

Bald Eagles in the Verde Valley



Created by Cecelia Overby, Augmented by Janie Agyagos



I. Eagle Identification



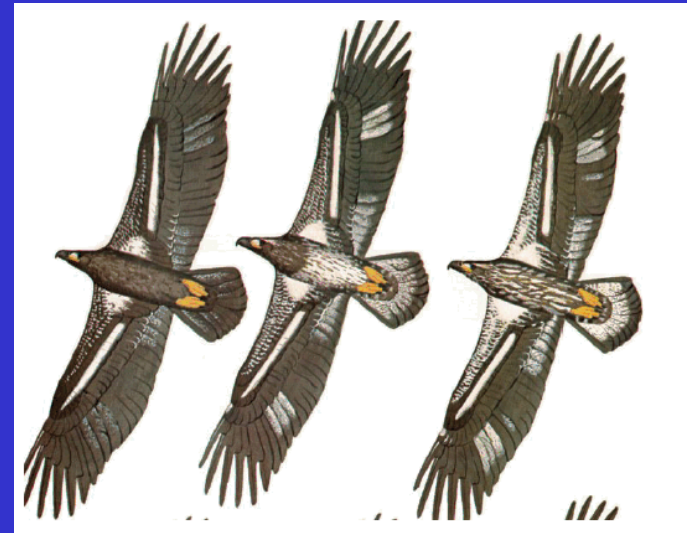


Plumage Phases

- 1st year:
Juvenile —
dark brown
- 2-4 years:
Immature —
mottled brown
- 5+ years:
Adult — white
head and tail



Juvenile Plumages



Immatures have whitish armpits.
Adults (5 years and older) get all
white head and tail.



Immature/Subadult Plumages



Adult Plumage

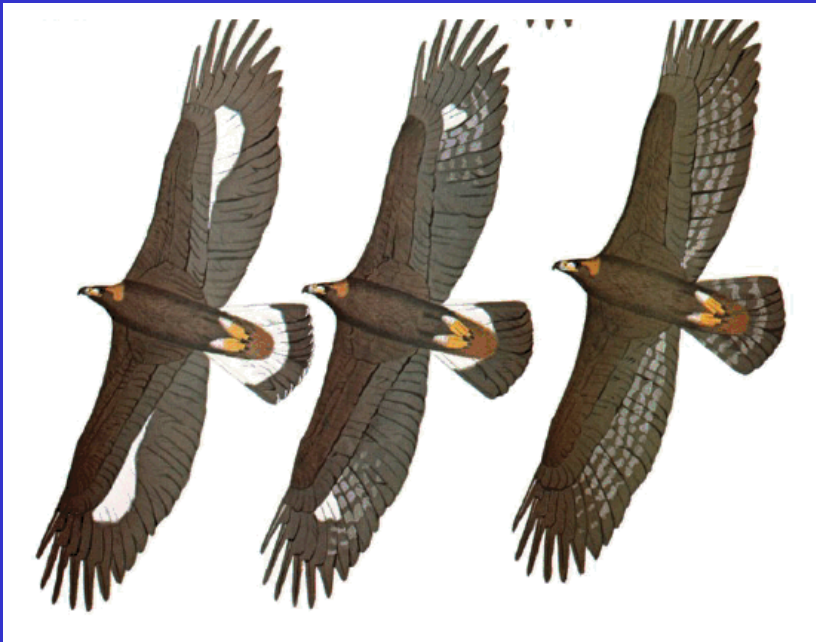


Eagle Identification

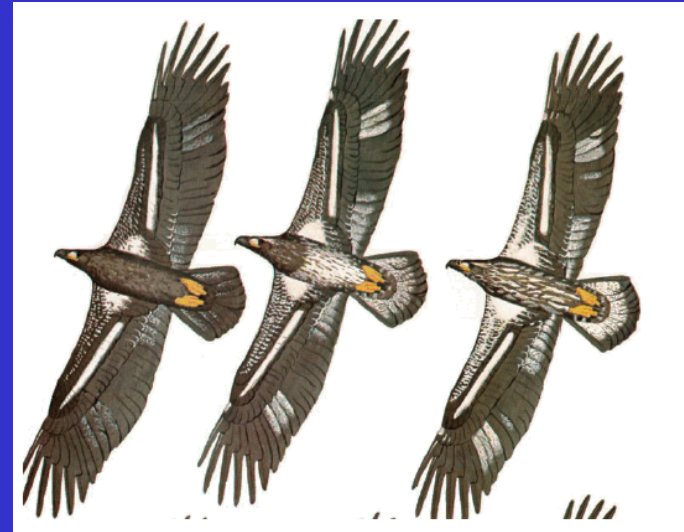
Golden Eagles

Vs.

