

# Basics of Birding: An Introduction to Bird Identification

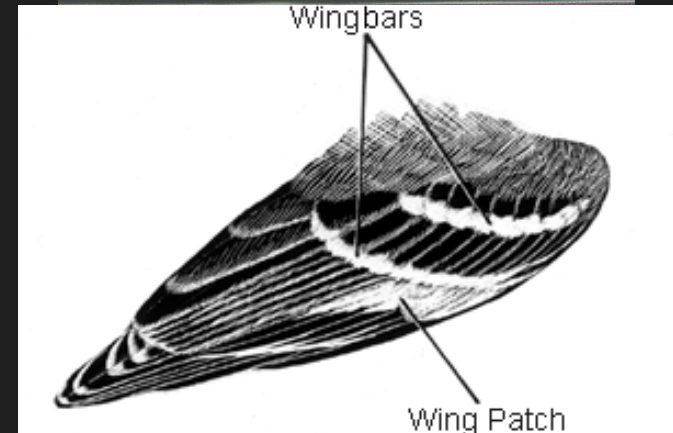


Roger J. Masse  
21 January 2012

*Presented at the Wood-Pawcatuck Watershed Association*

# Overview

- Value of birds
  - For people
  - For conservation and science
- Basics of bird identification
  - Visual
  - Auditory
  - Examples
- Identification tips
  - What to do, and what not to do
  - Resources



# Value of Birds

- Why care about birds?
- Evolutionary standpoint
  - Unique and interesting component of diversity of life
  - ~ 10,000 species worldwide; ~ 700 continental U.S.





# Value of Birds

- Diversity of birds leads to diversity of interests/user groups
  - Birding
  - Hunting
  - Conservation/science
- During past century, popularity of birding has increased dramatically
  - Field Guide to the Birds; R. T. Peterson 1934



# Value of Birds

- Business of birding
  - 2006 USFWS survey
    - ~ 48 million birders
    - ~ \$36 billion in expenditures
    - 21% of US residents
    - 25% of RI residents
    - TN Hooded Crane
- Aesthetics
  - Enjoyment obtained by seeing/hearing diversity of birds



# Value of Birds

- Business of hunting
  - 2006 USFWS survey
    - ~ 8.3 million bird hunters
    - > \$2 billion in expenditures
- Aesthetics and heritage
  - Enjoyment obtained by hunting and continuing or passing on tradition



# Value of Birds

- Conservation and science
  - Federal Duck Stamp Program
    - 1934: license requirement for hunting migratory birds
    - 98% of funds go directly to purchase/lease of lands for waterfowl conservation; areas protected in National Wildlife Refuge System
    - More recently, serve as entrance to many NWR's; non-hunters important buyers too
    - > \$700 million used to acquire > 5.2 million acres





# Value of Birds

- Local(ish) NWR's purchased, in part, with Duck Stamp dollars
  - Stewart B. McKinney NWR; CT
  - Great Meadows, Monomoy, and Parker River NWR's; MA
- State programs





# Value of Birds

- Benefits of Duck Stamp programs





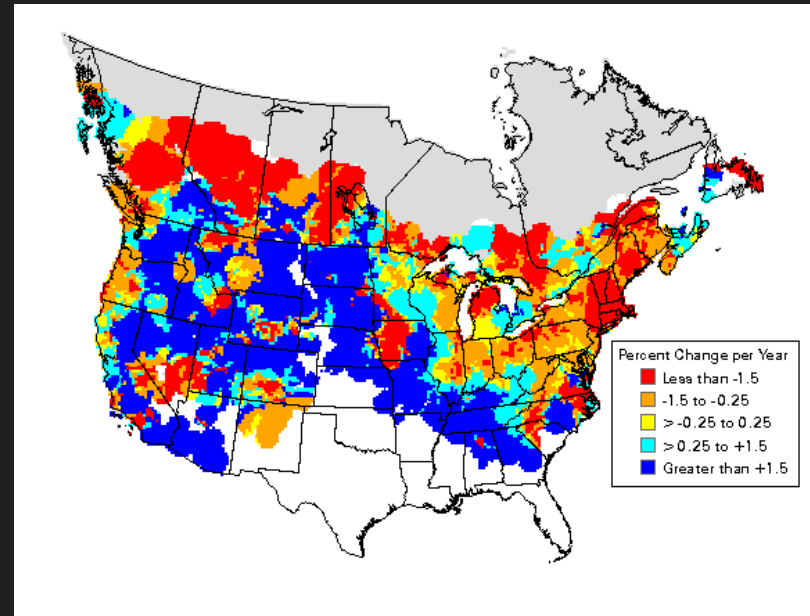
# Value of Birds

- Added benefits of Duck Stamp programs



# Value of Birds

- Due to popularity, ‘citizen science’ programs involving birds have been successful
  - Christmas Bird Count
    - 1900 – present
  - North American Breeding Bird Survey
    - 1966 – present
  - Great Backyard Bird Count
    - 1997 – present





# Basics of Bird Identification

- Considering a few fundamental criteria will help to make identifying birds much easier
  - Shape and size; silhouettes
  - Patterning; light/dark, bold/faint
  - Behavior; flight, feeding, etc...
  - Habitat; where/what to expect
- What group of species does a bird belong to?



