



Soaring Past COVID

Raptors of Washington



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Fall 2020



Overview of Course

- Lectures
 - Key Characteristics
 - Buteos
 - Harriers & Accipiters
 - Falcons
 - Eagles, Vultures, Kites, & Review
- Homework
 - Review

- 20 species in Washington
- Goals
 - Learn to identify raptors
 - Know what characteristics to check
 - Have some understanding of behavior, ecology, & distribution
- Thomas Bancroft –
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 - Cell phone – 202 297 8501



Rules for Identifying

- One bird at a time
- Identify a bird to a broad category
 - Then narrow to a smaller group, then to species
- Look for 3 or more clues to identify the bird
- Remember everyone makes mistakes, that is okay, learn from them.



How to Identify Raptors

- Shape & Size
- Color Patterns (Markings)
- Behavior
- Habitat & Distribution
- Calls



Scientific Name

- Genus & species makes the scientific names.
 - *Buteo jamaicensis* - Red-tailed Hawk
 - *Accipiter striatus* - Sharp-shinned Hawk
 - *Falco columbarius* - Merlin
 - *Circus hudsonius* - Northern Harrier

Group of birds that are related are in the same genus, the next higher level is the family level, and they are related at the next higher level.

Many characteristics are similar for members of the same genus.

Break Them Down into Smaller Groups

- Vultures



- Eagles & Osprey



- Buteos



- Accipiters



- Falcons



- Harriers



- Kites



Vultures



California Condor

@ Macaulay Library



Turkey Vulture



Black Vulture

Eagles & Osprey



Golden Eagle

@ Macaulay Library



Osprey



Bald Eagle

Buteos

Red-tailed
Hawk



Swainson's Hawk



Red-shouldered Hawk



Rough-legged Hawk



Ferruginous Hawk



Accipiters

Sharp-shinned
Hawk




Cooper's Hawk



Northern Goshawk

Falcons

A Merlin (Taiga) falcon is shown in flight against a clear blue sky. The bird has a compact body, a long, straight beak, and wings with a mix of brown, grey, and white feathers. Its tail is short and broad.

Merlin
(Taiga)



Peregrine Falcon



Prairie Falcon



American
Kestrel



Gyr Falcon

Harriers



Northern Harrier



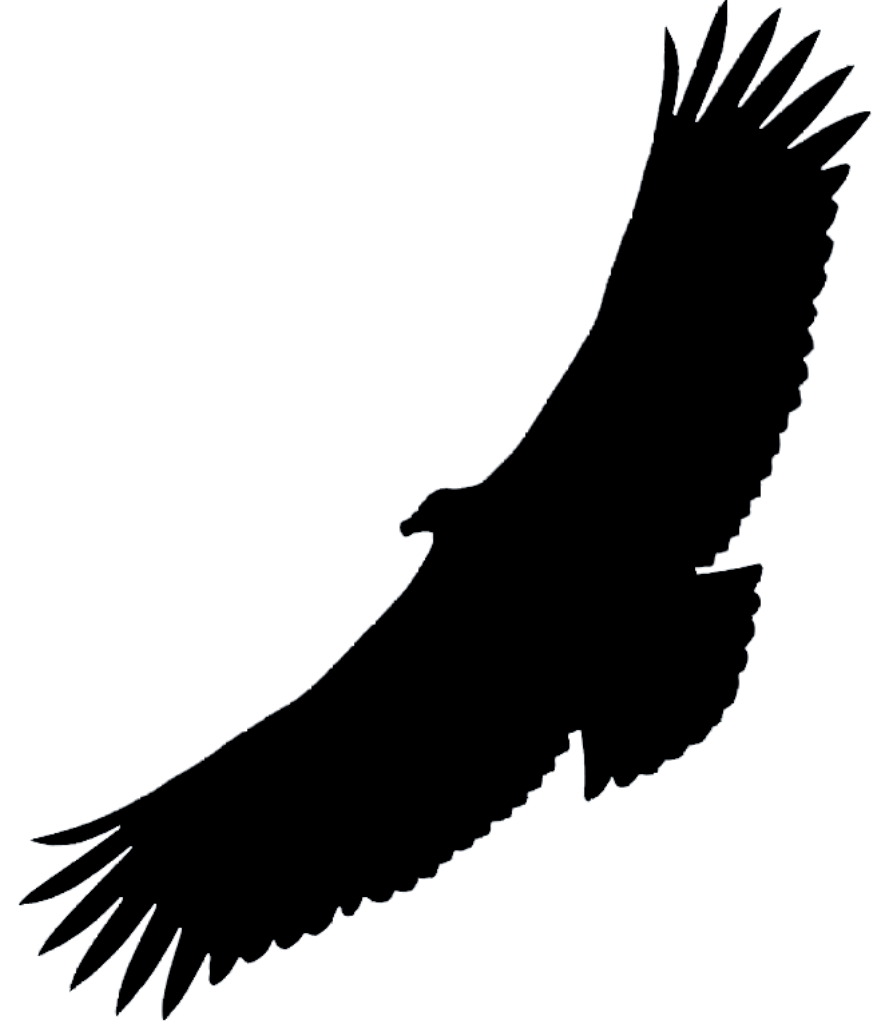
Kites



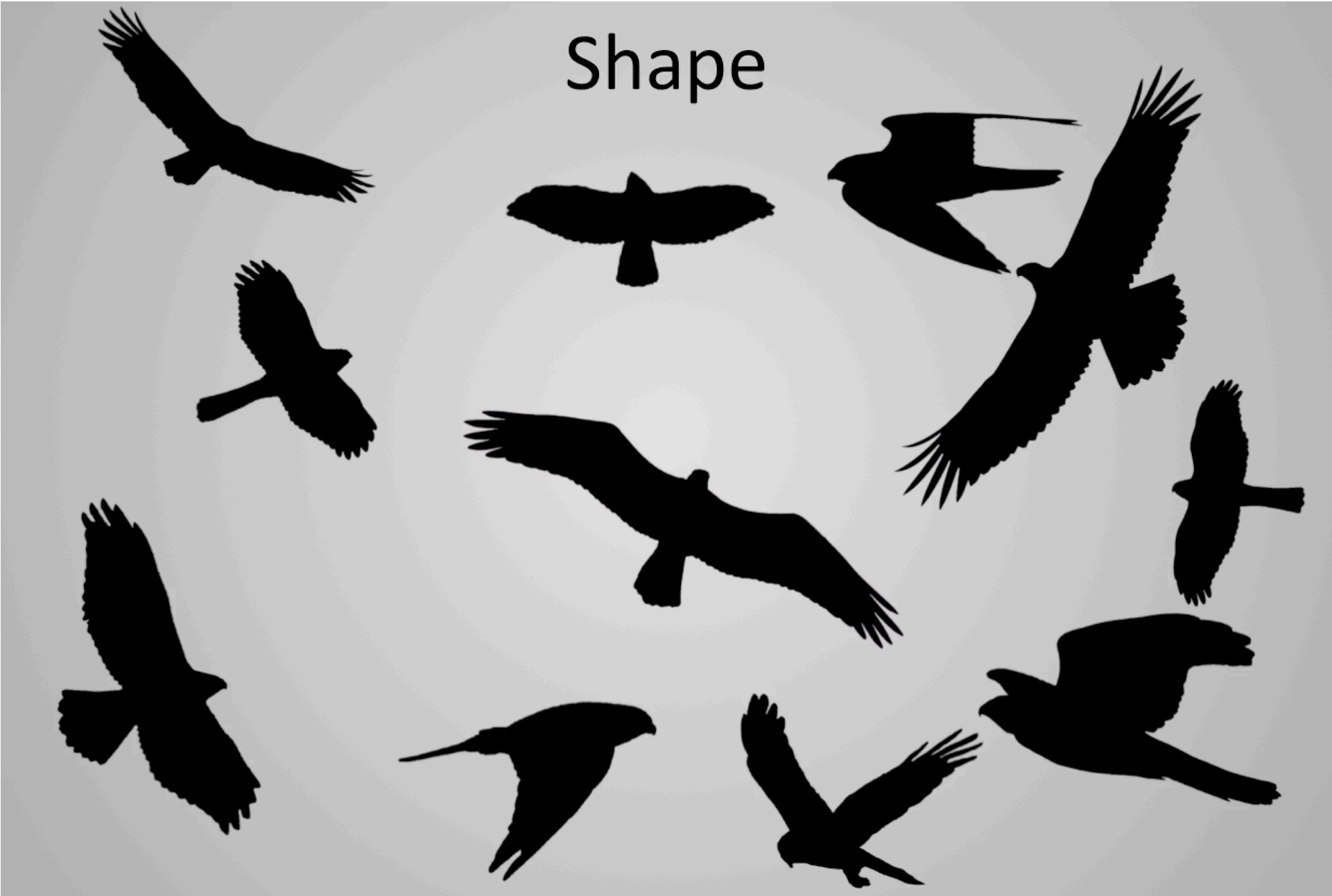
White-tailed Kite

How to Identify Raptors

- **Shape** & Size
- Color Patterns (Markings)
- Behavior
- Habitat & Distribution
- Calls