Bald Eagles



Immatures have white on the other portion of the underwing and white on the upper tail. Adults become all dark.



Immatures have whitish armpits. Adults (5 years and older) get all white head and tail.



Bald vs. Golden Eagles



Immature Golden Eagle in Flight
Photo Mike Kochert - USGS

W

Bald Eagle vs. Osprey

Photo by George Jameson



Bald Eagle's Voice



- “ridiculously weak and insignificant...quite unbecoming a bird of its size and strength”
- “weak in volume and trivial in expression”
- “a snickering laugh expressive of imbecile derision”

How big are eagles?





Bald Eagle vs. Shaq



Wingspan: 6.5 – 7.5 feet 7 feet 1 inch

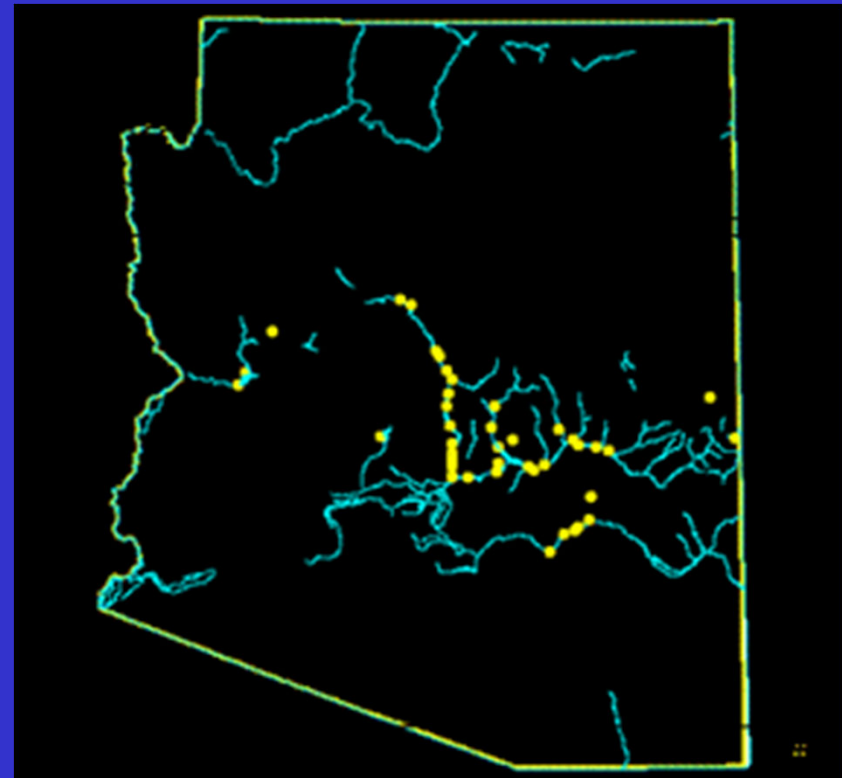
Height: 2.5 – 3 feet 7 feet 1 inch

Weight: 7 – 14 pounds 325 pounds

II. Nesting Bald Eagles



Arizona Breeding Eagles



Eagle Nests in the Verde Valley



Nest Sites



Nest Watch Program



Nest Watch Program



Nest Watch Program



Ladders Breeding Area Closure

Closed from Dec 1 through June 30

- **Closed to all entry including:**
 - Hikers
 - Bikers
 - Equestrians
 - Hunters
 - Motorized activities
- **Exceptions:**
 - Administrative (agency personnel, permittees)
 - Boaters as long as they stay on the river through the closure area

Quiz

The heaviest recorded bald eagle nest weighed:

- a. 350 pounds
- b. 900 pounds
- c. 1,300 pounds
- d. 4,000 pounds

Answer: 4,000 lbs!

9 feet across and 12 feet tall!



More typical is 5-6 feet across and 3-4 feet tall.

Arizona Breeding Chronology

- Egg Laying: January-February
- Incubation: 35 days
- Nestling Stage: 12 weeks
- Fledging: May-June





Quiz

Once eagles have fledged from their nest, they are:

- a. bigger than their parents
- b. smaller than their parents
- c. same size as their parents

Answer:

a

Young eagles are “supersized”, but weigh less!

