# Liberty Wildlife Rehabilitation Foundation



### **Education Program's Natural History**



Red-Tailed Hawk

#### Red-Tailed Hawk (Buteo jamaicensis)

Range: The Red-Tailed Hawk is one of the most common and wide spread soaring hawks (Buteos) found throughout North and Central America, and Caribbean Islands except extreme Northern Canada. This hawk is the most common hawk found throughout Arizona.



**Habitat**: The Red-Tailed Hawk has one of the widest ecological ranges of any North American hawk and can be found everywhere (except dense forest/tundra). They generally prefer habitat where they have open country to hunt and wooded areas where they can build a nest. The most characteristic habitat is natural savanna or its manmade counterpart, farmlands with woods. They commonly can be sighted along roads perched on telephone/light poles, fence posts, trees or saguaros. They share the same habitat with the Great Horned Owl.



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**Description**: Because of the variability of color, this large, dark brown hawk can sometimes be difficult to identify. Three common adult characteristics are:

Its brick red tail:

A dark bar on the leading edge of the underwing called a patagial mark or "comma;"

A "belly-band" of dark streaks across its lower lighter belly;

A light "V" formed on the back of the wings.

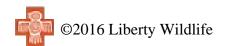
However, not all Red-Tailed Hawks will have a red tail and some will have a faint or no bellyband and some will have no apparent patagial marks.

The wings are broad and rounded with a wingspan measuring  $3\frac{1}{2}$  to  $4\frac{1}{2}$  feet.

Typically this hawk will weigh between  $1\frac{1}{2}$  and 3 pounds, with the female weighing up to 1/3more than the male. [In 2013, as part of Liberty Wildlife's Feather Bank repository functions, Liberty received a Red-tailed Hawk carcass weighing 5 pounds according to Animal Care Coordinator Jan Miller

The Red-Tailed Hawk will measure 18 to 26 inches in length.

Its call is a raspy, scraping, screamed "kree-eee-ar."



**Hunting/Prey**: The Red-Tailed Hawk hunts primarily by sight. It will soar in the air or sit perched in a tree until it locates prey. In a dive or stoop, it can reach a speed of 120 mph. It is an important raptor in controlling rodent populations. Typical food will be small to medium sized mammal such as rodents, cottontails and jack rabbits. It will also eat birds and reptiles.

**Breeding/Nesting**: Red-tailed hawks usually begin breeding when they are three years old. They are monogamous, and mate with the same individual for many years. In fact, red-tailed hawks usually only change mates when their original mate dies. During courtship, the male and female soar together in circles, with flights lasting 10 minutes or more. The male dives down in a steep stoop, and then shoots up again at nearly as steep an angle. He may repeat this maneuver several times, and then will approach the female from above. He extends his legs and touches or grasps her briefly. The pair may grab onto one other and may interlock their talons and spiral toward the ground.

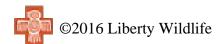
They build bulky stick nests in tall trees, poles or on ledges. The nests are usually lined with soft material. The female usually lays 2 to 3 eggs that are dull-white to bluish-white in color with irregular spot or blotches. She generally maintains the incubation which lasts between 28 and 32 days. The male sometimes will sit on the eggs to relieve her.

**Lifespan**: Red-tailed Hawks are relatively long-lived birds. While many live less than two years, those that survive the first few years can live 12 to 16 years. The oldest known wild red-tailed hawk lived to at least 21.5 years old. In captivity, red-tailed hawks have lived for at least 29.5 years. (Preston and Beane, 1993)

**Threats**: Some of the main threats are: Great Horned Owl predation on the young, illegal shooting, nest collapse, electrocution, pesticide poisoning, and automobiles. Navajos and Hopis can legally shoot and take young form the nest for religious and ceremonial purposes.

#### **Other Red-Tailed Hawk Facts:**

- There are 14 subspecies of this hawk ranging in color from the pale Krider's morph to the red rufous morph to the dark Harlan's morph.
- Because its eyes are fixed in its sockets, the Red-Tailed Hawk has limited peripheral vision. To compensate for this, it like other birds of prey has 14 vertebrae in its neck. This allows the hawk to rotate its head 210°; more than humans but less than the owls.
- It is one of the few birds that will hunt a rattlesnake on the ground it will spread its wings and when the snake strikes at a wing and misses, the hawk will grab it with its talon and kill it for food. A video presentation can be found at: http://www.youtube.com/watch?v=hjmJla-q880
- The Red-Tailed Hawk has adapted well to humans who have cleared forest giving it more room for hunting and nesting.
- Spanish name: Aguililla Parda or Aguililla Cola Roja
- Typically is one of the first birds a novice falconer will use in hunting.
- Great Horned Owls will hunt its nestlings.
- The powerful cry of a red-tailed hawk is often used in TV commercials and movies depicting bald eagles and other birds of prey. Advertisers feel the hawk's voice sounds more regal and eagle-like than the eagle's.
- The first red-tailed hawks were identified in Jamaica, West Indies. This is how the bird gets its species name, *jamaicensis*



• Pale Male is a Red-tailed Hawk living in Manhattan's Central Park since the early 1990's. Since then he has over 20 off springs living in the Park.



