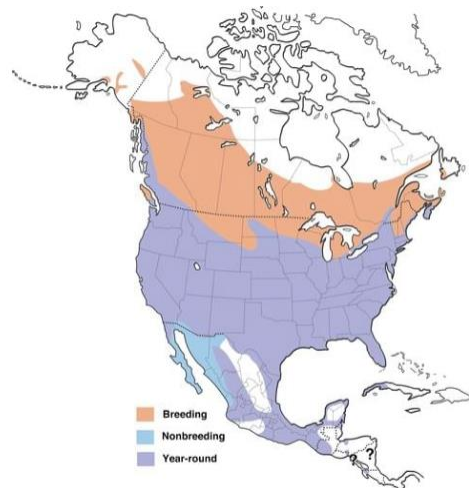
- Eat insects, transplants, and fruits
  - May help control pest insects
  - Will likely eat your transplants
  - Likes raspberries and other fruits
  - May help control weeds
- Brushy cover attracts them
  - Plant and retain brush near crops to attract sparrows
  - Weedy fields attract more sparrows
- Some nest in grasses
  - Leave some grassland or pasture to promote Savannah and Grasshopper Sparrows



# Blackbirds



## Red-winged blackbird



Range map provided by [Birds of North America](http://www.allaboutbirds.org)

## Red-winged blackbird



Male

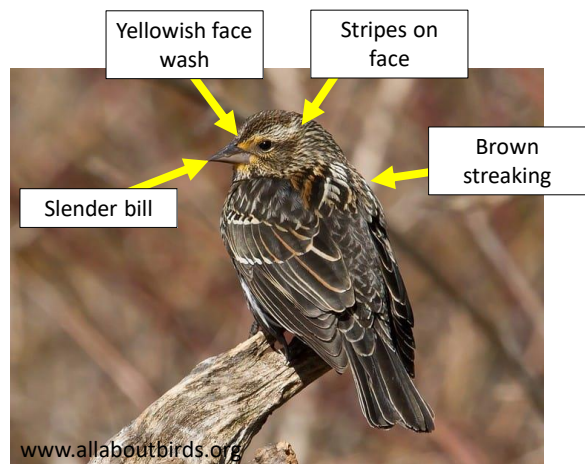


Female

## Red-winged blackbird

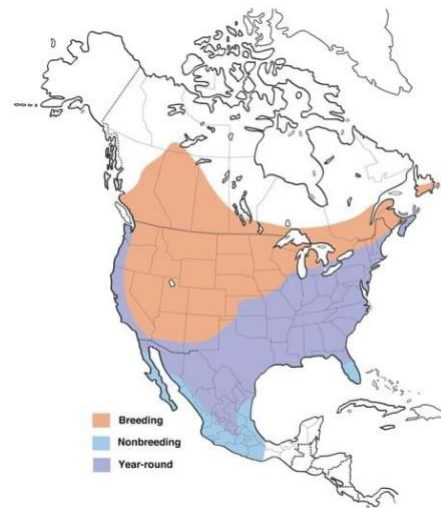


Male



Female

## Brown-headed Cowbird



Range map provided by [Birds of North America](#)