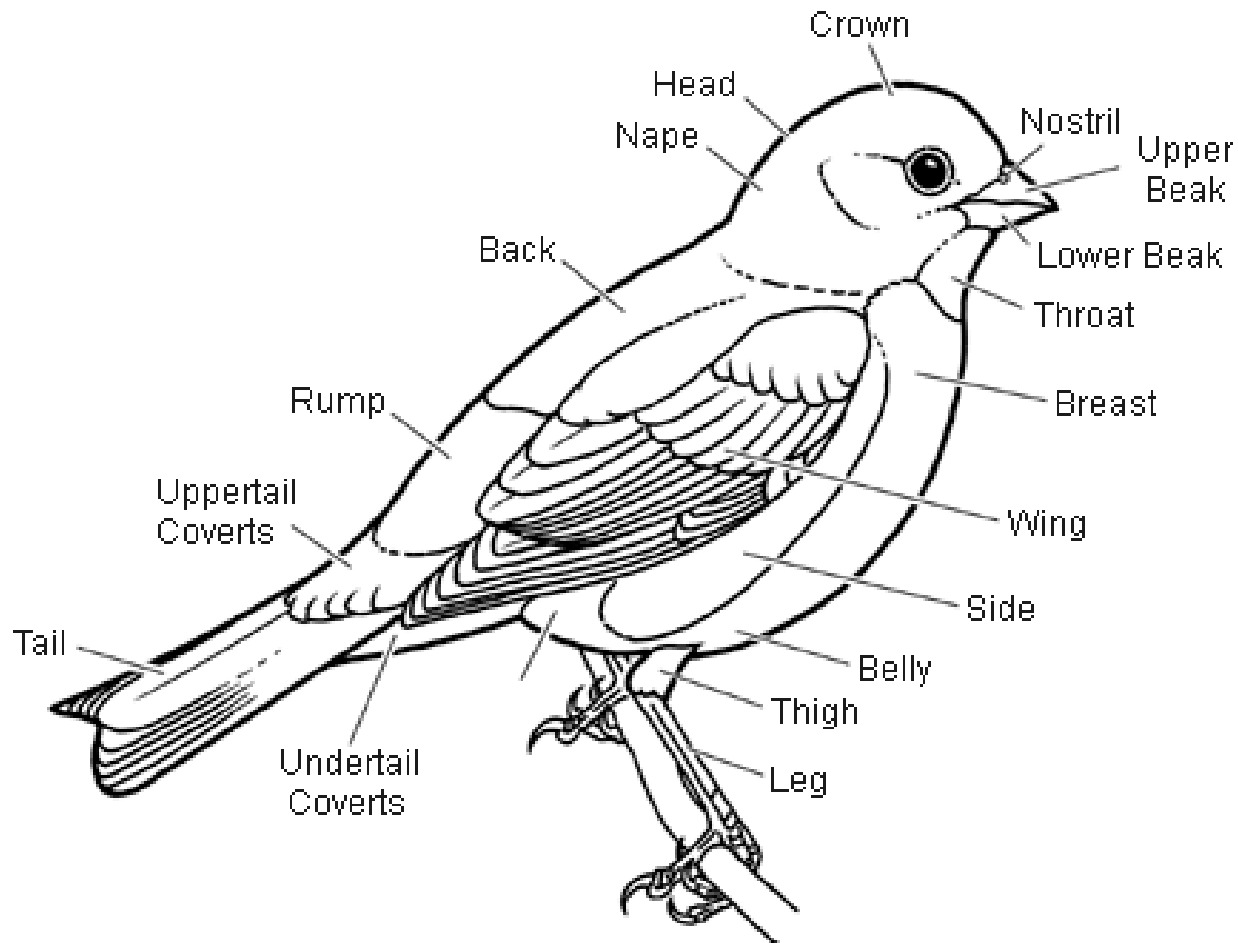
# Basics of Bird Identification

- Visual ID: “Seeing is believing”
  - In most cases, identifying birds is easily accomplished by seeing *external* or *phenotypic* characteristics
  - *Field marks*: external attributes of birds that permit identification
  - Precise vs. coarse identification



