Raptor Identification Webinar 1: How to get started
Kevin J. McGowan
The Cornell Lab of Ornithology
Education
Sponsored by CELESTRON

How do you identify raptors?
• Size
• Shape
• Color pattern
• Markings
• Behavior
• Habitat
• Calls

Kevin’s rule of 3 for beginners
1. Pick 1 – Identify 1 bird at a time
2. 2 many birds – Identify to a broad category, then narrow to a smaller group
3. Look for 3 – Find 3 clues or more
How do you identify raptors?

- Size
- Shape
- Color pattern
- Markings
- Behavior
- Habitat
- Calls

Basic Raptor Diversity

- Vultures
- Falcons
- Eagles
- Kites
- Buteos
- Others
- Accipiters

Vultures

- Turkey Vulture
- Black Vulture
- California Condor

© Kevin J. McGowan

© Jay W. McGowan
How do you identify raptors?

- Size
- **Shape**
  - Color pattern
  - Markings
  - Behavior
  - Habitat
  - Calls

Shape

Basic Raptor Diversity

- Vultures
- Eagles
- Buteos
- Accipiters
- Falcons
- Kites
- Others
Shape
- Wing shape
- Tail shape
- Proportions
- Posture

Wing Shape
- Rounded/pointed at tip
- Emarginate/closed
- Broad/narrow
- Short/long

Cooper's Hawks
Tail Shape

- Long/short

- Notched/square/rounded/pointed tip

Cooper's Hawks

Red-tailed Hawk
Red-tailed Hawk

Tail < Head & body < Wing length
Medium wings, short tail

Sharp-shinned Hawk
Sharp-shinned Hawk
Head\&body < Wing length = Tail
Short wings, long tail

Proportions of North American Raptors

<table>
<thead>
<tr>
<th>Raptor Category</th>
<th>Wing Length</th>
<th>Wing Width</th>
<th>Wing Shape</th>
<th>Tail Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vultures</td>
<td>Long</td>
<td>Broad</td>
<td>Rounded</td>
<td>Short</td>
</tr>
<tr>
<td>Eagles</td>
<td>Long</td>
<td>Broad</td>
<td>Rounded</td>
<td>Short</td>
</tr>
<tr>
<td>Buteos</td>
<td>Moderately Long</td>
<td>Broad</td>
<td>Rounded</td>
<td>Short</td>
</tr>
<tr>
<td>Accipiters</td>
<td>Short</td>
<td>Broad</td>
<td>Rounded</td>
<td>Long</td>
</tr>
<tr>
<td>Falcons</td>
<td>Long</td>
<td>Narrow</td>
<td>Pointed</td>
<td>Long</td>
</tr>
<tr>
<td>Kites</td>
<td>Long</td>
<td>Narrow</td>
<td>Pointed</td>
<td>Long</td>
</tr>
<tr>
<td>Harriers</td>
<td>Long</td>
<td>Narrow</td>
<td>Rounded</td>
<td>Long</td>
</tr>
</tbody>
</table>
How do you identify raptors?

- Size
- Shape
- Color pattern
- Markings
- **Behavior**
  - Habitat
  - Calls

Behavior

- Flight style
- Foraging method
- Gregariousness
- Bobs and twitches

Flight style

- Soaring
- Direct flight
- Hovering
Flight style - soaring

FLAT
- Bald Eagle
- Black Vulture
- Red-tailed Hawk

BENT
- Turkey Vulture
- Osprey
- Northern Harrier

DIHEDRAL
- White-tailed Hawk

Flight style - soaring

- Long soar
  - California Condor
  - Turkey Vulture
  - Bald Eagle
- Flap and soar
  - Black Vulture
  - Red-tailed Hawk
  - Sharp-shinned Hawk

Flight style - straight

- Power flight
  - Peregrine Falcon
- Flap, flap, glide
  - Red-tailed Hawk
- Glide, flap, glide
  - Prairie Falcon
  - Cooper’s Hawk
  - Northern Harrier
  - Sharp-shinned Hawk
Foraging Method

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

Foraging method - hovering

White-tailed Kite © Kevin J. McGowan
American Kestrel © Kevin J. McGowan
Osprey © Kevin J. McGowan
Rough-legged Hawk © Kevin J. McGowan

Foraging method - Perch

American Kestrel © Kevin J. McGowan
Red-tailed Hawk © Kevin J. McGowan
Harris's Hawk © Kevin J. McGowan
Swinson's Hawk © Kevin J. McGowan
Rough-legged Hawk © Kevin J. McGowan
Bobs and Twitches

- Identify one raptor at a time
- Use shape to narrow to group
- Measure a hawk to itself
- Notice how a raptor flies
- Notice how it forages
- Notice how social it is

Want to be a better birder!
New online tutorials that focus on “Size & Shape” and “Color & Pattern” for bird ID.
birds.cornell.edu/tutorial

©Kevin J. McGowan

birds.cornell.edu/courses

birds.cornell.edu/courses