Juvenile Migration



- 45 days after fledging, juvenile eagles migrate north

Eaglet #40004

- **June-July:** left birth area and traveled north
- **August- September:** Washington State
- **October:** headed back home



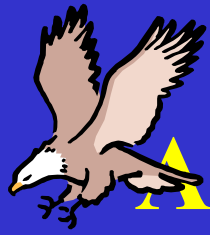
Breeding Adult Movements

Summer Vacations?



III. Wintering Bald Eagles





▲ Typical Winter Day for an Eagle

Roosting

16 hours

Loafing

7 hours

Flying, Feeding, Foraging

1 hour

24 hours

Human's point of view:

“Nothing about the wintering eagle is more striking than its laziness.” M. Stalmaster

Eagle's point of view:



Patience is a
Virtue!

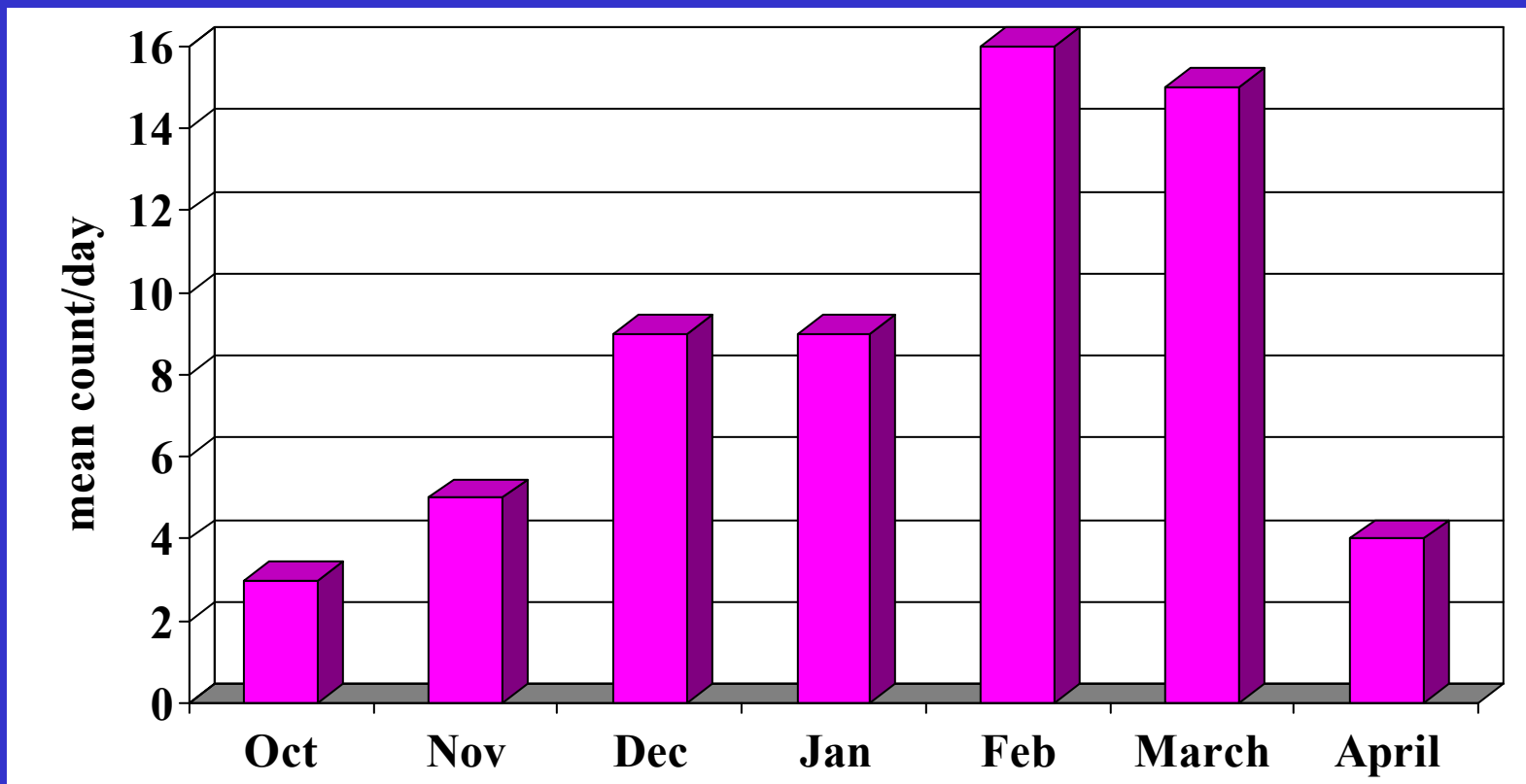
Winter Migrations





Coconino National Forest

Wintering Bald Eagles



T.G.Grubb, RMRS

Winter Migration Research



Northwest Territories

0 100 200 300 400
Kilometers



Can travel 2000 to 3000 miles!