## Brown-headed cowbird



Male



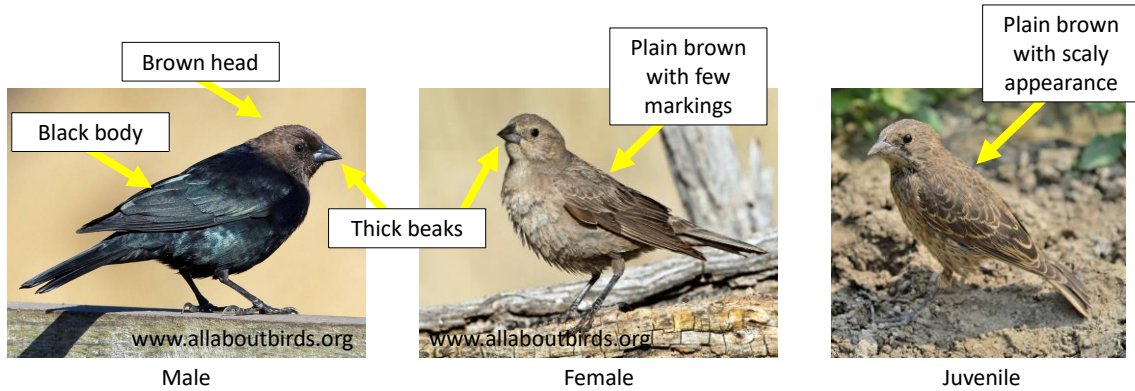
Female



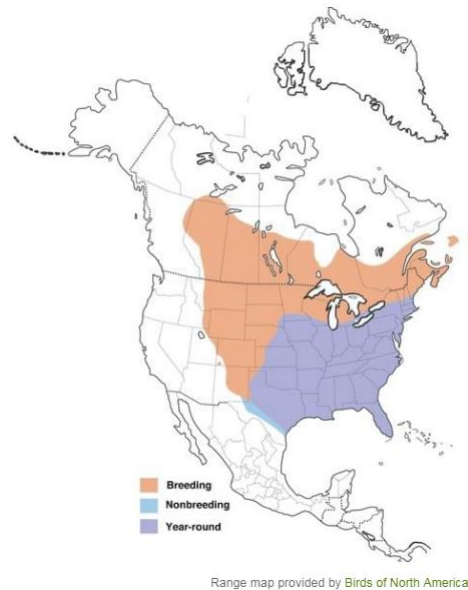
Juvenile



## Brown-headed cowbird



## Common Grackle



## Common Grackle

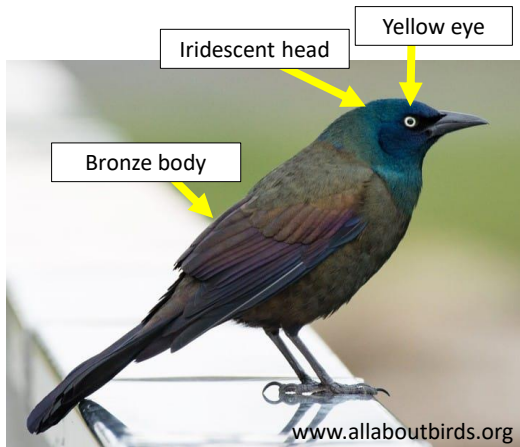


Male

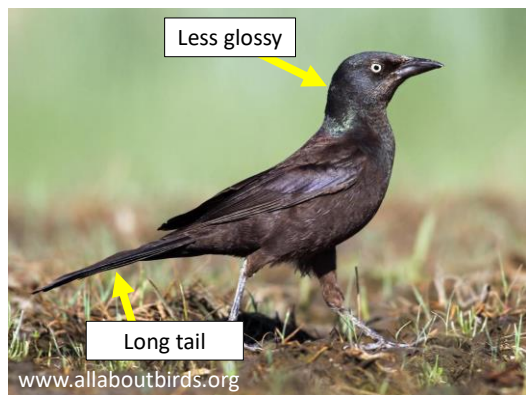


Female

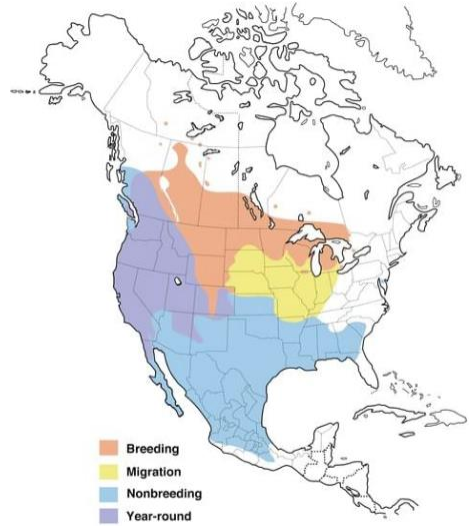
## Common Grackle



Large blackbird

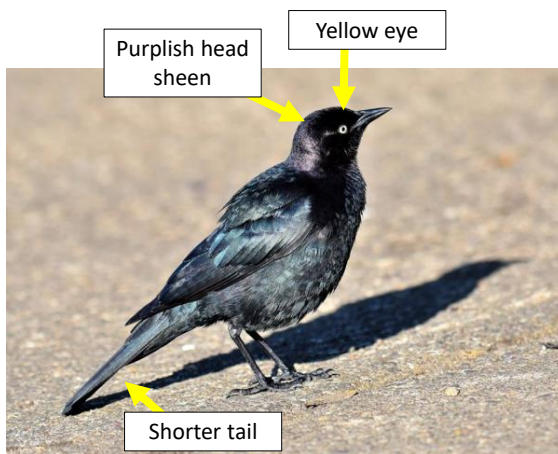


## Brewer's Blackbird

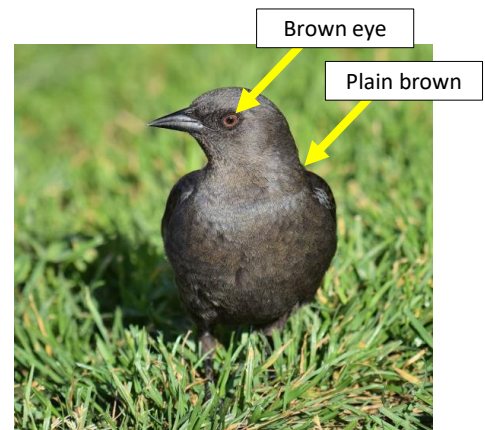


Range map provided by [Birds of North America](#)

## Brewer's Blackbird



Mid-sized blackbird



Female

## Blackbirds

- Eat insects and grain
  - Can help with insect pest control
  - Can damage crops
  - Often cause large livestock feed losses
- Often found around livestock
- Attract by putting out bird feeders, and promote nesting by leaving or creating wetlands