# Basics of Bird Identification

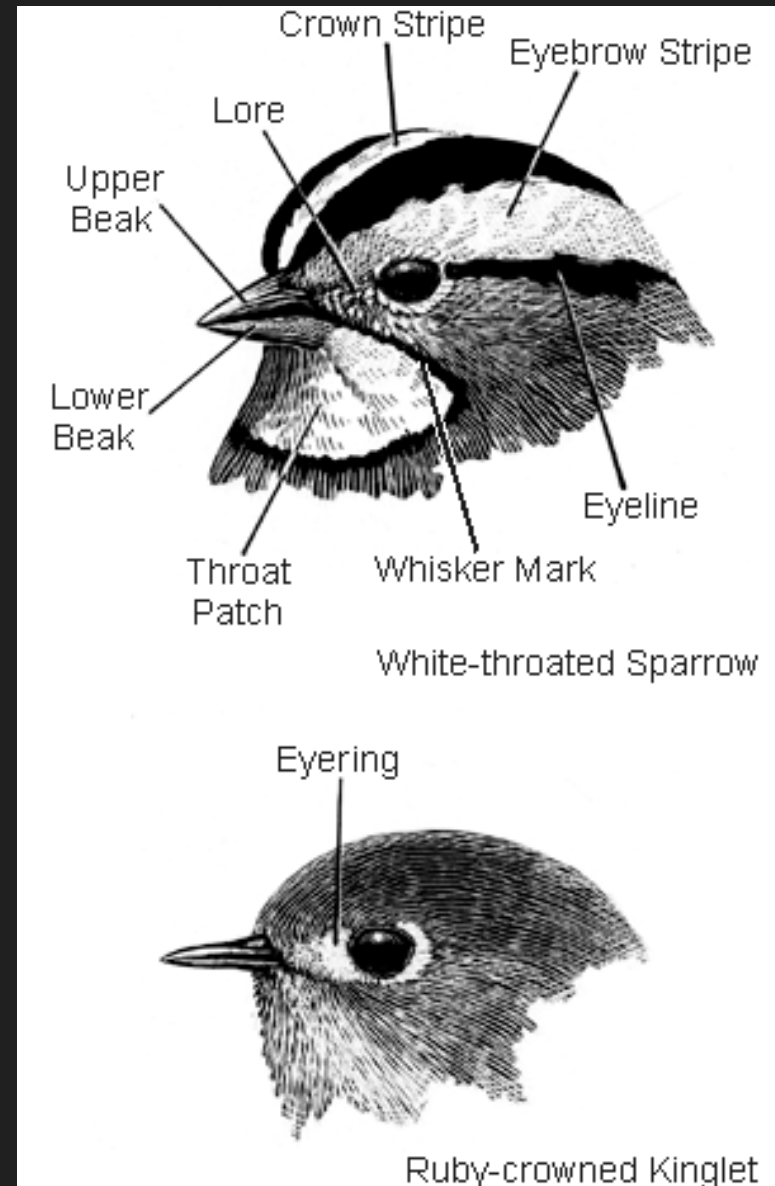
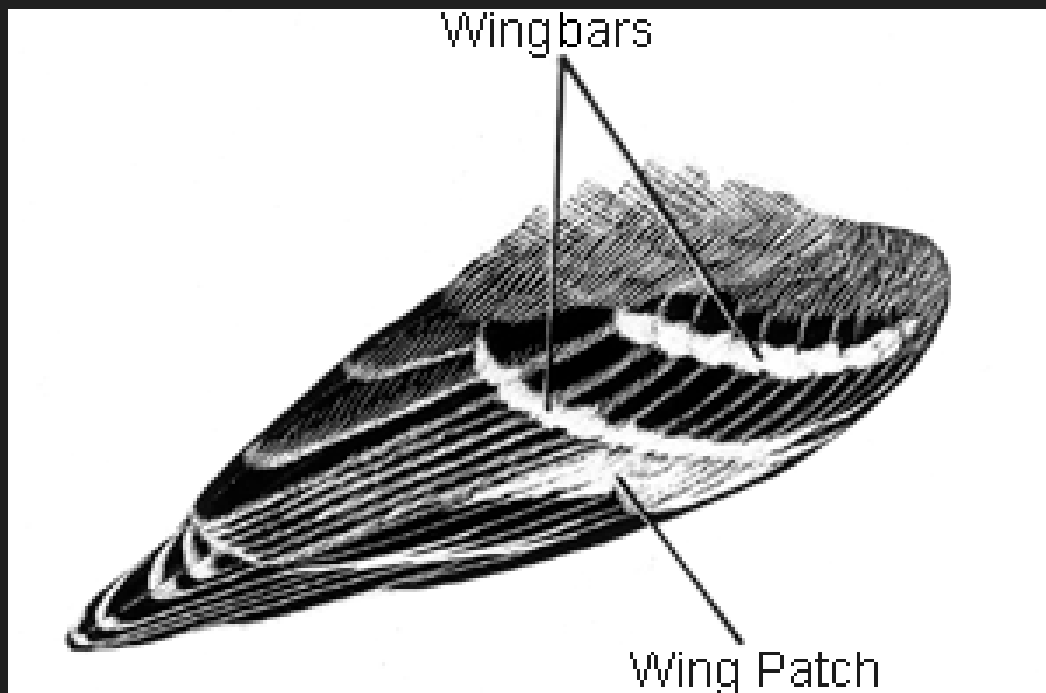
- Where might field marks be located?





# Basics of Bird Identification

- Important locations to consider on the head and wings



# Basics of Bird Identification

- Considerations
  - Figures provide *basic* introduction to common terms
  - More technical terms exist as synonyms
    - eyebrow stripe = *supercilium*
    - back = *mantle*
  - Additional terminology used for certain groups
    - *speculum* (i.e., wing patch) for waterfowl

# Basics of Bird Identification

- Auditory ID: “Hearing is believing”
  - There will *always* be times when visual ID is not possible
    - Birds at a distance, birds flying away, birds in poor light, ‘identical’ species
  - At these times, knowing diagnostic *call notes* or *songs* is important
  - Typically regarded as difficult because there is nothing to see



*Black -capped  
Chickadee*



*Carolina  
Chickadee*



# Basics of Bird Identification

- Phonetic units
  - *Verbal representations or descriptions* of what bird calls or songs sound like
  - Linking calls/songs with words or rhythms gives your brain something it can ‘point’ at