Shape



Raptor Diversity

- Vultures



- Eagles & Osprey



- Buteos



- Accipiters



- Falcons



- Harriers



- Kites



Shape

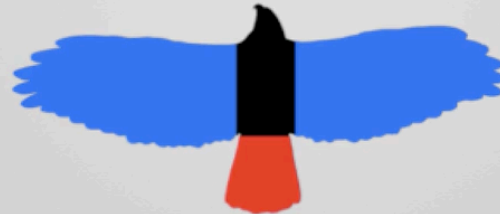
- Wing shape



- Tail shape



- Proportions

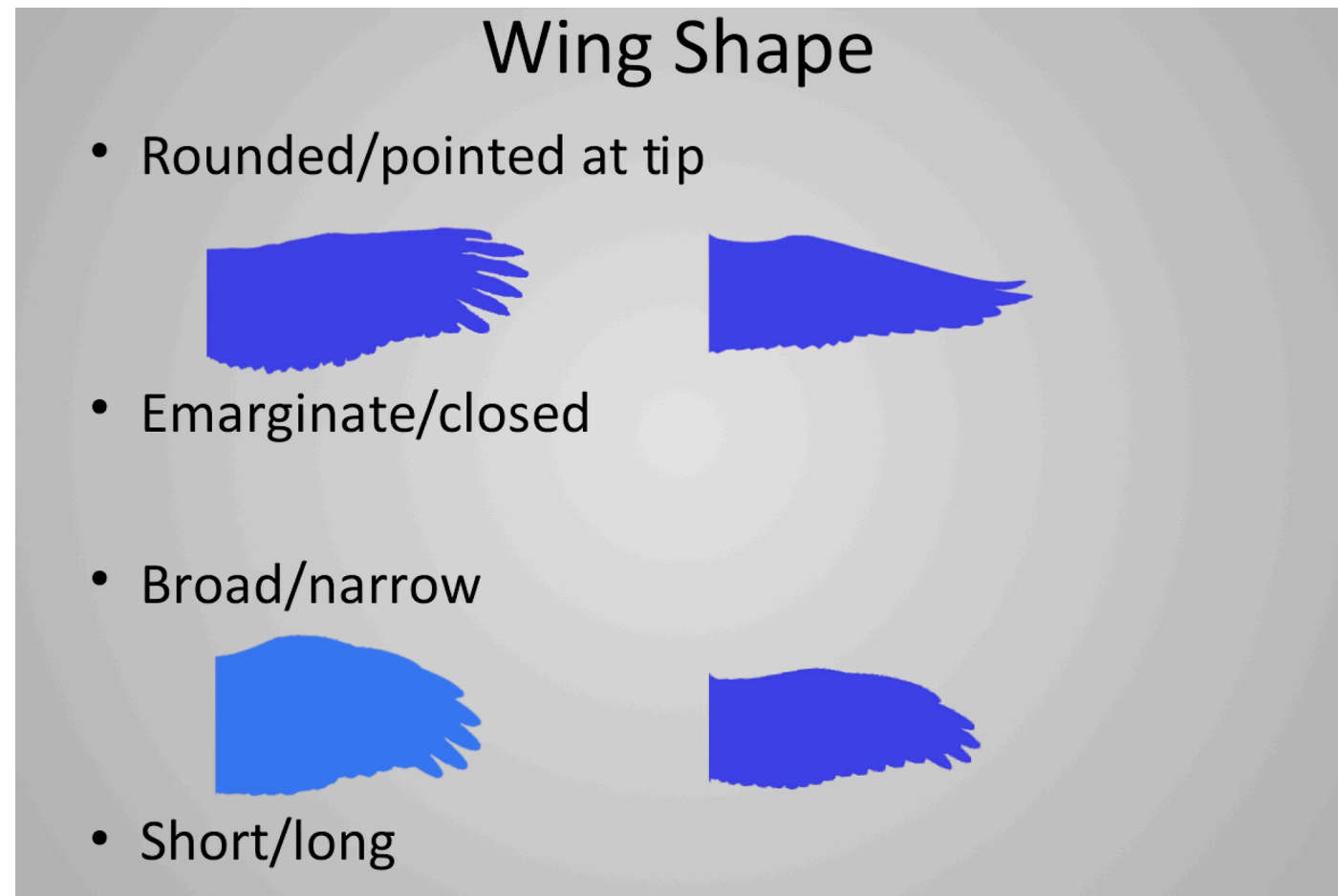


- Posture



Wing Shape

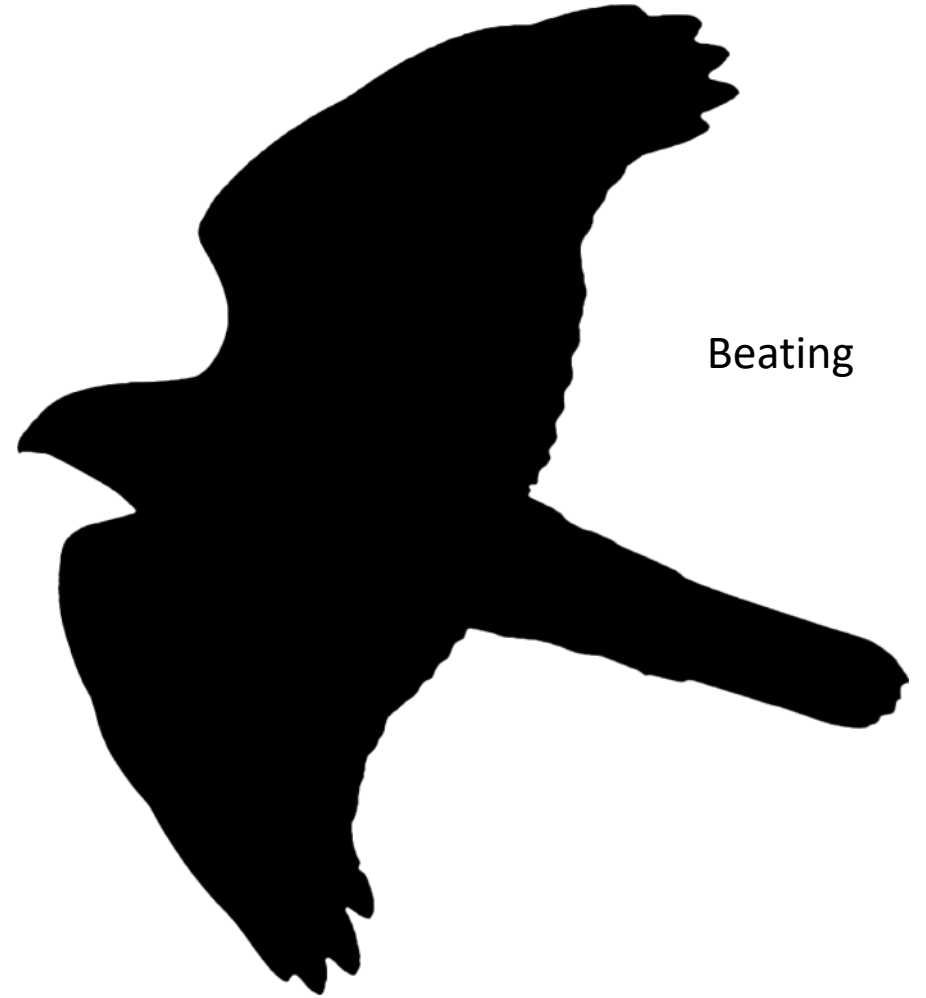
- Rounded or pointed at tip
- Emarginated
- Broad or Narrow
- Short or long