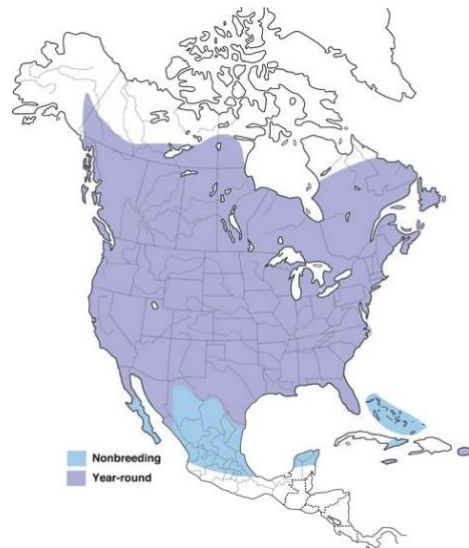


## Introduced species





## European Starling



## European Starling

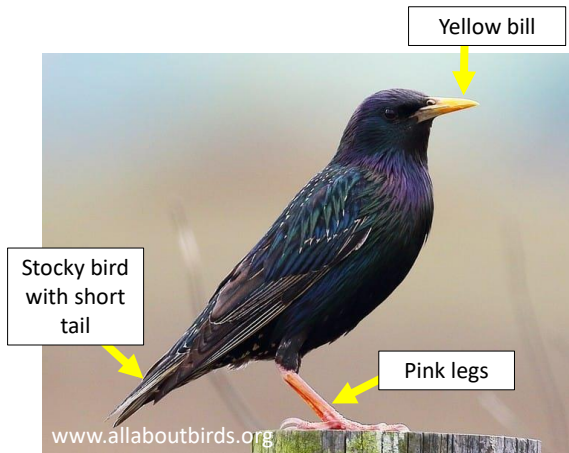


Breeding plumage

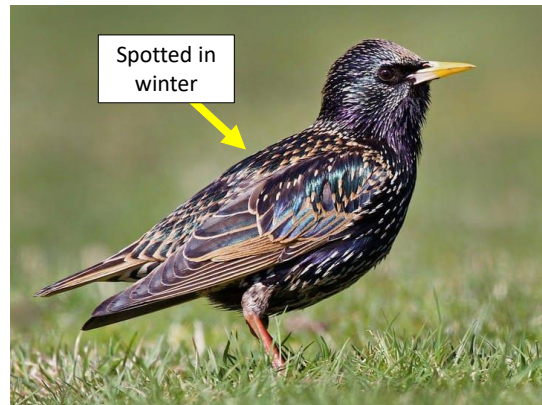


Non-breeding plumage

## European Starling




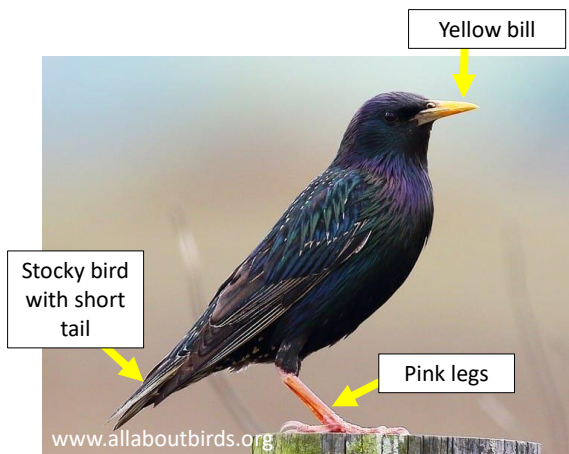
Breeding plumage



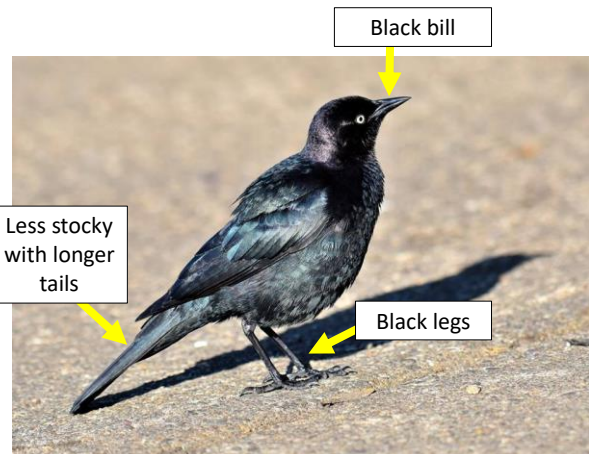
Non-breeding plumage

## Starlings vs. Native Blackbirds

Voices and songs differ 



Breeding plumage



## House Sparrow



Range map provided by [Birds of North America](#)

## House Sparrow



Male




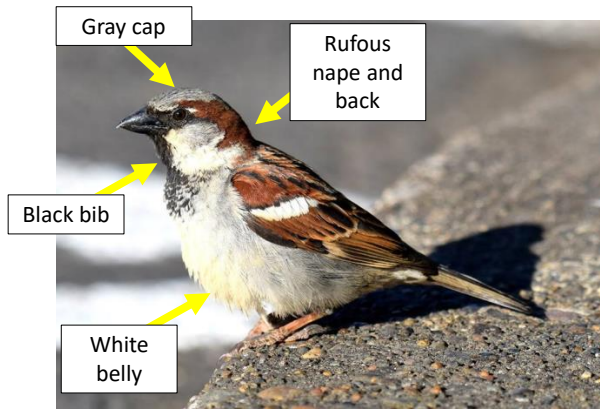
[www.allaboutbirds.org](http://www.allaboutbirds.org)