*Who's-a-wake?  
Me-too.*

*Great Horned Owl*



*Killdeer*

*Kill-deer-kill-deer...  
De-dee-deer...*

*Who-cooks-for-you...  
Who-cooks-for-you-all?*

*Barred Owl*



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# Examples

Grayish above

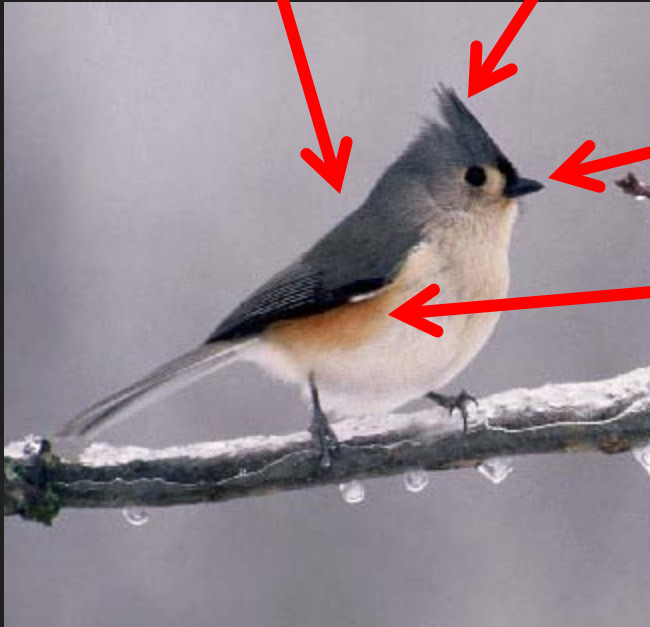
Small crest or tuft

Black patch on forehead

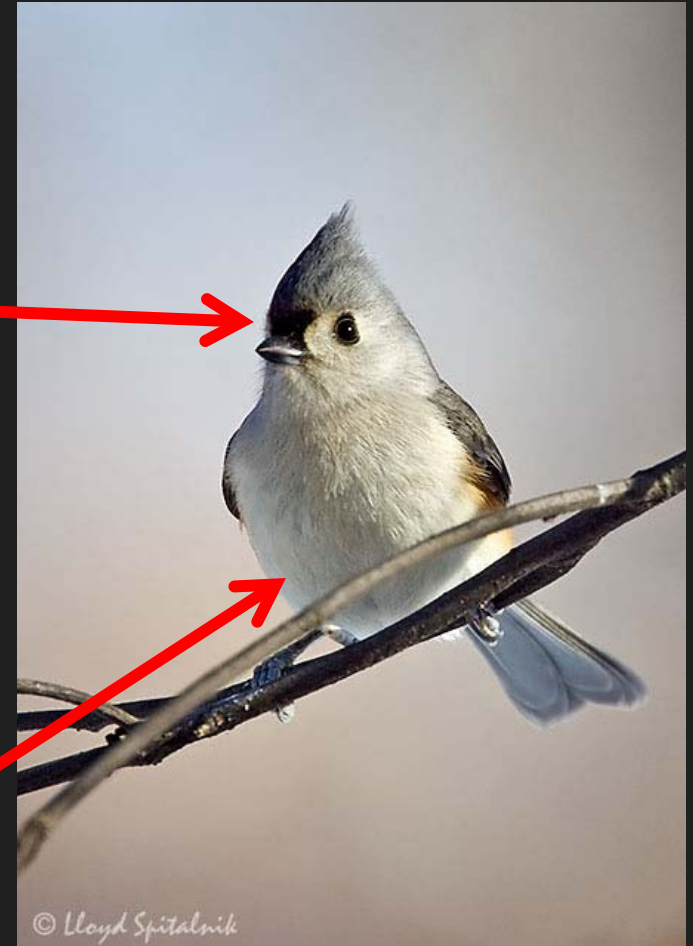
Small, thin bill

Rusty wash on sides or flanks

Whitish below



*Tufted Titmouse*



Song: clear whistles, faintly two-noted; *peter—peter—peter—peter*

Call: nasally, slightly raspy, complaining; *wait—wait*

# Examples

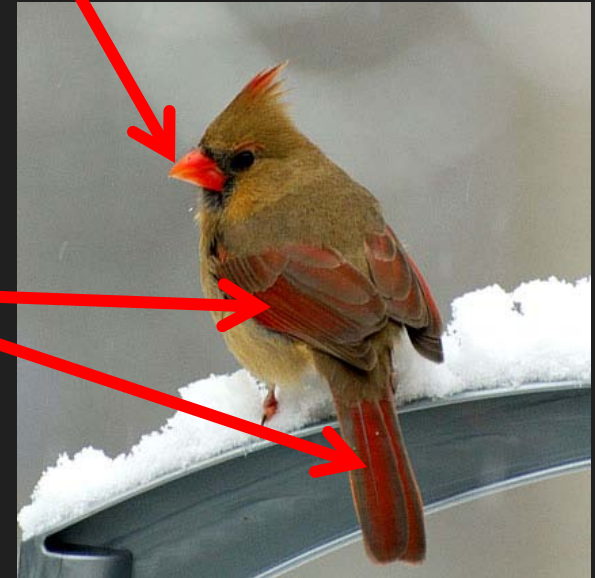
Black mask

Small crest or tuft

Thick, reddish bill



Red (male)  
or reddish-  
olive (female)



*Northern Cardinal*

Song: variable; usually loud, clear, often two-noted whistles; *pur-dee—pur-dee—pur-dee—pur-dee* and/or *cheer—cheer—what—what—what—what*