Photo of Pall Mall, October 2013 from http://www.palemale.com/

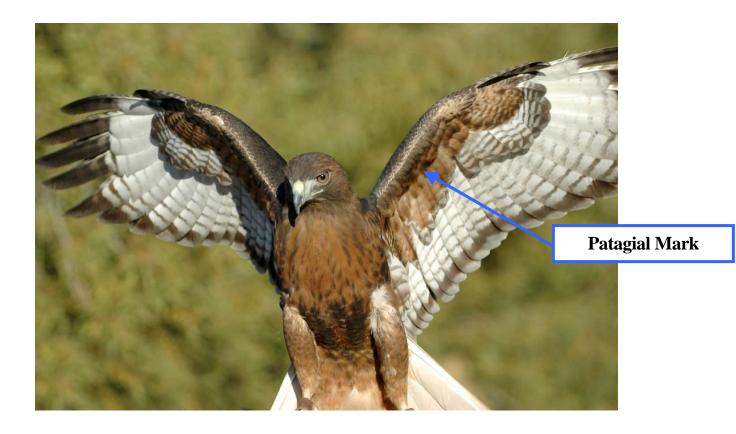


**Light Belly Band** 



Acoma is one of Liberty Wildlife's oldest education birds of prey. He was brought to Liberty in 1986 from Wickenburg. He had sustained wing injuries that precluded him from regaining full flight and being released. In the education program, Acoma is classified as level 1, the easiest with which to work. He is often the first bird a new education volunteer will "sign off" on and be able to take to programs. Acoma has the typical Red-Tailed Hawk markings: a belly band, brick red tail and patagial marks. His normal weight is approximately 2 pounds. Acoma is generally the first bird most new education volunteers will handle.

ACOMA
RED-TAILED HAWK



#### CHACO RED-TAILED HAWK

Chaco is a rufous morph Red-Tailed Hawk, distinguished by the reddish chest coloration, a variation of the typical Red-Tailed Hawk's cream chest coloration. She was taken from her nest as a juvenile and raised by people. She arrived at Liberty Wildlife in 2004 as an imprint, unable to relate to her species and expecting people to care for her. Because she has no physical injuries, Chaco is being trained for Liberty's flight program, learning to fly on cue to a handler. Working with her is limited to the flight program handlers. Chaco came to Liberty in 2004. Being a female, she weighs more than Acoma or Duncan. Her typical weight will be between 1100 and 1200 grams or about  $2\frac{1}{2}$  pounds. Chaco is one of Liberty's flighted birds and typically handled by one of the flight handlers.



Light "V" on back of wings

Duncan was found in 2002 in Duncan, Arizona with wing fractures that did not allow him to fly and hunt. A Liberty Wildlife Rescue volunteer transported Duncan to Liberty where he was found to be imprinted, leading to speculation that someone had raised him before his injury. As an imprint, Duncan cannot be released because he does not relate to other Red-tailed Hawks and expects humans to care for him.

DUNCAN RED-TAILED HAWK



**Belly Band** 

DUNCAN RED-TAILED HAWK







### **Skye**

Skye was transferred from a Washington state facility to Liberty Wildlife in 2011. That facility had received Skye from the California Ojai Raptor Center in 2007. According to the various transfer documents, Skye was taken from the wild as a chick in 2004 and imprinted. She was illegally kept by a man in southern California who gave her to the California Center when he no longer wanted her. There she was determined to be non-releasable due to her imprinting. She was given to a falconer to determine if she could be used for hunting and eventually returned to nature. The falconer returned her after a week reporting she did not have the aggression necessary to hunt. She was then transferred to the Washington facility and then to Liberty.

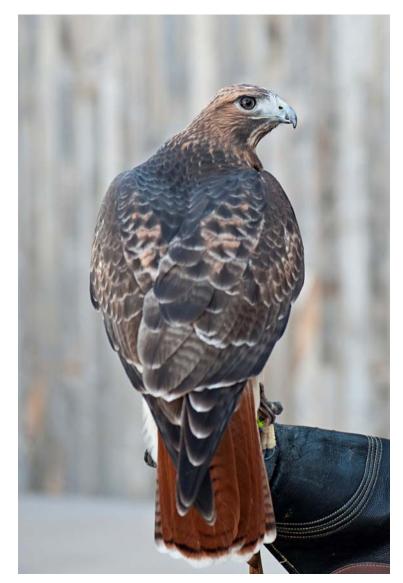
Skye was determined to be a female following her annual spring-laying of three to five eggs that fall to the ground each year and break. It is during this time of the year that Skye becomes protective of her mew.





### **Emmitt**

Emmitt arrived at Liberty Wildlife on June 5, 2015 as a nestling. He had been found on the ground. It was uncertain how long his rescuer had been caring for him, but during intake he demonstrated behaviors that he had become imprinted. He was placed with foster Red-tail hawks and other young Red-tail hawks but he showed no signs of accepting them. It was apparent the imprinting was irreversible at this stage of his life. He became a welcomed addition to our Education animals.





## Arya

Arya was brought to Liberty in April 2014 as a young nestling. Her rescuer had cared for her for a week, feeding her hamburger and treating a head injury with an unknown ointment. During this time, she became imprinted. Efforts to place her with foster parents and other young Red-tailed Hawks had no effect on her imprinted behaviors. For this reason, Arya was assigned to the Education team.

Compiled by Max Bessler

Photos by Barb Del'Ve

Sources: Cornell Lab of Ornithology, Desert USA, National Geographic, The Peregrine Fund, University of Michigan Museum of Zoology Animal Diversity Web, San Diego Zoo