Female

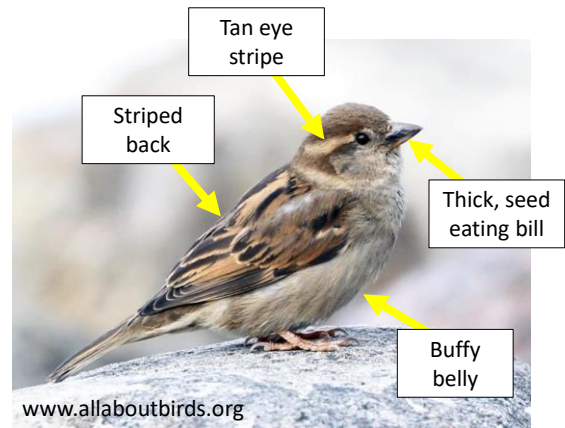


# House Sparrow

Simple call vocalizations 




Male

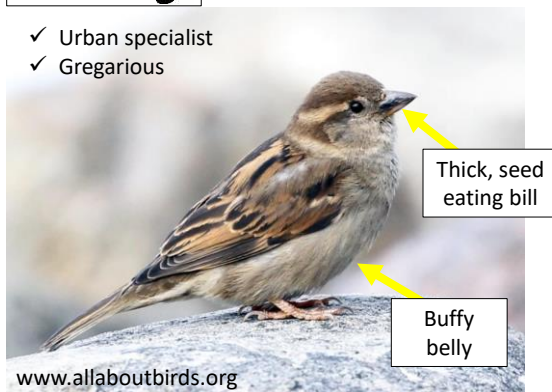



Female

## House Sparrow vs. Native Sparrows

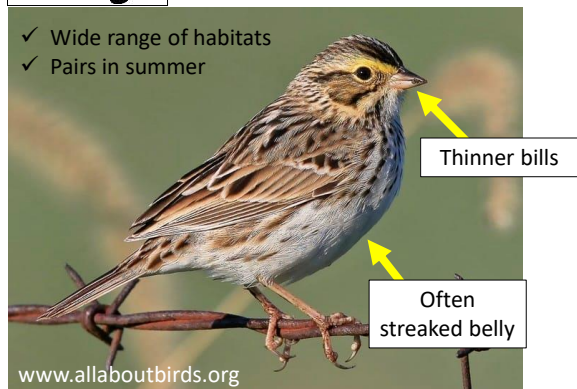
Simple call vocalizations 

- ✓ Urban specialist
- ✓ Gregarious



Complex songs 

- ✓ Wide range of habitats
- ✓ Pairs in summer

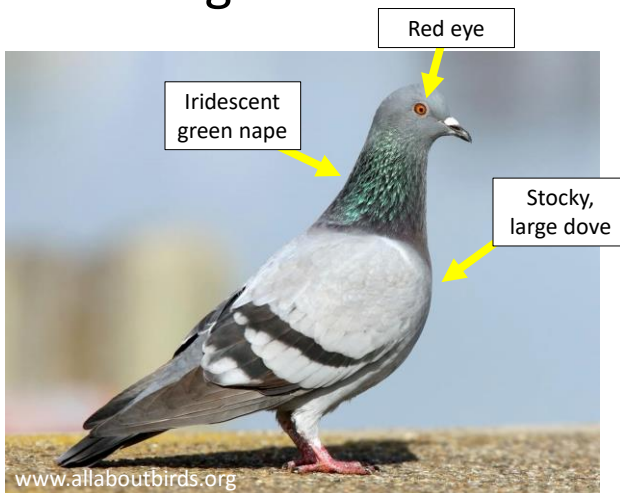




## Rock Pigeon



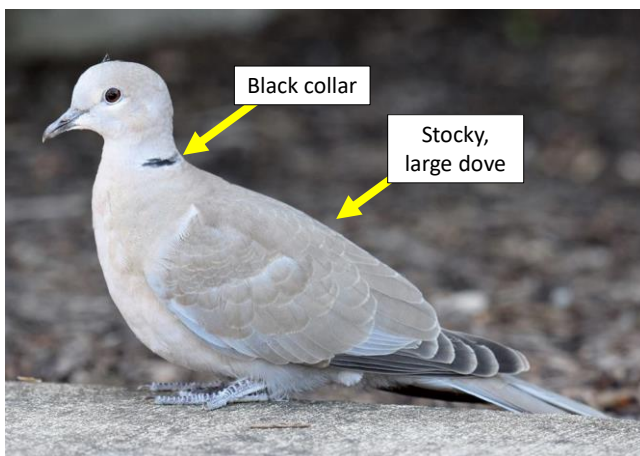
## Rock Pigeon



## Eurasian Collared-Dove



## Eurasian Collared-Dove



## Managing Invasive Species

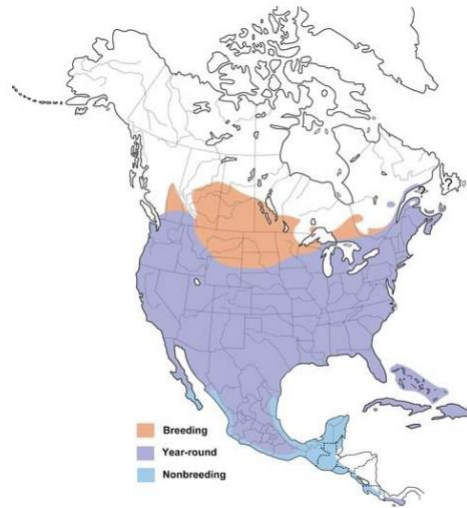
- Natives protected by Migratory Bird Treaty Act
- Invasives not protected
  - Can use lethal control
  - Monitoring nest boxes and removing invasives often recommended
- Prevent nesting on structures with netting