“Snowbird”

**One who travels to warm climes
for the winter**

(Merriam-Webster)

Lake Concentrations



Winter Home Range Movements





Midwinter Survey



- 1979-1991 National Wildlife Federation
(Arizona contributions were limited)
- 1992 – USGS coordinates
 - Routes established throughout Arizona
- 1995 – 115 Standardized routes established
- 2006 – 104 routes statewide
- 15 routes within the Coconino N.F.





Bald Eagle Midwinter Survey



Arizona = 322 eagles per year

**Coconino N.F. = 54 eagles per year
(17%)**

**Some years 25 – 30% of
all eagles counted in Arizona**



Bald Eagles at Mormon Lake

120 Bald Eagles counted
at one time in 1995!!

Largest concentration
ever reported in the
state!



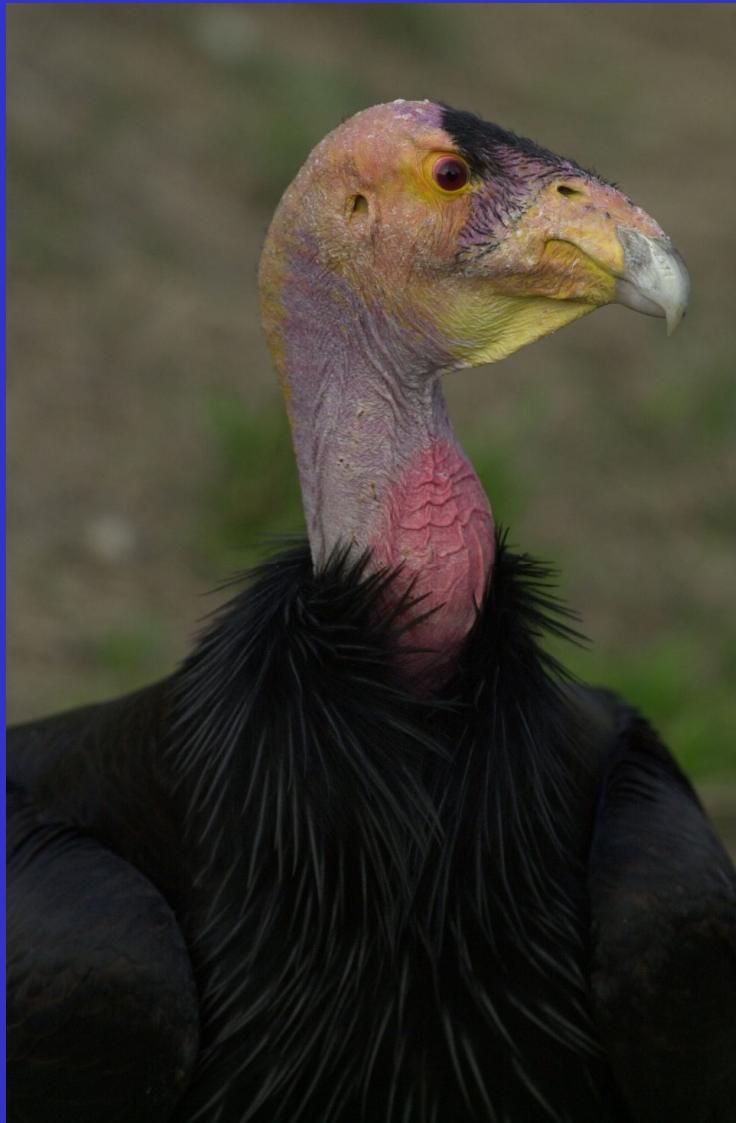


Hunting Strategies

1. Scavenging



Bald eagles are more closely related to vultures than to golden eagles. No surprise they act like glorified vultures!



"Ooooooweeeeeee! This thing's been here a loooooooooong time.
Well, thank God for ketchup."