Wing Shape – look at how it varies



Soaring



Beating

Cooper's Hawk

Tail Shape

- Long/short



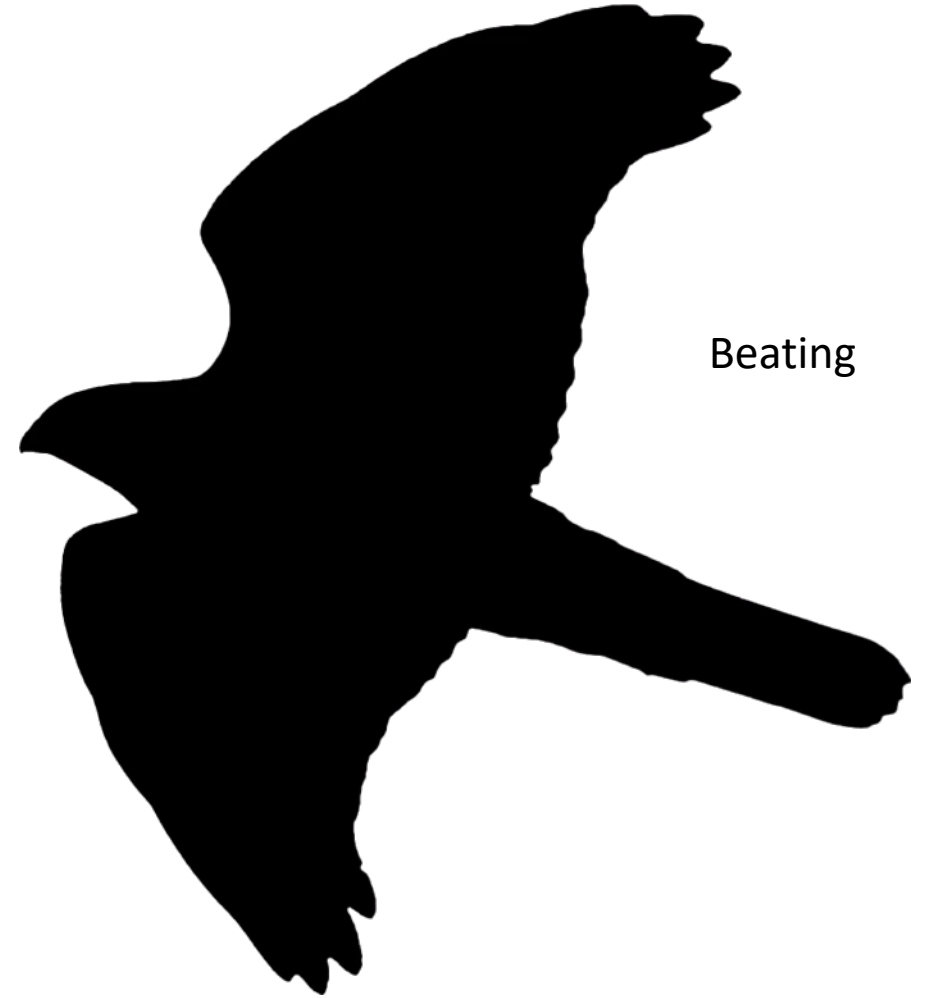
- Notched/square/rounded/pointed tip



Tail shape – it can vary



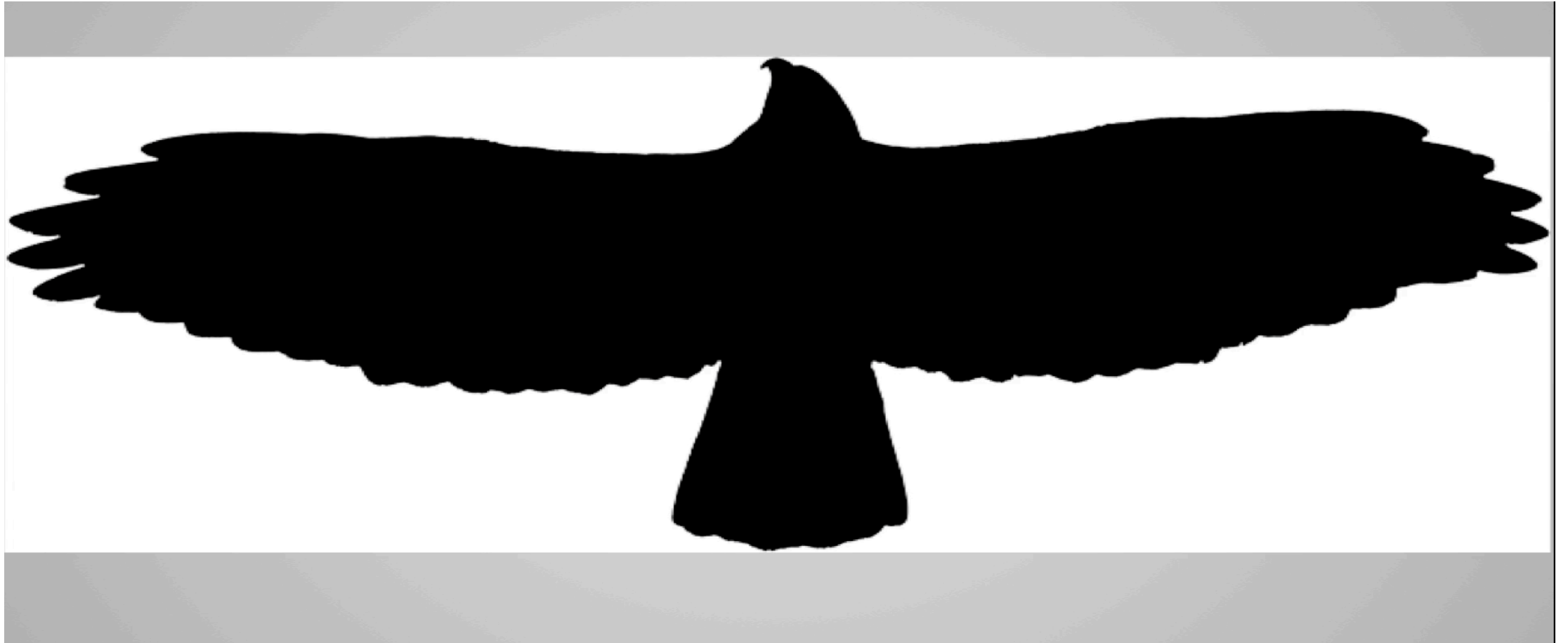
Soaring



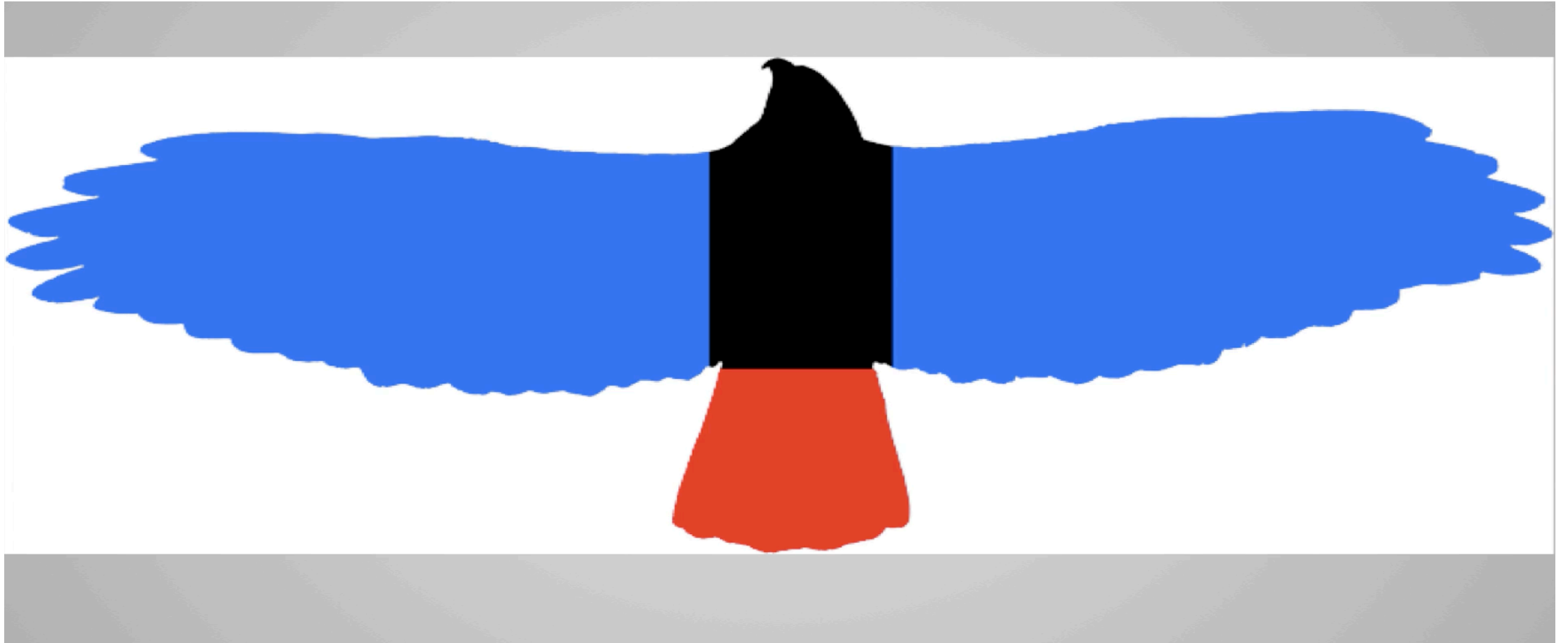
Beating

Cooper's Hawk

Red-tailed Hawk Proportions



Red-tailed Hawk



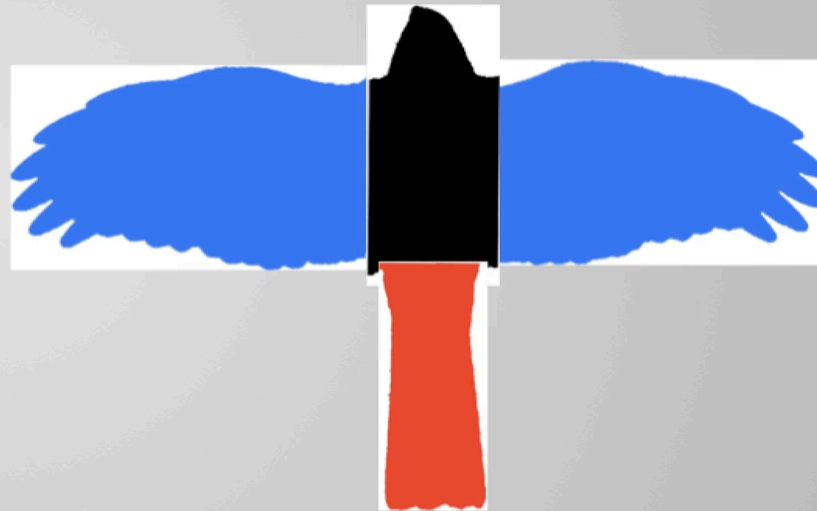
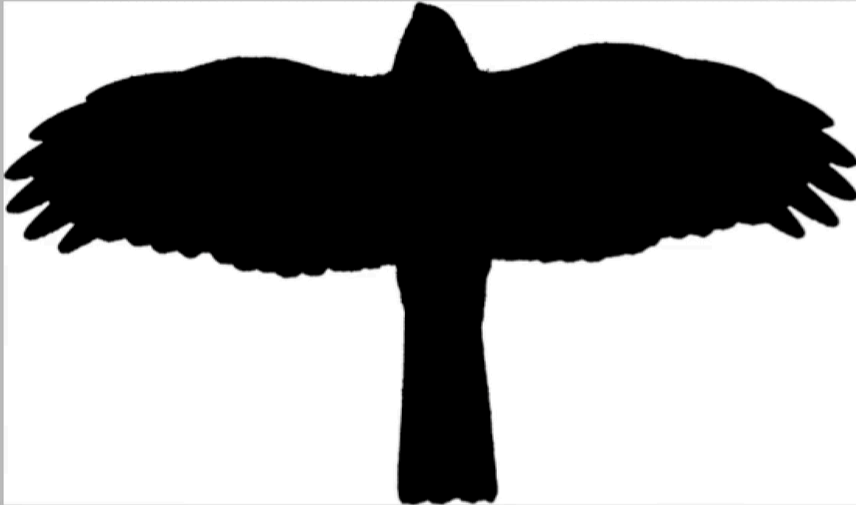
Red-tailed Hawk

Tail < Head&body < Wing length

Medium wings, short tail



Sharp-shinned Hawk



Sharp-shinned Hawk

Head&body \leq Wing length = Tail

Short wings, long tail



Red-tailed Hawk

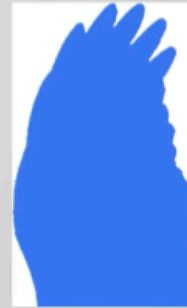
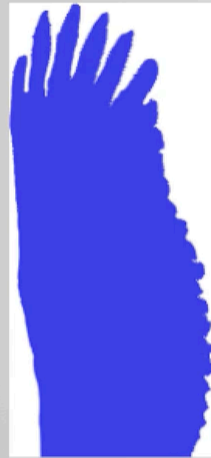
Bald Eagle

Peregrine Falcon

Sharp-shinned Hawk



Head+body



Wings



Tail

Proportions of North American Raptors

Raptor Category	Wing Length	Wind Width	Wing Shape	Tail Length
Vultures	Long	Broad	Rounded	Short
Eagles	Long	Broad	Rounded	Short
Buteos	Moderately Long	Broad	Rounded	Long
Accipters	Short	Broad	Rounded	Long
Falcons	Long	Narrow	Pointed	Long
Harriers	Long	Narrow	Rounded	Long

Questions?