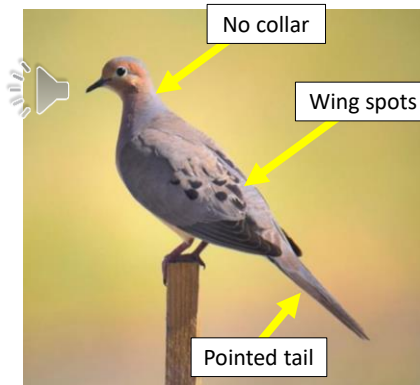
## Native Doves



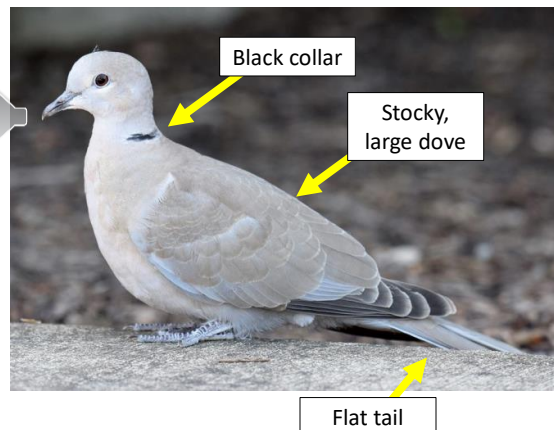
## Mourning Dove



## Mourning vs. Eurasian Collared Dove



Sound file: Randolph S. Little/Macaulay Library  
at the Cornell Lab of Ornithology (ML107039)



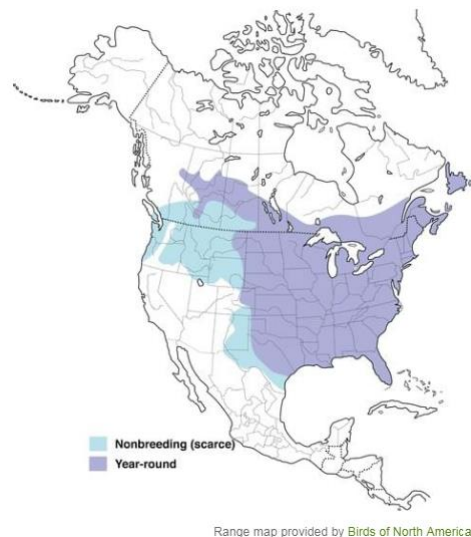
Sound file: Arnoud B van den Berg/Macaulay Library  
at the Cornell Lab of Ornithology (ML26380)



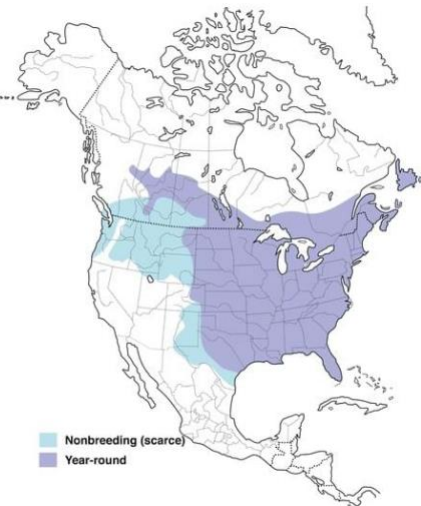
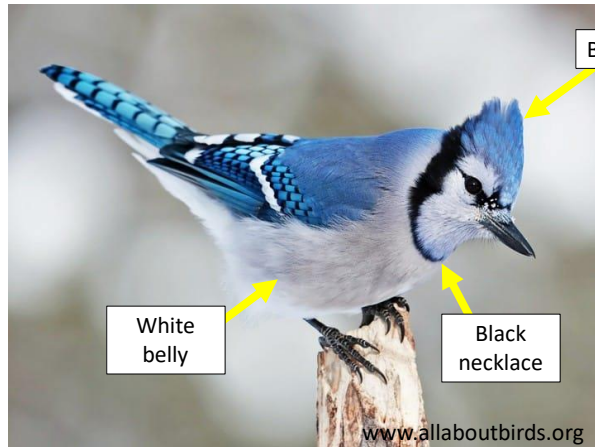
# Corvids



## Blue Jay



## Blue Jay



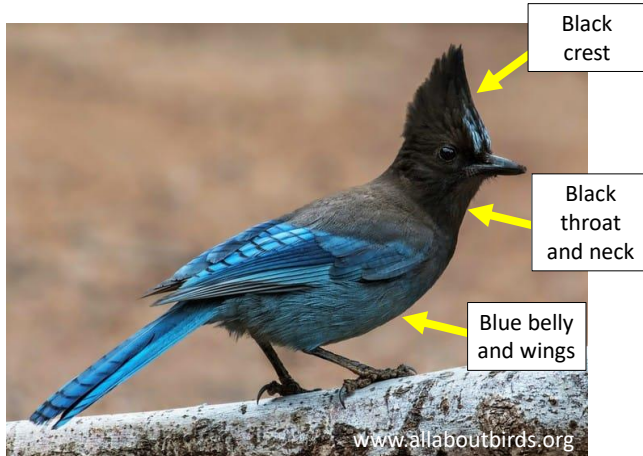
Range map provided by [Birds of North America](#)