Call: high pitched, metallic *chip*



# Examples

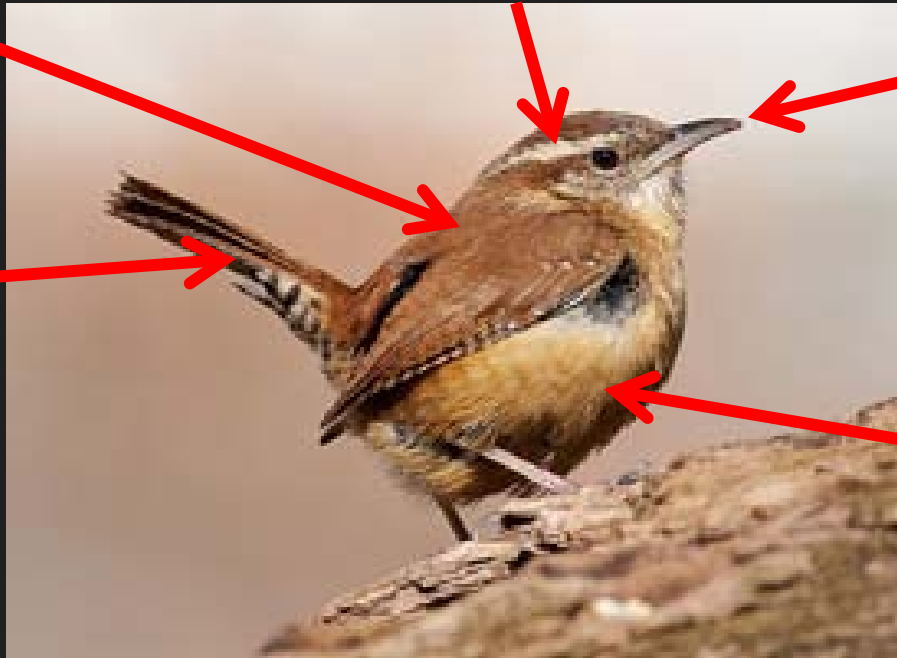
Bold, white eyebrow

Brown above

Tail usually  
cocked

Thin, slightly  
down curved bill

Warm buffy-  
brown below



*Carolina Wren*

Song: loud, repeated, hurried phrases; *tea-kettle—tea-kettle—tea-kettle—tea-kettle*