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I'm not a guru. I'm trying to learn shapes in raptors.

Body – Wing – Tail Comparison

Tail Length?
Wing Length?
Wing Width?

Not a North American Species
This is for you to practice proportions



Body – Wing – Tail Comparison

Tail Length?
Wing Length?
Wing Width?

Not a North American Species

This is for you to practice proportions



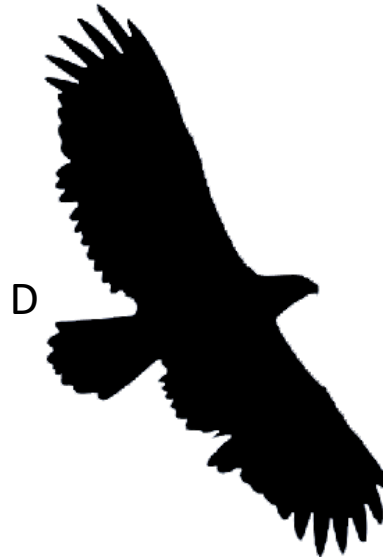
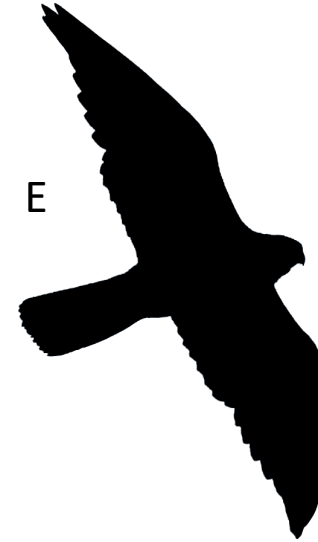
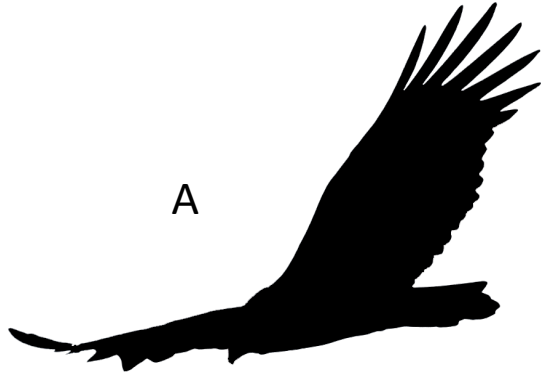
Body – Wing – Tail Comparison

Tail Length?
Wing Length?
Wing Width?



Not a North American Species
This is for you to practice proportions

Use Flying Shape to Classify These Raptors into a Group



- ☐ Buteo
- ☐ Vulture
- ☐ Eagle
- ☐ Falcon
- ☐ Accipiter

Shape

Posture Component



Shape



Sharp-shinned Hawk

Look at wing to tail length



Merlin (Prairie)

Shape



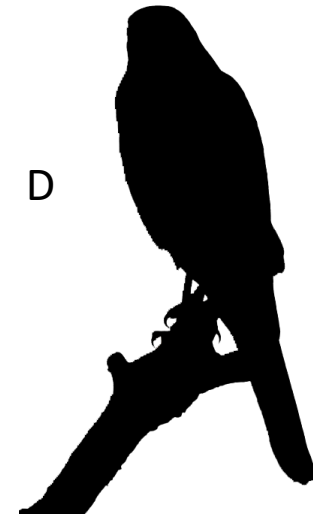
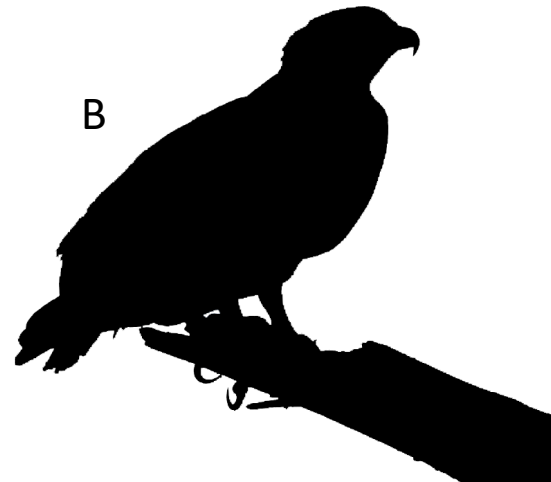
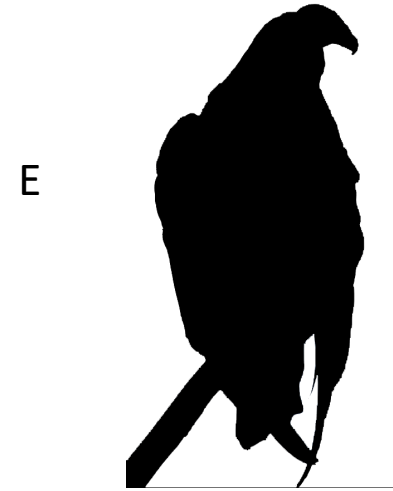
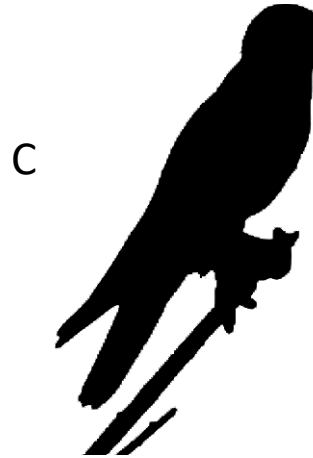
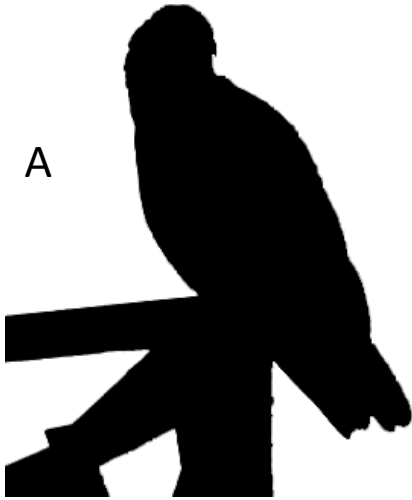
Cooper's Hawk



Red-shouldered Hawk

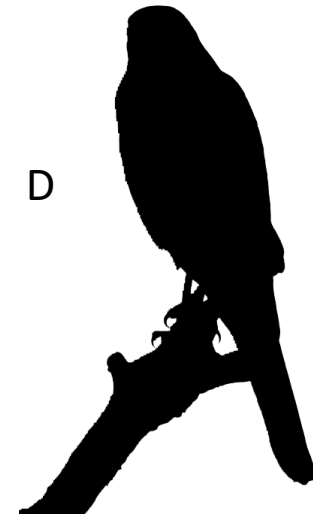
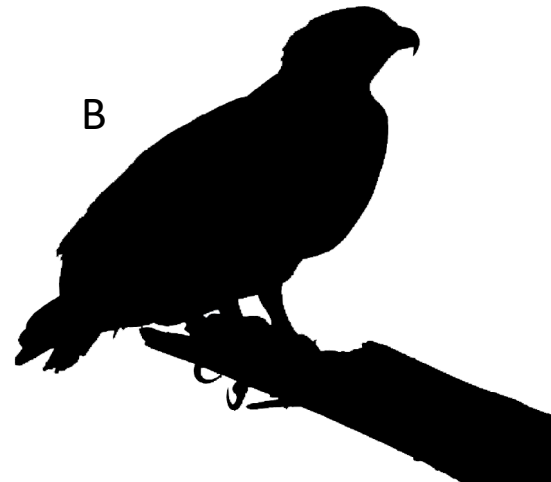
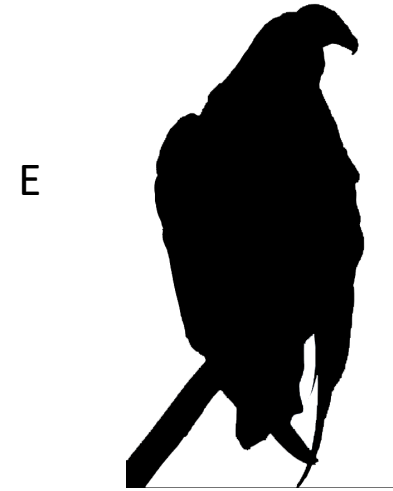
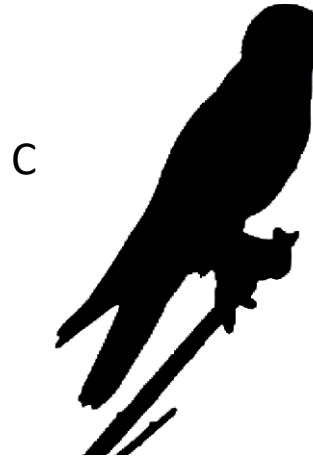
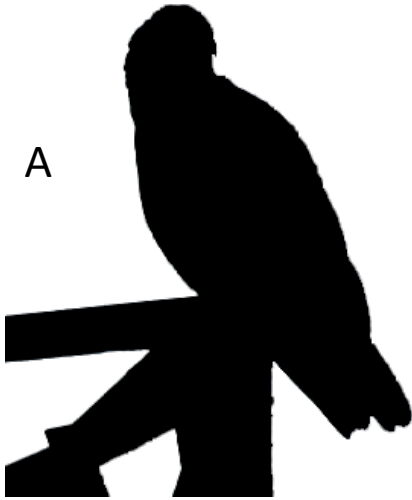
Look at wing to tail length