## Steller's ("Blue") Jay



Range map provided by [Birds of North America](#)

## Steller's ("Blue") Jay

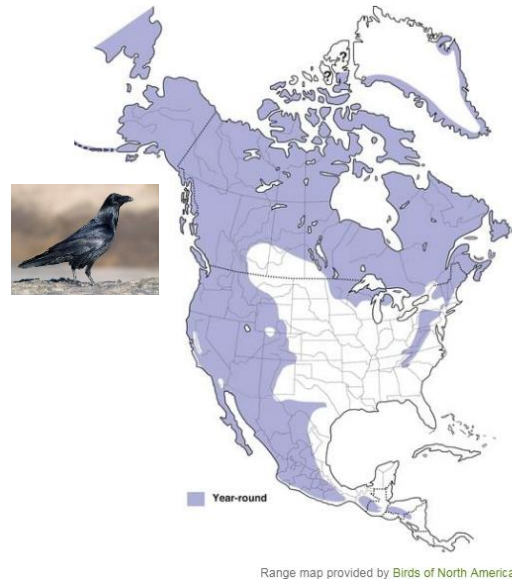
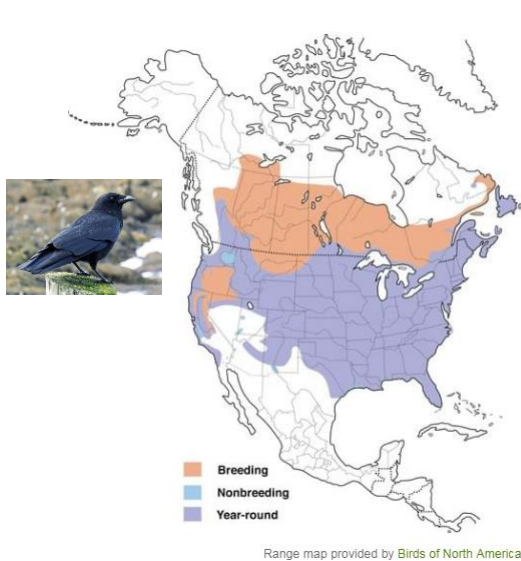


Range map provided by [Birds of North America](#)

## American Crow vs. Common Raven



## American Crow vs. Common Raven



## American Crow vs. Common Raven



Sound file: Bob McGuire/Macaulay Library at the Cornell Lab of Ornithology (ML229089)



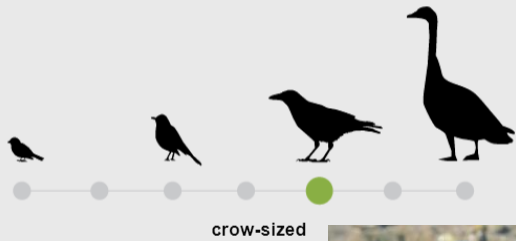
Sound file: William W. H. Gunn/Macaulay Library at the Cornell Lab of Ornithology (ML62386)



## American Crow vs. Common Raven

### RELATIVE SIZE

Nearly twice the size of a Blue Jay; about two-thirds the size of a Common Raven



### MEASUREMENTS

Both Sexes

Length: 15.8-20.9 in (40-53 cm)

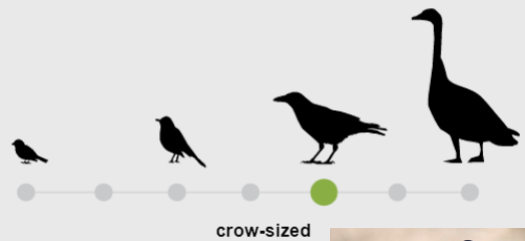
Weight: 11.2-21.9 oz (316-620 g)

Wingspan: 33.5-39.4 in (85-100 cm)



### RELATIVE SIZE

About half again larger than an American Crow or Chihuahuan Raven



### MEASUREMENTS

Both Sexes

Length: 22.1-27.2 in (56-69 cm)

Weight: 24.3-57.3 oz (689-1625 g)

Wingspan: 45.7-46.5 in (116-118 cm)



## Managing Corvids

- Good luck!
- Attract with tray feeders or leave out peanuts or pet food
- Can encourage nesting with hedges or by leaving forest