Call: generally raspy, descending or down-slurred *cheer* or *churr*

# Examples

Size of bill relative to head

DOWO: bill small;  $\frac{1}{2}$  width of head

HAWO: bill larger;  $> \frac{1}{2}$  width of head



Males with  
red patch on  
back of head

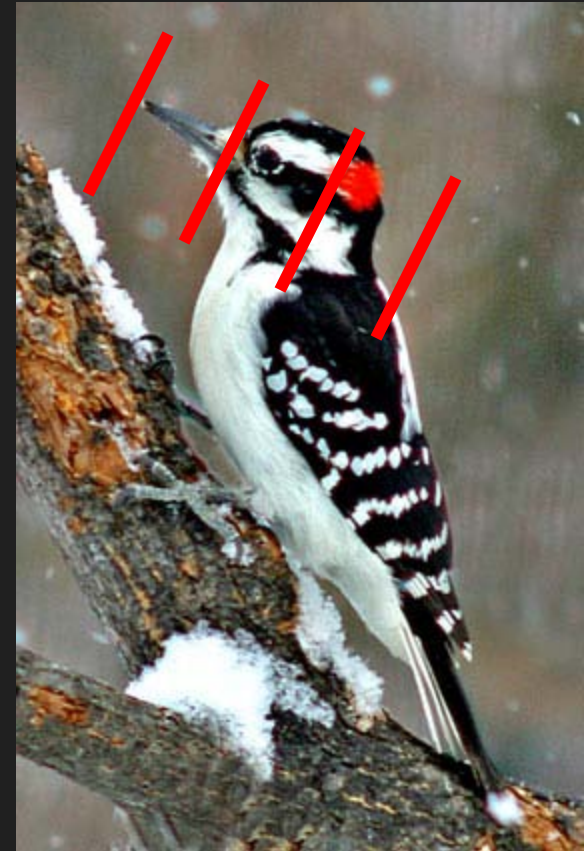
*Downy Woodpecker*

Call: rapid, raspy, *descending rattle* and/or a simple, flat *pik*

Pointed, chisel-  
tipped bill

White below

Black/white above



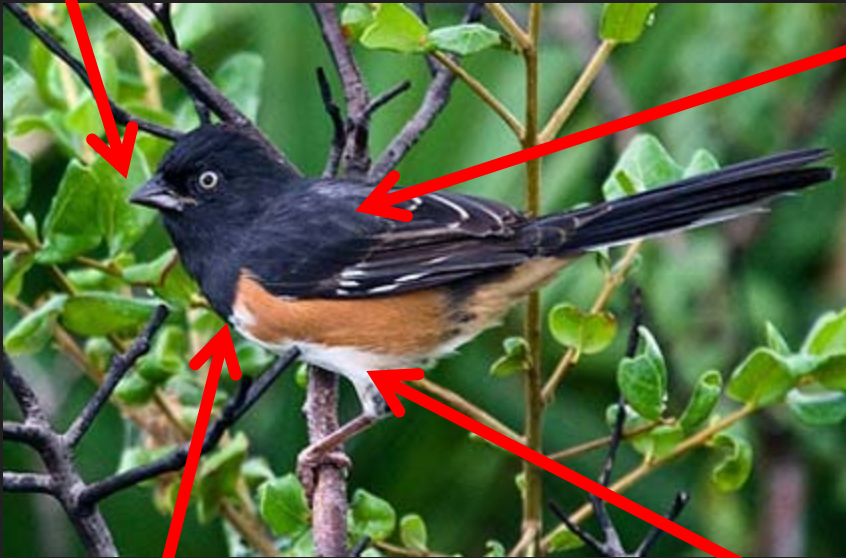
*Hairy Woodpecker*

Call: rapid, *even-toned rattle* and/or simple, higher *peek*

# Examples

Conical, sparrow-like bill

Dark (black or brown) above



Bibbed appearance

White below

Rusty sides or flanks

*Eastern Towhee*

Song: series of whistles with distinct cadence; *drink-your-teeeee*

Call: Usually like first note of song; ascending, whistled *drink*

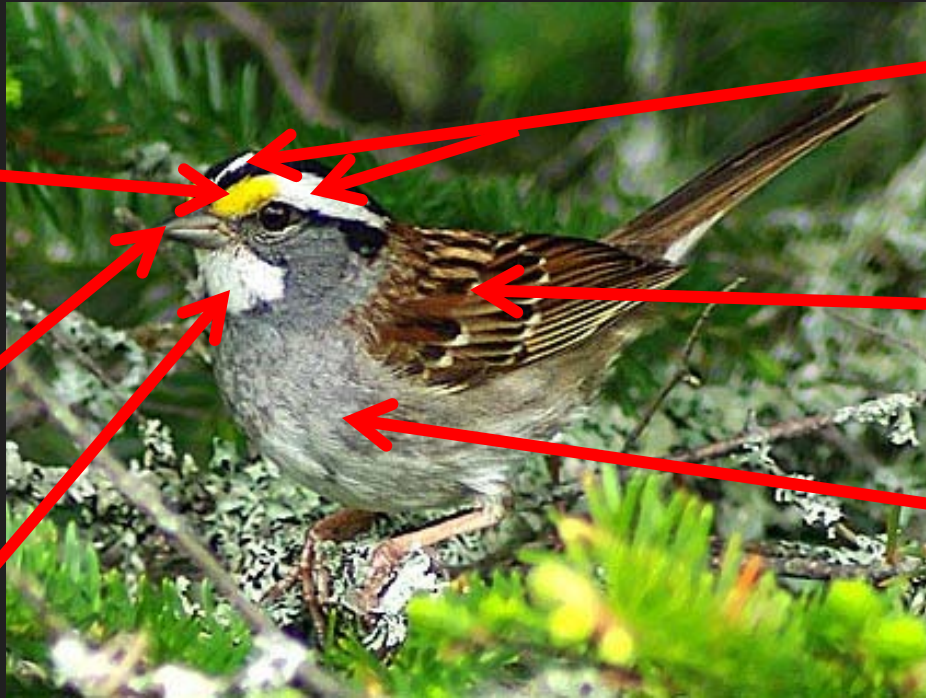


# Examples

Yellow eye spot  
or *lores*

Small, conical  
bill

Clear, white  
throat



White eyebrow  
and crown stripes

Brown above

Grayish below

*White-throated Sparrow*

Song: few clear introductory whistles followed by a diagnostic cadence of three-parted whistles; *poor—sam—pea-bod-y—pea-bod-y—pea-bod-y*

Call: usually an abrupt, metallic *chink* or a high, thin *seet*

# Identification Tips

- Six tips for successful ID and improved learning
  - Identify Yourself; Thompson et al. 2005

## 1) Watch the bird, not the book

- Ignore temptation to immediately open field guide; carefully observe field marks first





# Identification Tips

## 2) Be an organized observer

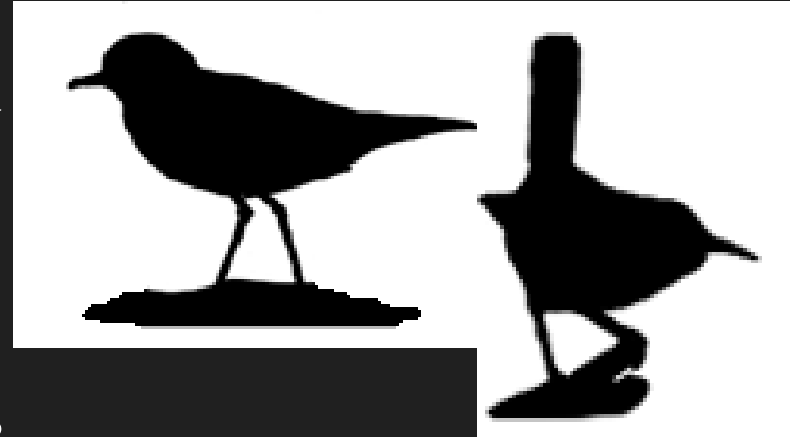
- When possible, start at the head and move backwards. Head and bill characteristics can quickly narrow ID to specific group



# Identification Tips

## 3) Shape, color, and size

- Shape most reliable; quickly narrows down ID
- Color good at times, but should be used with caution; influenced by feather wear and light
- Size should always be used with caution; difficult to judge at distance or when looking through optics; best used as relative measure



# Identification Tips

## 4) Use your ears

- Recognizing bird songs/calls greatly improves ability to ID. Watching birds sing/call facilitates learning.