Use Posture to Classify These Raptors into Groups



- _____ Vulture
- _____ Accipiter
- _____ Buteo
- _____ Falcon
- _____ Osprey

Use Posture to Classify These Raptors into Groups



- _____ Vulture
- _____ Accipiter
- _____ Buteo
- _____ Falcon
- _____ Osprey

How to Identify Raptors

- Shape & Size
- Color Patterns (Markings)
- **Behavior**
- Habitat & Distribution
- Calls



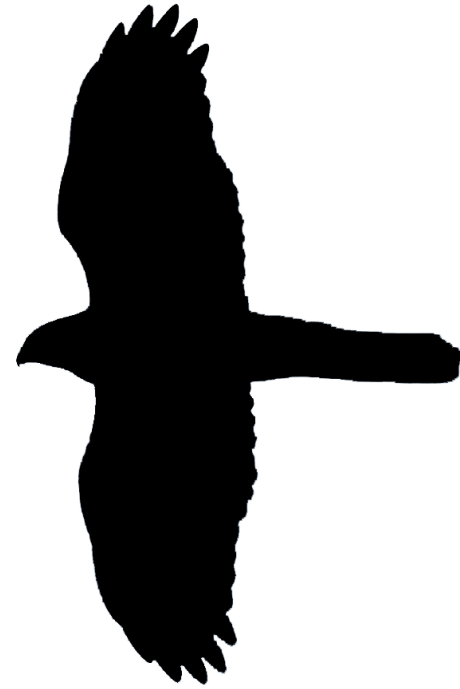
Behavior

- Flight Style
- Foraging Method
- Gregariousness
- Bobs and twitches



Flight Style

- Soaring
 - Flat, Bent, Dihedral
 - Long or Flap & Soar
 - Power flight (Falcons)
 - Flap, flap, glide (Red-tailed Hawk & Accipiters)
 - Glide, flap, glide (Northern Harrier)
- Direct Flight
- Hovering



Flight style - soaring

FLAT



Bald Eagle



Black Vulture

BENT



Osprey



Red-tailed Hawk

DIHEDRAL



Turkey Vulture



Northern Harrier



White-tailed Hawk

Flight style - soaring

Long Soar



California Condor



Turkey
Vulture



Bald
Eagle



Red-tailed Hawk

Flap and Soar



Cooper's Hawk

Flight style - straight

Power Flight



Prairie Falcon



Peregrine Falcon

Flap, Flap, Glide



Sharp-shinned
Hawk



Cooper's
Hawk



Red-tailed
Hawk

Glide, Flap, Glide



Northern Harrier

Foraging Method

- Hover
- Perch and drop
- Dash and pursuit
- Soar and stoop
- Low and slow



Foraging method – hovering



Foraging method – Perch



Swainson's Hawk



Red-tailed Hawk



Rough-legged Hawk



American
Kestrel

Foraging method – Dash and Pursue



Northern Goshawk

From in a Forest

Sharp-shinned
Hawk



Cooper's
Hawk



Foraging method – Dash and Pursue



Peregrine
Falcon

Often done from open
Or from on the wing

Gyr Falcon



Merlin

Prairie
Falcon



Foraging method – Soar and Stoop

Turkey
Vulture



Golden
Eagle



Foraging method – Low and Slow



Northern
Harrier



Rough-legged Hawk

Gregariousness – Hawk Migrations



Gregariousness – vultures



Turkey Vultures



Black
Vultures



Black
&
Turkey
Vulture



Bobs & Twitches

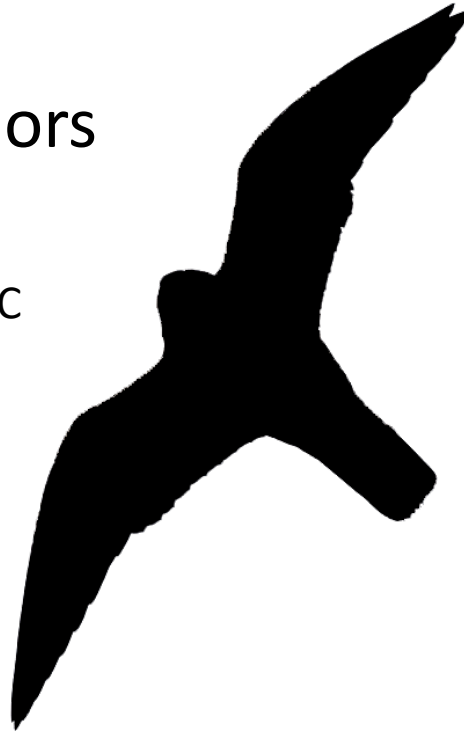


Foraging Behaviors

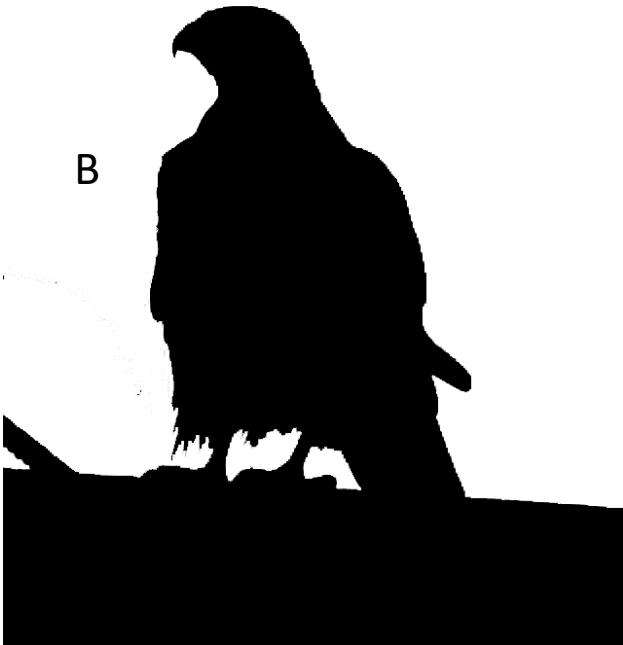
A



C



B



D



Foraging Behaviors can
Help you identify species

Do you recognize these
Behaviors?

- ☐ Hovering
- ☐ Perch & Drop
- ☐ Dash & Pursuit
- ☐ Soar & Stoop



Questions?

Feel free to email me to?
gtbancroft@gmail.com

How to Identify Raptors

- Shape & **Size**
- Color Patterns (Markings)
- Behavior
- Habitat & Distribution
- Calls



Cooper's Hawk



Sharp-shinned Hawk



Merlin

Size – It is relative and hard to tell absolute



Photo from Feederwatch – taken by Jay McGowan
<https://feederwatch.org/blog/sharp-shinned-hawk-versus-coopers-hawk/>

Size



The Bird Yard Stick - from Kevin McGowan at Cornell Laboratory of Ornithology

SCALE IN BIRDS



SCALE IN BIRDS



Size – Larger or Smaller than a Crow?



Red-tailed Hawk



American Crow

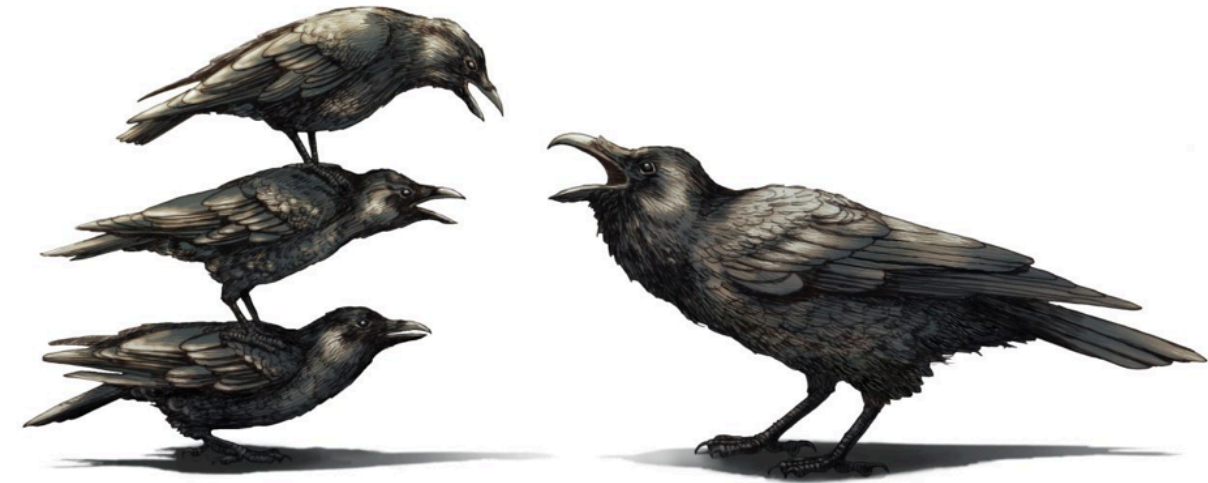


Cooper's Hawk

Size – Larger or Smaller than a Crow?



Watch out for Ravens!



How to Identify Raptors

- Shape & Size
- **Color Patterns (Markings)**
- Behavior
- Habitat & Distribution
- Calls



Color Pattern



Color Pattern

- White Patches
- Barring

Red-shouldered
Hawk



Gray Hawk



Rough-legged Hawk



Ferruginous
Hawk



Tail barring



Red-shouldered Hawk



Merlin



Red-tailed Hawk



Sharp-shinned Hawk

Tail barring

Peregrine
Falcon



Red-tailed
Hawk



Cooper's
Hawk



Where is the White?