Hunting Strategies

1. Scavenge

2. Steal





Other Victims



Hunting Strategies

1. Scavenge

2. Steal

3. Hunt and Kill



Eagles hunt from air, from trees, or from ground



Foraging eagles will even wade
in after food!



Prey Preferences



Other Food Sources





Quiz

True or False:

An eagle can catch
and carry fish up to
10 pounds.

False

About ½ its weight



Cooperative Hunting





Foraging Behavior

“Ice Fishing Eagles”



- Ice Picking
- Ice Fishing
- Geyser Fishing

Where do eagles go at night?





Bald Eagle Communal Roost

An area where a group of eagles
spends the night in close proximity

2 to 500 eagles!!

What is a Roost?
Eagles don't build roosts!





Roost Characteristics

- Big, older trees
- Large snags
- 1 to 43 acres
- On a slope
- Close to food!



Why Roost in Groups?

- information centers
- form or renew pair bonds
- share suitable habitat for shelter
- discourage predators



Dispels the last theory!



Winter Survival Tactics

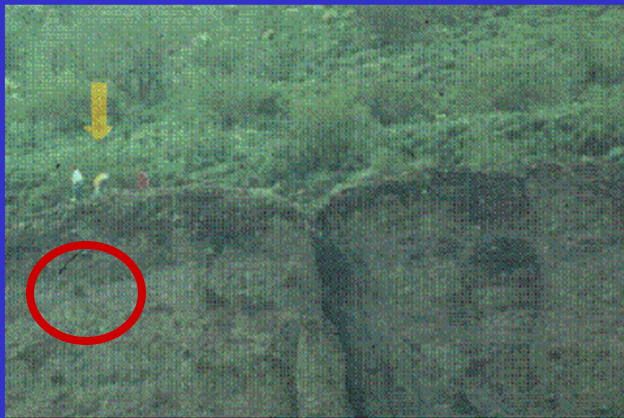
- Migrating
- Stealing Food
- Cooperative Hunting
- Communal Roosting
- Energy Conservation



IV. Status and Conservation



Concern for Arizona Eagles



Legal Status

1940 - Bald Eagle Protection Act

1967- So. Pop on Endangered Species List

1978 – expanded to all bald eagles

2007 - removed from Endangered
Species List!

2008 – Arizona eagles back on list

2012– DNA analysis => eagles aren't a
distinct population, so no ESA protection

Legal Status

- 1940 - Bald Eagle Protection Act
- 1978 - endangered in 43 states; threatened in 5
- 1995 - downlisted to threatened

2007

removed from Endangered Species List!!

Optimism for Arizona Eagles

- 1978 – 11 breeding areas
- 2006 – 50 breeding areas
- 2018 – 67 breeding areas
- Midwinter Surveys –
stable to increasing
- People who care



Bald Eagles - Report Bald and Golden Eagles between April 15 and Oct. 1 which is when wintering individuals are not around.

Resident (Nesting) Eagles:

- Stay year-round
- Stay close to nesting areas on Verde and major tributaries
- Any eagles observed last of April through September are nesting eagles!
- The only eagle closure is Ladders from Verde Falls downstream 2 miles. No entry Dec 1-June 30

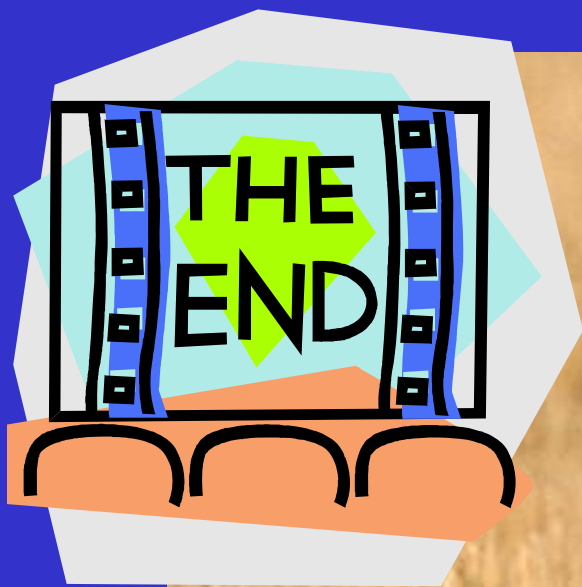


Wintering Eagles:

- Here mid-Oct thru mid-April
- Can occur anywhere because they forage opportunistically (waterfowl, fish, road kills, remains from hunting, etc.)







Thanks