## 5) Make it a social event and take notes

- Simply put, birding with others facilitates learning

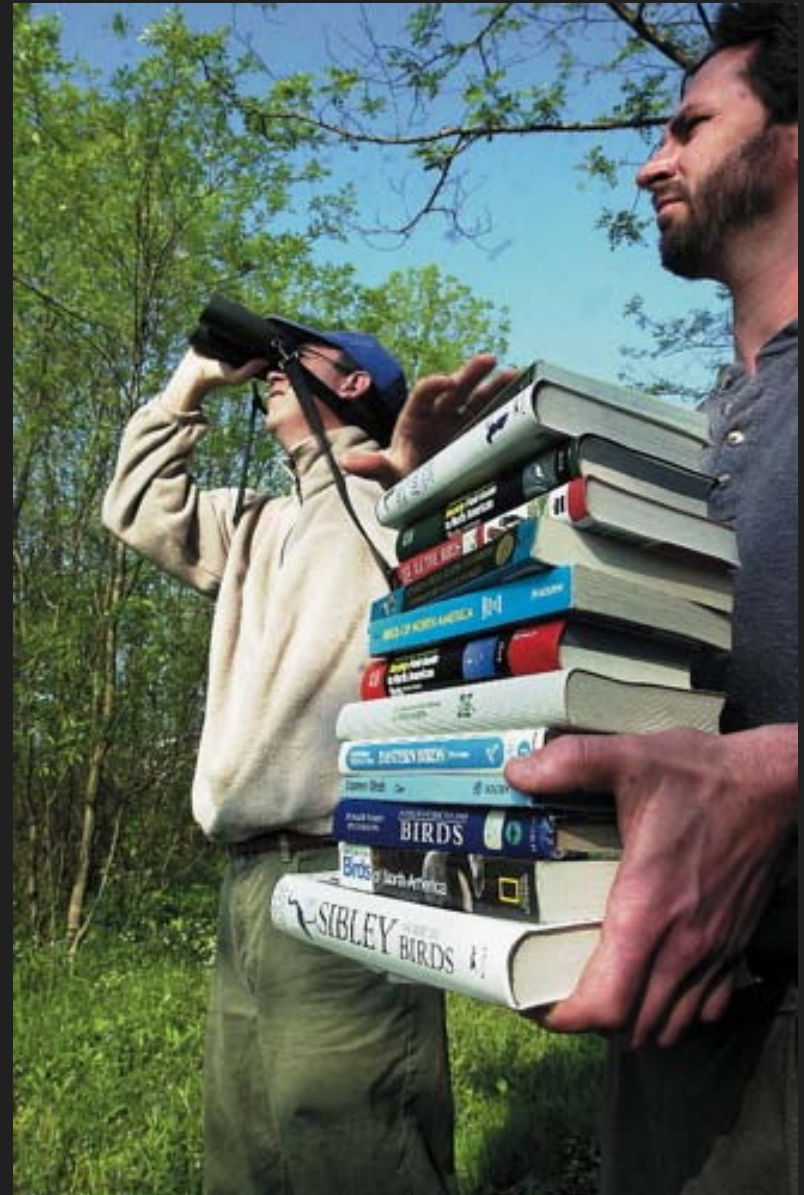




# Identification Tips

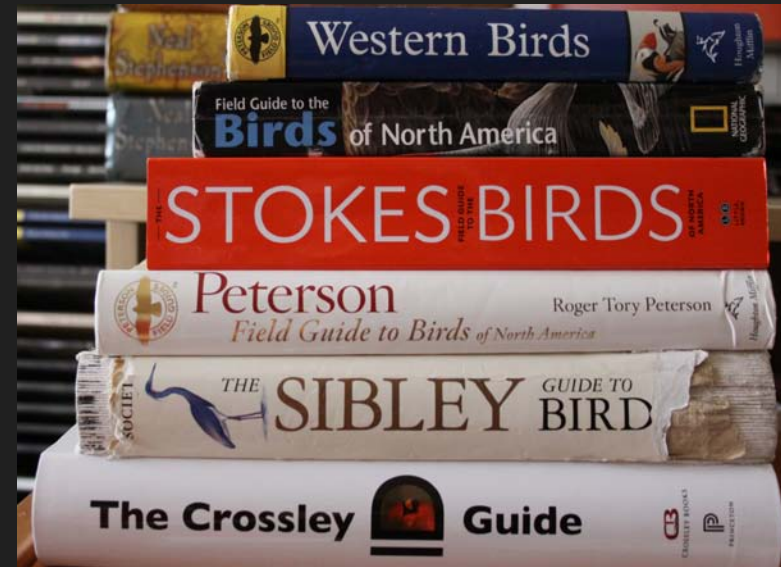
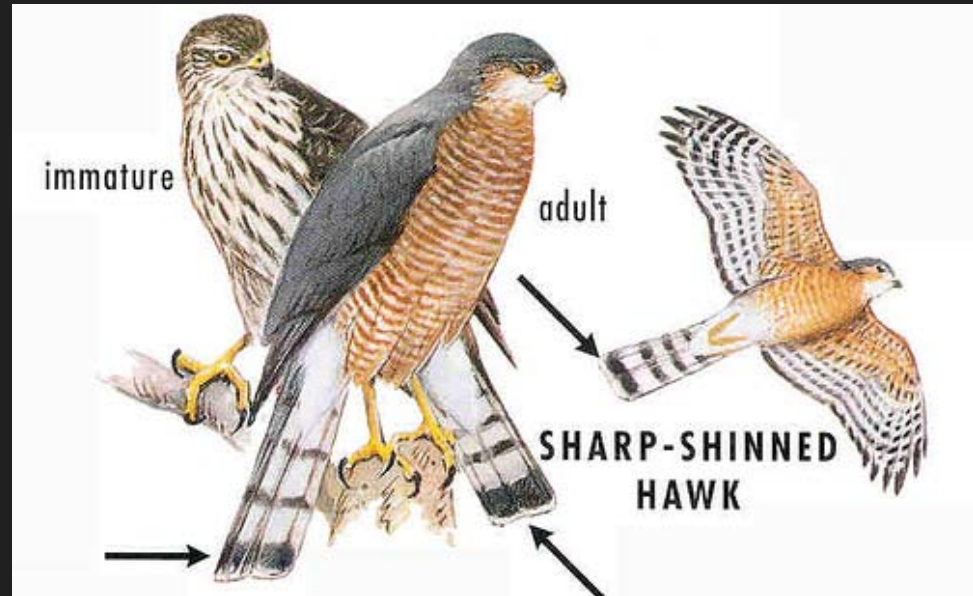
6) In theory, practice makes perfect