- Rump
- Wings
 - Hands
 - Lining
- Tail
- Head

Bald
Eagle



Golden Eagle

White Rump



Rough-legged Hawk



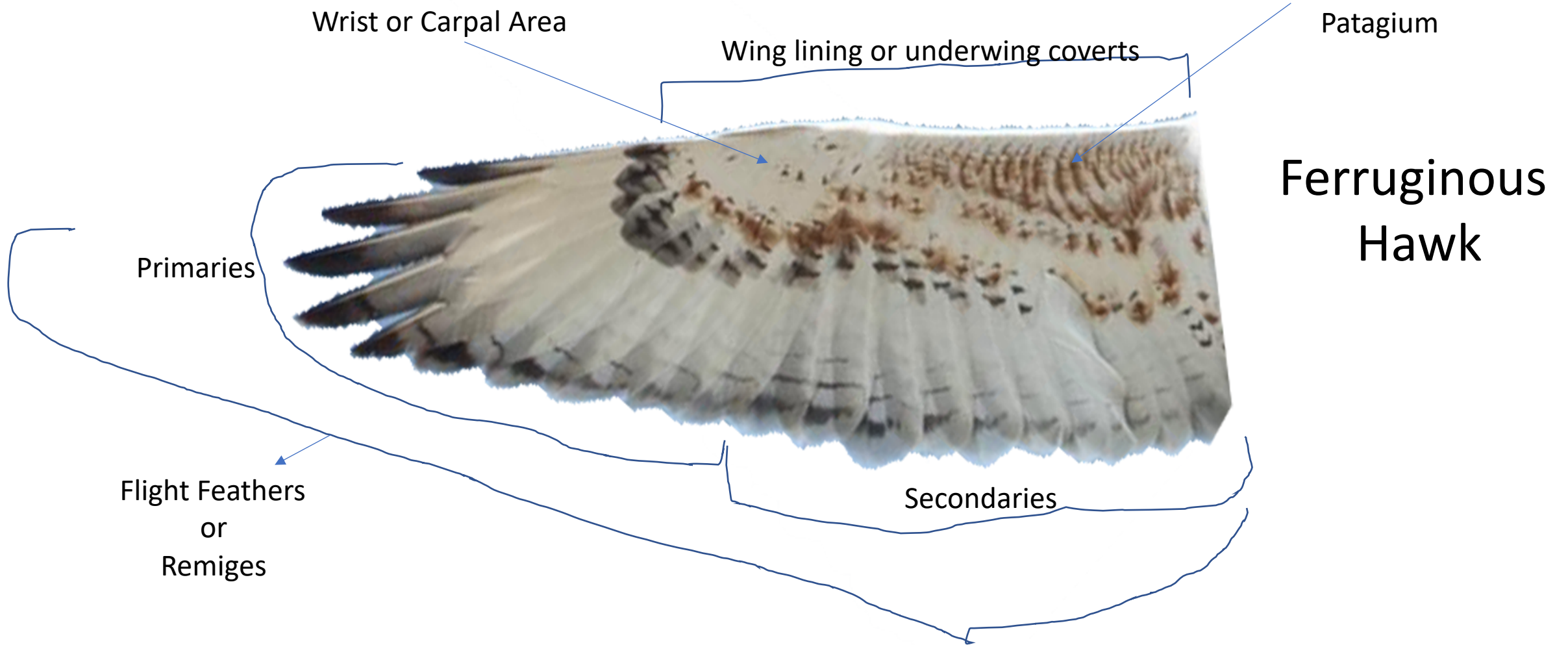
Northern Harrier

Red-tailed
Hawk



Ferruginous Hawk

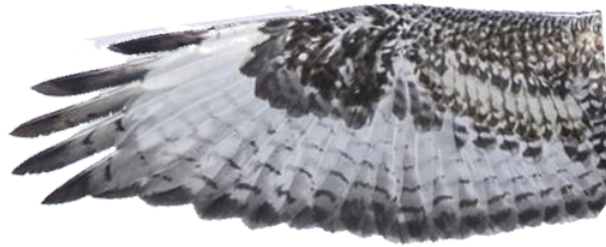
The Wing in Raptors



White in Lining or Flight feathers?



Ferruginous Hawk



Rough-Legged Hawk



Red-tailed Hawk



Broad-winged Hawk



Swainson's Hawk

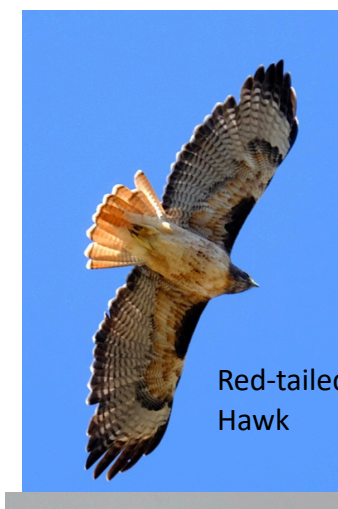
White in the Wings



Rough-legged Hawk



Bald Eagle



Red-tailed Hawk



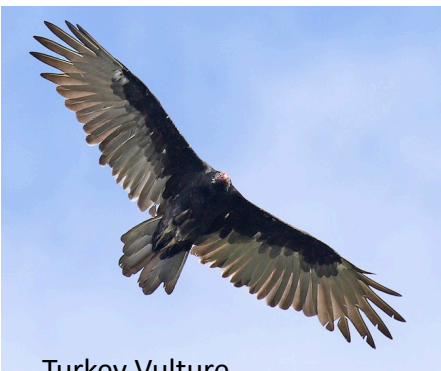
Osprey



Ferruginous Hawk



Short-tailed Hawk



Turkey Vulture



White-tailed Kite



Northern Harrier

Outlined?

- Black on leading edge
- Black on trailing edge
- Line or Patch



Ferruginous
Hawk



Northern Harrier



Red-tailed Hawk



Swainson's Hawk

Dark Patches



White-tailed Kite



Rough-legged
Hawk

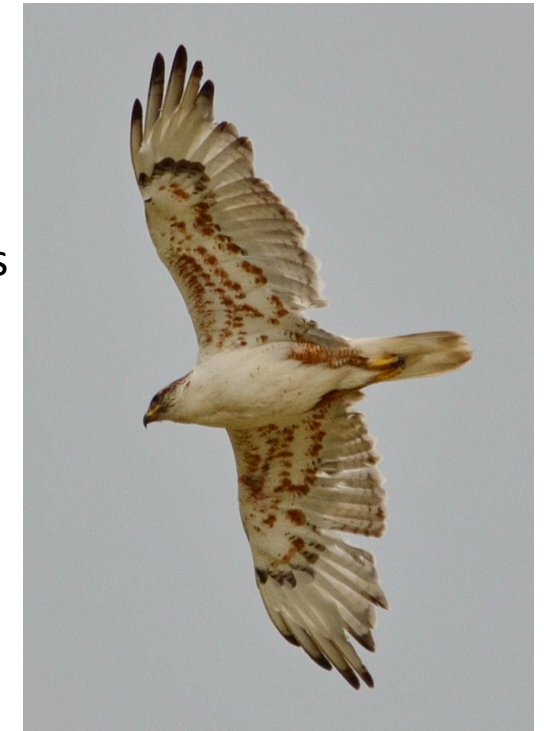


Red-tailed
Hawk



Prairie Falcon

Ferruginous
Hawk



Light Patches



Red-shouldered
Hawk



But watch out for young
Red-tailed Hawks which can have
a light patch, too

How to Identify Raptors

- Shape & Size
- Color Patterns (**Markings**)
- Behavior
- Habitat & Distribution
- Calls



Markings

- Barring
 - Chest
 - Tail
 - Wings



Red-shouldered Hawk

Cooper's
Hawk



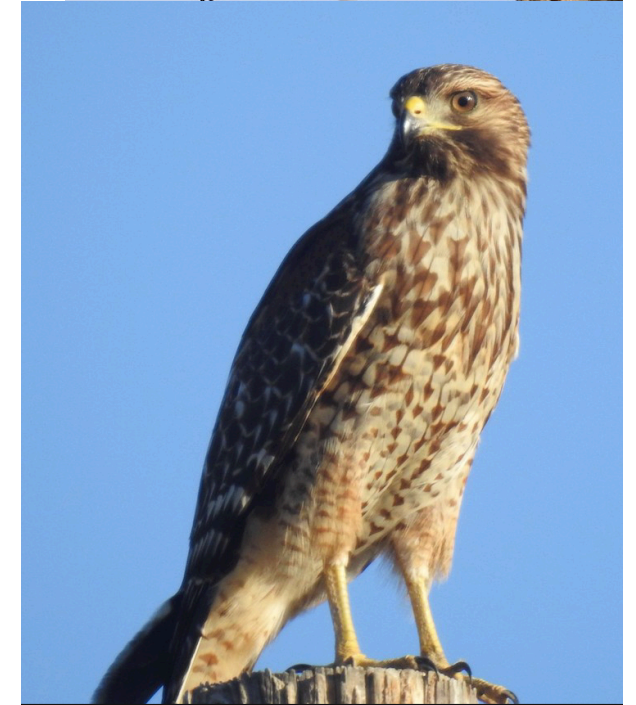
Barred or Streaked?



