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### Laws Protecting Bald Eagles

- **1900 - Lacey Act**
  - Felony
    - 3 years imprisonment
    - \$250,000 per person
    - \$500,000 per organization
  - Misdemeanor
    - 1 year imprisonment
    - \$100,000 per person
    - \$200,000 per organization
- **1918 - Migratory Bird Treaty Act**
  - Felony
    - 2 years imprisonment
    - \$250,000 per person
    - \$500,000 per organization
  - Misdemeanor
    - 6 months imprisonment
    - \$5,000 per person
    - \$10,000 per organization
- **1940 - The Bald and Golden Eagle Protection Act**
  - Felony
    - 2 years imprisonment
    - \$250,000 per person
    - \$500,000 per organization
  - Misdemeanor
    - 1 year imprisonment
    - \$100,000 per person
    - \$200,000 per organization
- **1967 - Endangered Species Preservation Act**
  - Replaced by the Endangered Species Act 1973
- **1971 - Airborne Hunting Act**
  - Misdemeanor
    - 1 year imprisonment
    - \$100,000 per person
    - \$200,000 per organization
- **1975 - Convention on International Trade of Endangered Species**
- **1978 - Endangered Species Act**
  - Misdemeanor Violations relating to Endangered Species
    - 1 year imprisonment
    - \$100,000 per person
    - \$200,000 per organization
  - Misdemeanor Violations relating to Threatened Species
    - 6 months imprisonment
    - \$25,000 per individual/organization
- **Arizona Revised Statute**
  - Title 17-314
    - \$2,500 per verdict

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### 1940 – Congress passes Bald and Golden Eagle Protection Act (Eagle Act)

- Prohibits the take or use of bald and golden eagles except under permit for scientific, exhibition, and religious purposes.

“Take” is defined as pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or **disturb**.

- In 2007, To coincide with Delisting and new Permits under The Eagle Act:

Disturb was codified and means to **agitate or bother** a bald or golden eagle to a degree that causes, or is **likely to cause**, based on the best scientific information available,;

- 1) injury to an eagle
- 2) a **decrease in its productivity**, by substantially interfering with normal breeding, feeding, or sheltering behavior, or
- 3) **nest abandonment**, by substantially interfering with normal breeding, feeding, or sheltering behavior.

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### What guides bald eagle management now and in the future?

The Conservation Assessment and Strategy for the Bald Eagle in Arizona



Outlines the successful management programs we have implemented for 20 years.

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### Southwestern Bald Eagle Management Committee

- Arizona Game and Fish Department – Chair
- Arizona Department of Transportation
- Arizona Public Service
- Arizona State Parks
- Army Corps of Engineers
- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Fort McDowell Yavapai Nation
- GeoMarine Incorporated
- The Hopi Tribe
- Maricopa County Parks and Recreation Department
- National Park Service
- Navajo Nation
- Salt River Pima-Maricopa Indian Community
- Salt River Project
- San Carlos Apache Tribe
- Tonto Apache Tribe
- U.S. Department of Defense
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- White Mountain Apache Tribe



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### Arizona Bald Eagle Management Program

Projects and Responsibilities

- Southwestern Bald Eagle Management Committee
- Nestwatch Program
- Nest Search
- Visual Identification and Banding Project
- Winter Count
- Occupancy and Reproductive Assessment Flights
- Organochlorine, Heavy Metals and Parasite Analysis
- Emergency Rescue Team



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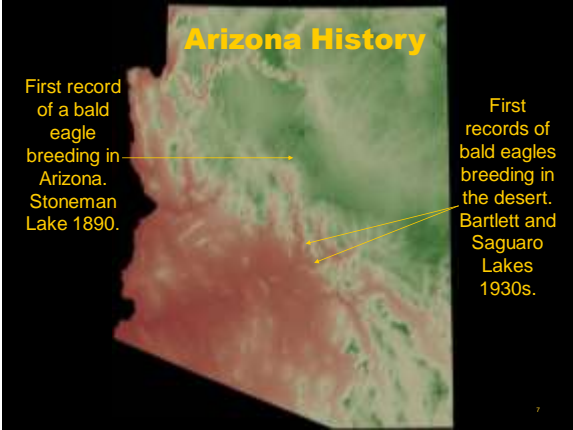
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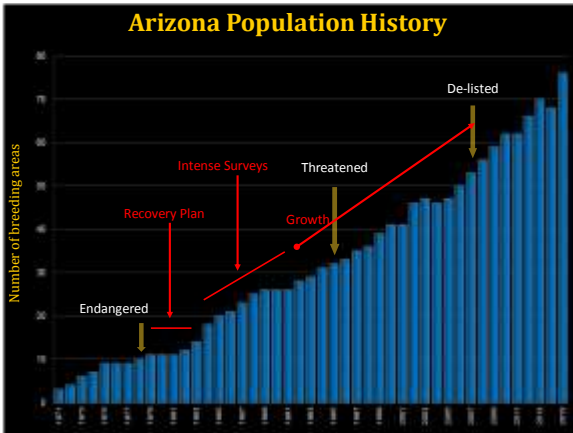
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### Diet