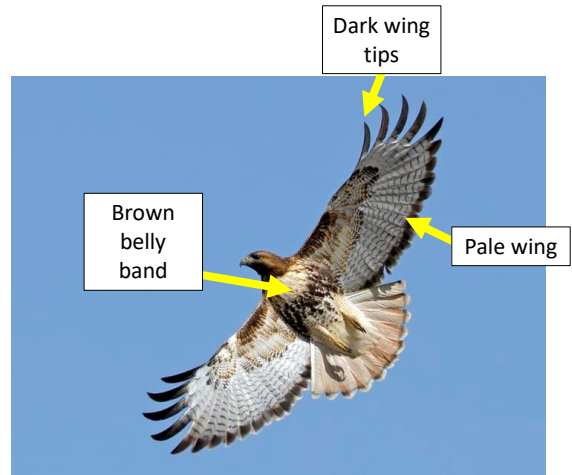
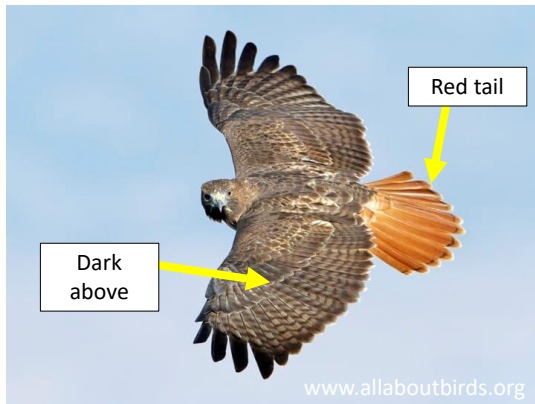
# Raptors



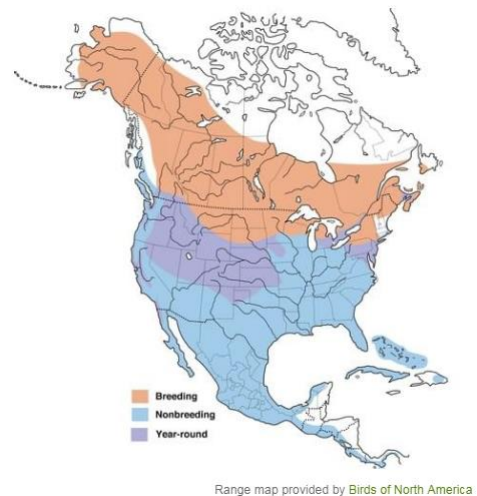
## Red-tailed Hawk



## Red-tailed Hawk



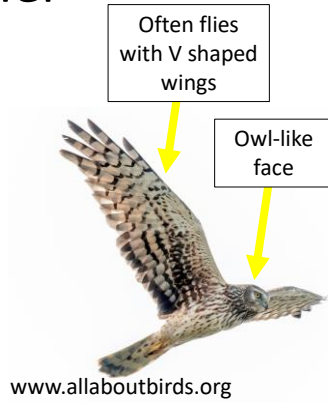
## Northern Harrier



# Northern Harrier



Adult male



Adult female



Immature

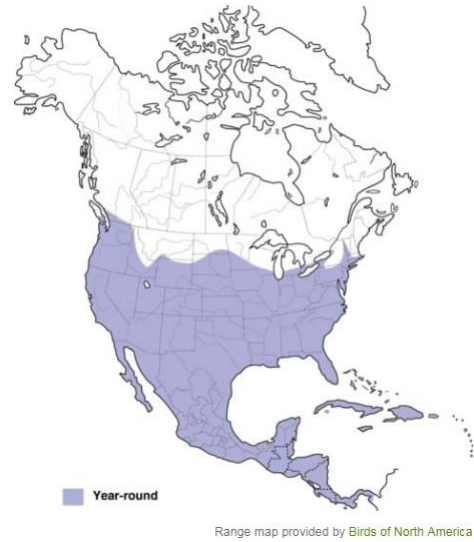
\* Find me in wetlands and grasslands eating rodents, including in your pastures

## Promoting Harriers

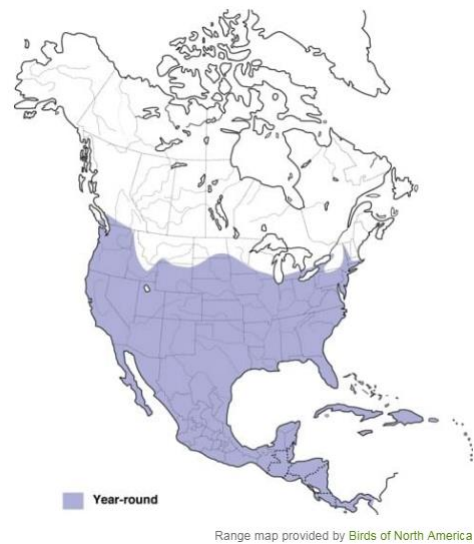
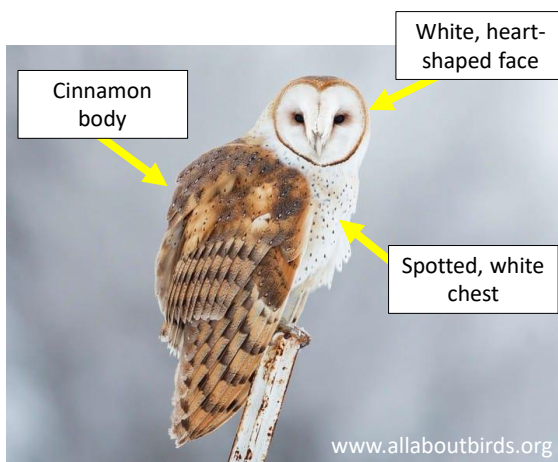