Peregrine
Falcon

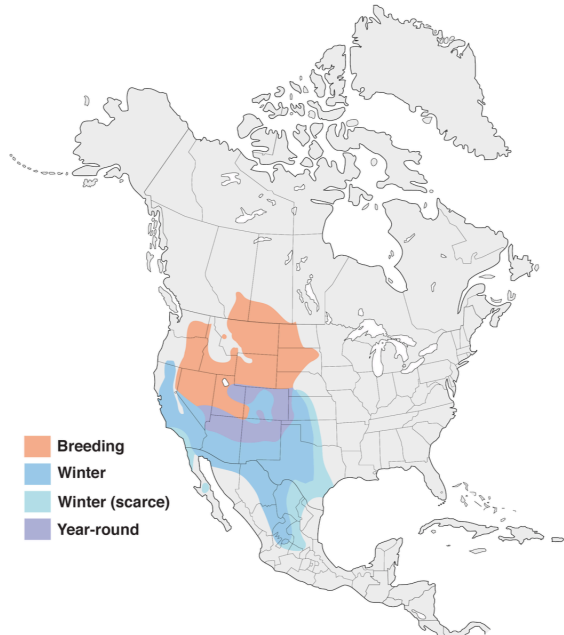


Red-shouldered
Hawk



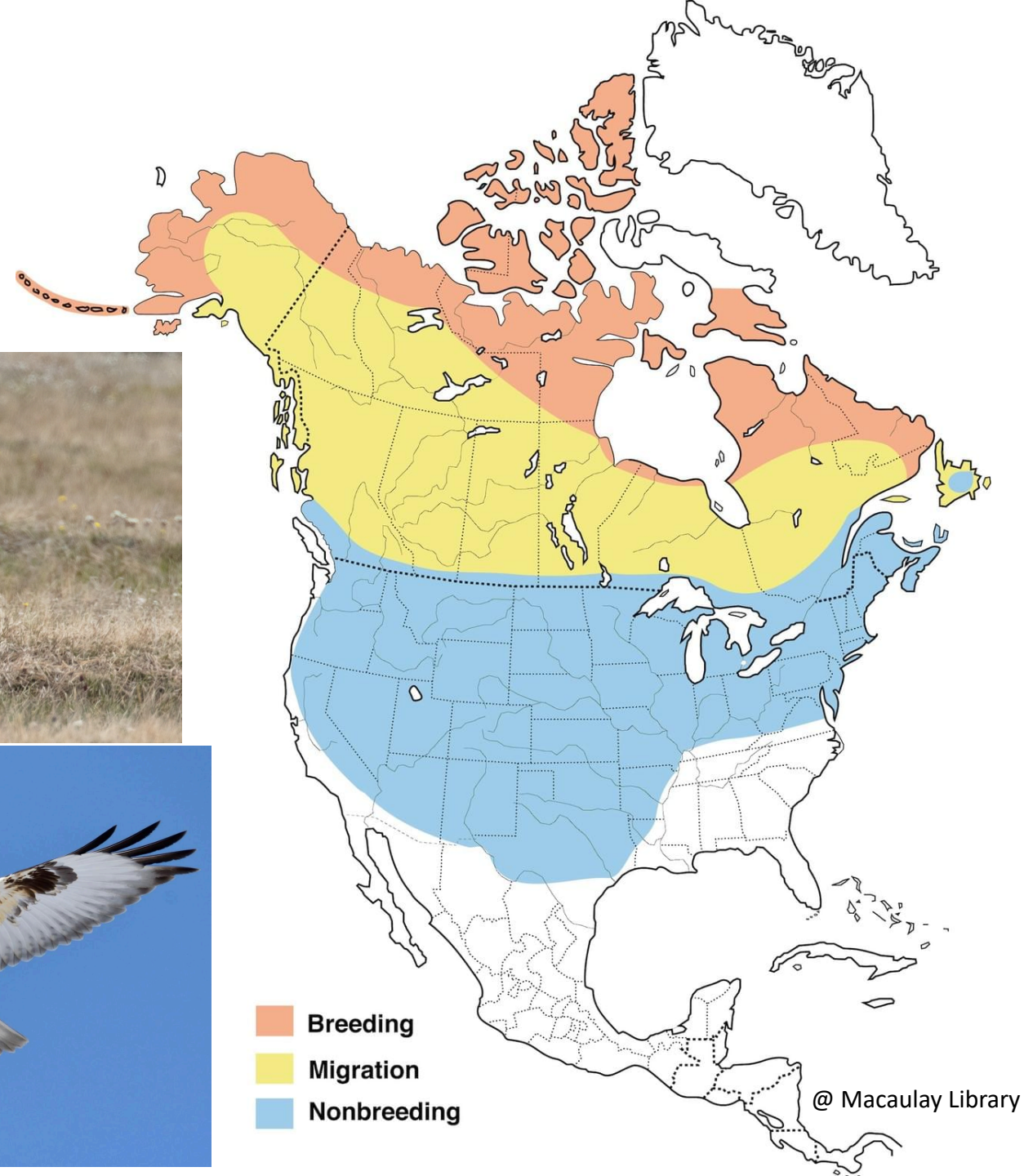
How to Identify Raptors

- Shape & Size
- Color Patterns (Markings)
- Behavior
- **Habitat & Distribution**
- Calls



Habitat & Distribution

- Open Country
- Forests
- Wetlands
- Deserts
- Urban Areas

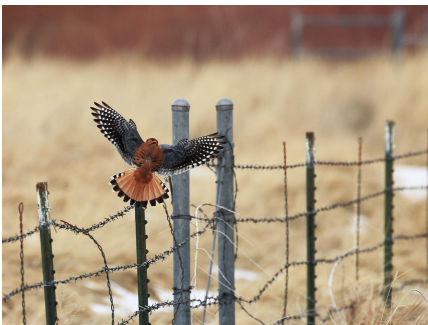


Open Country

- Red-tailed Hawk
- Swainson's Hawk
- Ferruginous Hawk
- Rough-legged Hawk
- American Kestrel



- Prairie Falcon
- Gyrfalcon
- White-tailed Kite
- Northern Harrier
- Golden Eagle



@ Macaulay Library



Forests

- Red-shouldered Hawk
- Broad-winged Hawk
- Northern Goshawk
- Cooper's Hawk
- Sharp-shinned Hawk



Wetlands

- Osprey
- Bald Eagle
- Northern Harrier



Urban Areas

- Peregrine Falcon
- Merlin
- Cooper's Hawk
- Red-tailed Hawk



How to Identify Raptors

- Shape & Size
- Color Patterns (Markings)
- Behavior
- Habitat & Distribution
- **Calls**



https://www.allaboutbirds.org/guide/Red-tailed_Hawk/overview

@ Macaulay Library



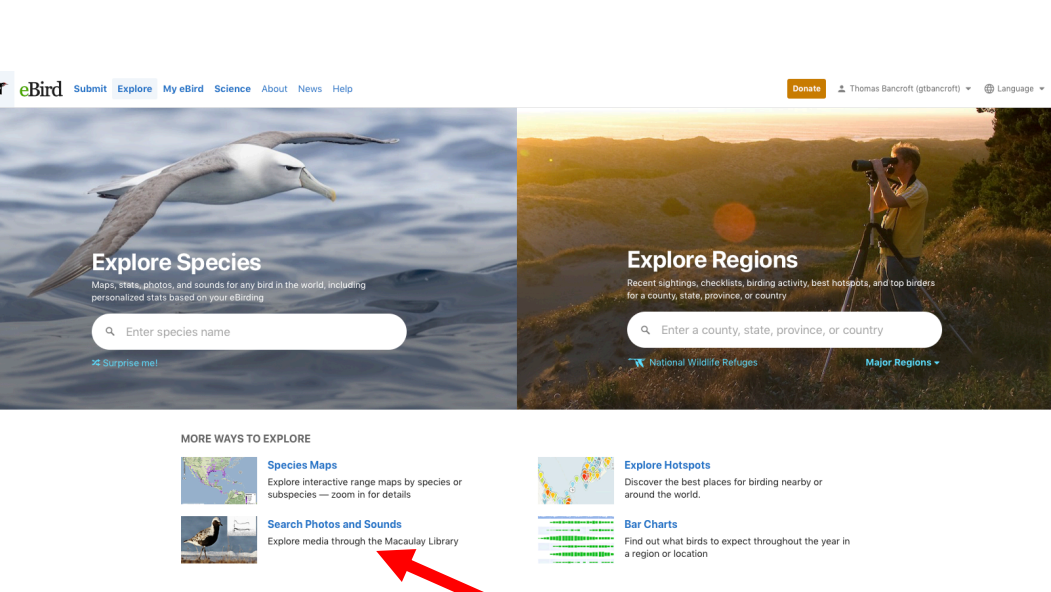
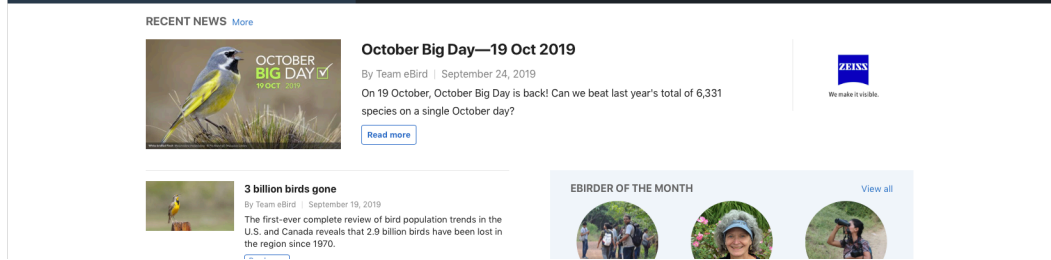
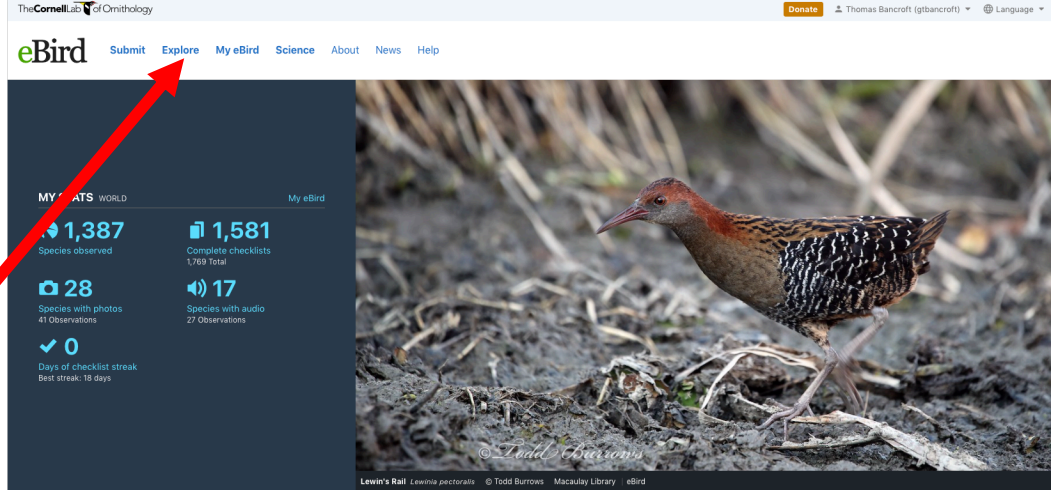
Review — Overview of Raptors

- Shape & Size
- Color Patterns (Markings)
- Behavior
- Habitat & Distribution
- Calls
- Homework
 - Review the PowerPoint
 - Look at photographs in eBird for five species found in Washington
 - Look at some distribution maps in a bird book or on <https://www.allaboutbirds.org>
- One bird at a time
- Identify a bird to a broad category
 - Then narrow to a smaller group (7 categories), then to species
- Look for 3 or more clues to identify the bird to species, (Use the 5 characteristics)
- We will take it slow. It takes practice and we are all here to learn and help each other.