80% is fish

 Sonoran Sucker	 Common Carp	 Desert Sucker
 Smallmouth Bass	 Roundtail Chub	 Largemouth Bass

20% is opportunistic prey

 Ducks	 Reptiles	 Mammals	 Carrion
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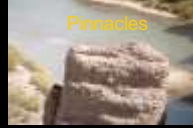

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### Breeding Habitat

Most nest within 1 mile of water.  
Most within the Riparian Vegetation of the Lower Sonoran Desert

 Pinnacles	 Cottonwood trees and arid	 Cliffs
 Ponderosa Pine Forests	 Mixed Conifer Forests	

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### Breeding Habitat

(Recent Revisions)  
Urban Areas

 Sand and Gravel Operations	 Some Distance to Activity Centers	 Suburban Housing Developments
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## Breeding Habitat

Golf Courses  
(new 2016)

- Activity
- Short Distances
  - Constant
  - Predictable




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## Breeding Chronology

Arizona bald eagles breed earlier than the Northern States.  
Similar to other populations of this latitude.

	<p><b>Courtship</b> November to January.</p>	
	<p><b>Egg laying</b> Timed with the fish spawns? December to March.</p>	
	<p><b>Hatching</b> 35 days after egg laying February to April.</p>	
	<p><b>Fledging</b> 12 weeks after hatching April to June.</p>	
	<p><b>Migration</b> 45 days after fledging May to July.</p>	

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	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
<b>Courtship &amp; Nest building</b>								

<p><b>Courtship</b></p> <ul style="list-style-type: none"> <li>▣ Aerial displays</li> <li>▣ Copulation</li> <li>▣ Building the nest</li> <li>▣ Perching</li> </ul>	<p><b>Pairs</b></p> <ul style="list-style-type: none"> <li>▣ High pair fidelity</li> <li>▣ Experience counts</li> </ul>	
		

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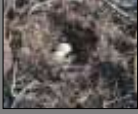



	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Courtship & Nest building								
Egg laying								

**Nest-building**

- Trees & cliffs
- Shared effort
- Multiple nests
- High site fidelity

**Egg-laying**

- Laid at intervals
- Sensitive time


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	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Egg laying								
Hatch								

**Incubation**

- After first egg is laid
- Relatively short
- Division of labor
- Nest exchanges




**Hatching**

- Hatch at intervals
- Behavior changes
- Brooding

**Emergencies/Failures**

- Hatch failure
- Nestling death
- Adult behavior
- Disturbances





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	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
Hatch								
Fledge								

**Nestlings - First week**

- Off-white down
- Not very active
- Head looks proportionately "large"


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**Nestlings - Second week**

- ▣ Off-white down
- ▣ Head looks proportionately "normal"

**Threats**

- ▣ Weather
- ▣ Intruders
- ▣ Lack of food



10-14 days



2 weeks

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**Factors influencing eagle response to human activities**

▣ The eagle	▣ Frequency
▣ Proximity	▣ Weather
▣ Perch height	▣ Time of day or week
▣ Visibility	▣ Nature of the activity






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**Nestlings - Third week**

- ▣ Medium gray down
- ▣ White down on head/neck





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**Nestlings - Fourth week**

- Medium gray down
- Feathers emerge
- Preening



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**Nestlings - Fifth week**

- Medium gray down
- Feathers cover 51-95%



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**Nestlings - Sixth week**

- Feathers cover body
- Tufts of down possible



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**Nestlings – Week 7-12**

- ✓ Feathers completely cover body
- ✓ Flapping
- ✓ Self-feeding
- ✓ Play
- ✓ Branching




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	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
Fledge								

**Nestlings – Fledging Week 10-12**

- ✓ Mottled underparts
- ✓ Emergencies
- ✓ Fostering
- ✓ Adult behavior




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	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
Fledge								

**Nestlings Post-fledging**

- ✓ Initially reluctant & clumsy
- ✓ Vulnerable on ground
- ✓ Dependent on adults
- ✓ Behavior
- ✓ Be alert




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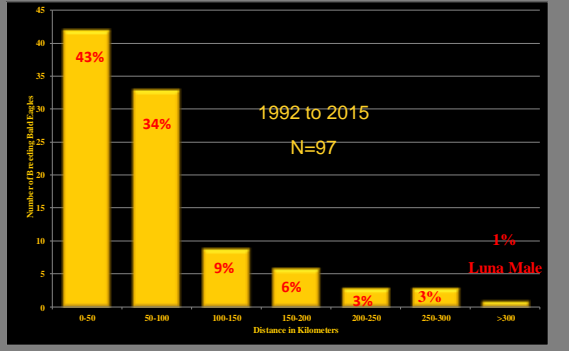
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### Breeding Distance from Natal Area



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Emergency Contact:

1-800-352-0700

Cell: 928-941-0170

Information:

WWW.SWBEMC.ORG



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