## Barn Owl



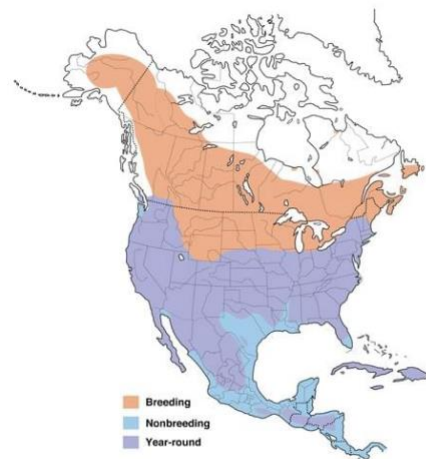
## Barn Owl



## Promoting Barn Owls

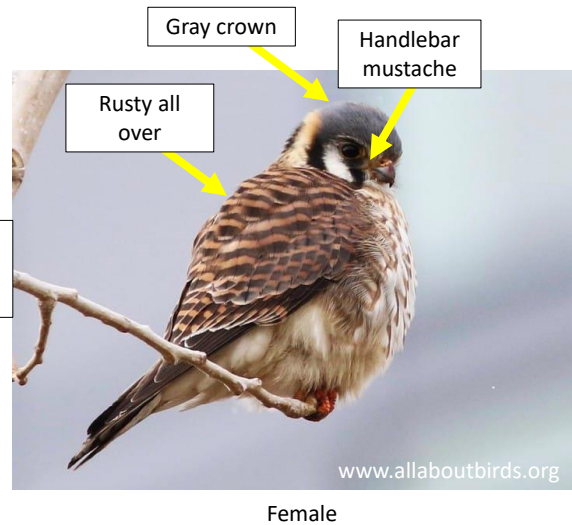
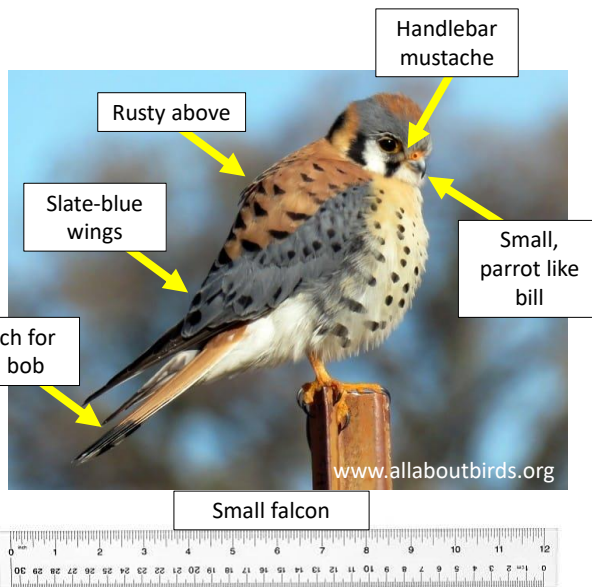


## American Kestrel



Range map provided by *Birds of North America*

## American Kestrel



Female

## Promoting Kestrels

- Beneficial for bird and rodent control
- Install nest boxes near crops you'd like protected
  - Will be most effective when chicks are in nest
  - <https://nestwatch.org/learn/all-about-birdhouses/birds/american-kestrel/>



## Summary

- Be patient!
  - The US has over 400 breeding birds
  - You can find over 700 birds in North America
- Learn general size and shape, plumage patterns, behaviors, vocalizations, and common habitats
- Birds play complex ecological roles and can both help and hurt the farm



## Additional Resources

- Bird identification
  - Field guides (I like Sibley)
  - Merlin Bird ID App, eBird App, or <https://www.ebird.org>
  - <https://www.allaboutbirds.org/>
  - Cornell Lab of Ornithology Bird Academy <https://academy.allaboutbirds.org/course-list/>
- Bird song identification
  - Larkwire or other song learning app
  - Recordings available in eBird App, <https://allaboutbirds.org>, and <https://www.macaulaylibrary.org/>
- Habitat management
  - <https://nestwatch.org/>
  - <http://content.yardmap.org/>



## Additional Resources

- eOrganic
  - Learn about how to use Merlin and Habitat Network at <https://www.youtube.com/watch?v=vPxuQWmOZ1Q>
  - Articles on promoting beneficials and identifying nests
    - <http://articles.extension.org/pages/74436/identification-diet-and-management-of-chickadees-and-warblers-common-on-organic-farms>
    - <http://articles.extension.org/pages/74435/identification-diet-and-management-of-swallows-and-swifts-common-on-organic-farms>
    - <http://articles.extension.org/pages/74434/western-bluebird-sialia-mexicana-identification-diet-and-management-for-organic-farmers>
    - <http://articles.extension.org/pages/74686/identifying-bird-nests-on-farm-structures>

Questions?



[www.allaboutbirds.org](http://www.allaboutbirds.org)

- Find all upcoming and archived webinars at <http://articles.extension.org/pages/25242> and on the eOrganic YouTube channel. This recording will be available within 1-2 weeks.
- Have an organic farming question? Use the eXtension Ask an Expert service at <https://ask.extension.org/groups/1668>
- Please send your feedback! We will email you a survey about this webinar later today.
- Thank you for coming!