Questions?

gtbancroft@gmail.com

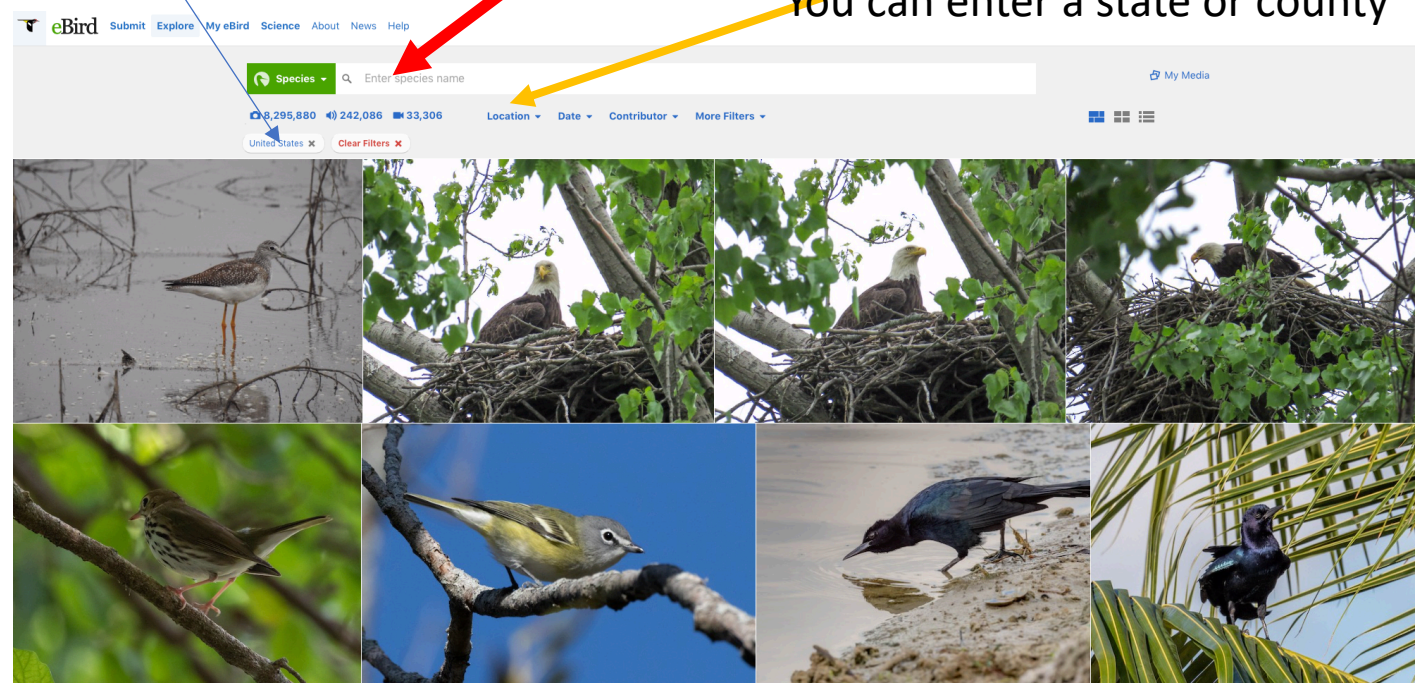




I had entered
United States
In Location filter

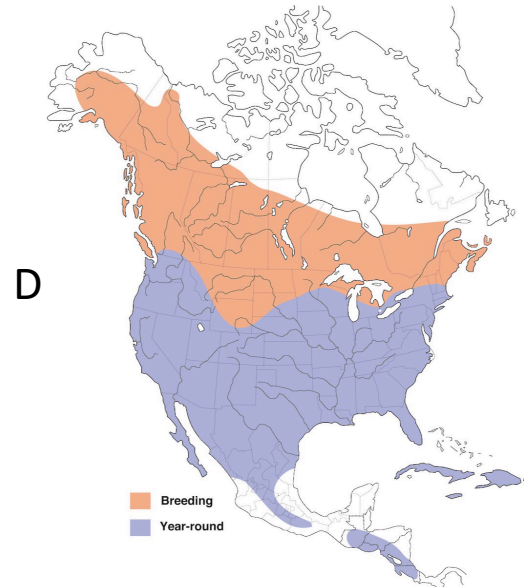
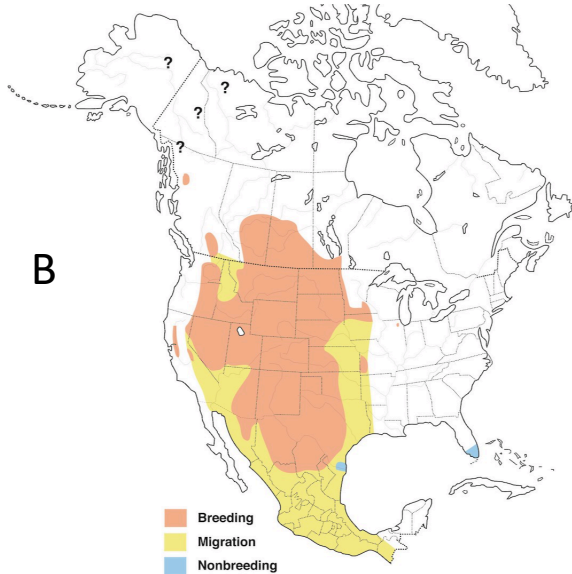
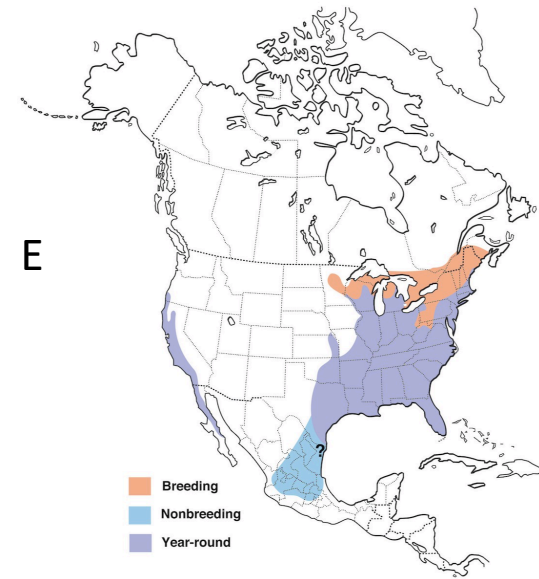
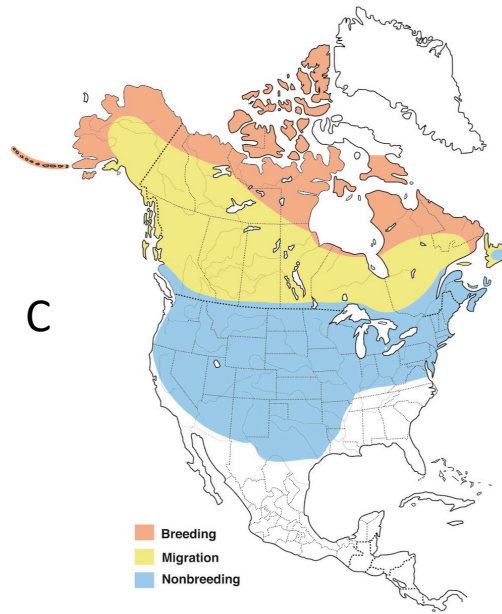
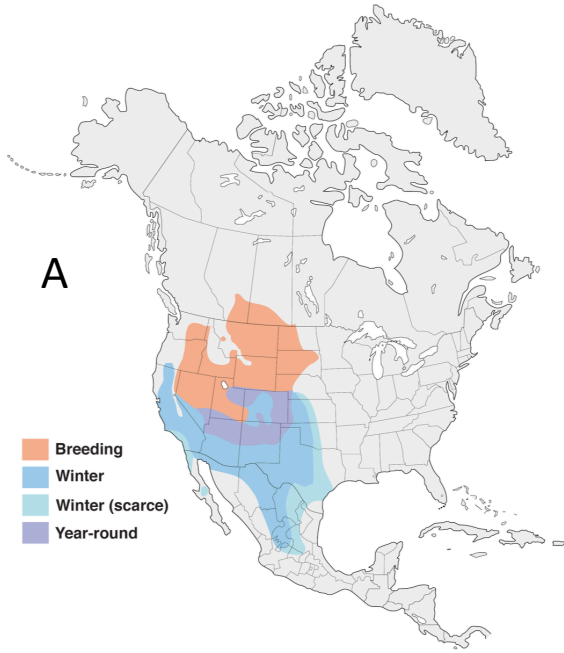
Enter species name here

See the word Location
You can enter a state or county



How to use eBird to look at photographs of
a species and in a particular state or county.

Five Buteos found regularly in Washington State



Can You Match the Distribution & Species

- ___ Rough-Legged Hawk
- ___ Swainson's Hawk
- ___ Red-tailed Hawk
- ___ Red-shouldered Hawk
- ___ Ferruginous Hawk