- Spending time in the field quickly improves ID skills. However, **EVERYONE** makes misidentifications.
- “1 hr spent watching wild birds = 3 hrs or more of looking at pictures in a book”



# Resources

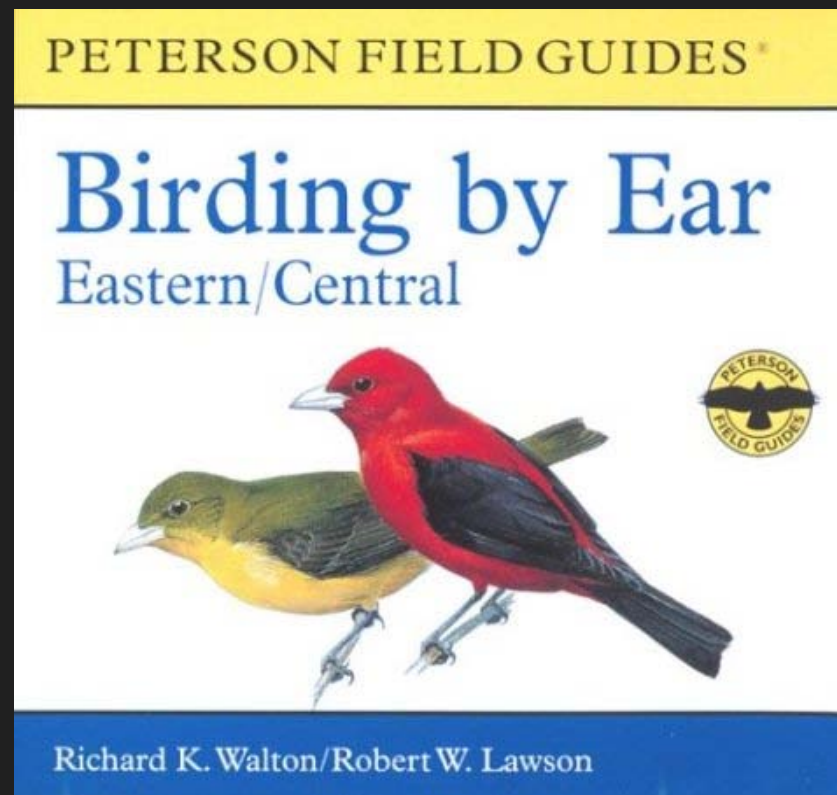
- Field guides
  - Drawings vs. photographs
  - Regional vs. national
- Focused learning
- Examples
  - Peterson, Sibley
  - Identify Yourself
  - Hawks from Every Angle





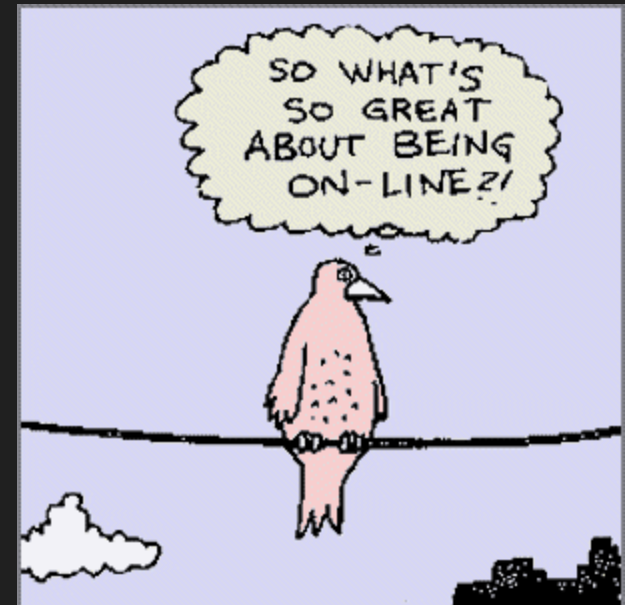
# Resources

- Audio Guides
  - Companion guides vs. stand-alone guides
- Examples
  - Peterson
  - Stokes



# Resources

- Websites
  - Learning resources
  - Visual/auditory guides
  - Quizzes
- Examples
  - Cornell Lab of Ornithology
    - <http://www.allaboutbirds.org>
  - Patuxent Wildlife Research Center
    - <http://www.pwrc.usgs.gov/birds/>



# Upcoming Schedule

- 11 February 2012: Big River Management Area
  - 9-11 a.m.; DEM Pull-off (near bridge) on Congdon Mill Rd.
- 3 March 2012: Ninigret NWR
  - 8-10 a.m.; West Entrance Parking Lot
- 24 March 2012: Arcadia Management Area
  - 8-10 a.m.; Tefft Hill Trail off Arcadia Rd.
- 14 April 2012: Carolina Management Area
  - 8-10 a.m.; DEM Check Station on Pine Hill Rd.
- 5 May 2012: Great Swamp Management Area
  - 8-10 a.m.; Parking Lot beyond Headquarters on Great Neck Rd.