

Red-tailed Hawk ***(Buteo Jamaicensis)***



Photo by Will Weyant (Apache)

Physical Description:

The Red-tailed hawk may be the most commonly observed north American raptor. They are a highly variable, polymorphic buteo with a large, stocky profile. There is a marked difference in size between the eastern and western North American races of Red-tailed Hawks, with the eastern birds being notably larger.

Red-tailed hawks average 48 to 65 centimeters in length. Their wingspan is approximately 4 feet, or 122 centimeters. There is sexual dimorphism in size: females are 25% larger than males. This kind of sexual dimorphism, where females are larger than males, is common in birds of prey. Red-tailed hawk plumage ranges from light auburn to deep brown. The underbelly is lighter than the rest of the body, with a dark belly band across it. The cere (the soft skin at the base of the beak), the legs and the feet are all yellow. The tail is uniformly red, and it is this trait that gives red-tailed hawks their name.

Immature red-tailed hawks look similar to adults, but... Immatures also have yellowish-gray eyes that become dark brown as adults.

There are at least 14 subspecies of *Buteo jamaicensis*. These subspecies are separated based largely on differences in plumage and in where they breed and winter.

Hunting Strategies:

The most notable Red-tailed strategy is to wait patiently from an elevated perch until prey

movement is seen, and then to launch attack either by stealth or speed. Still, the Red-tailed is a flexible hunter; it will stoop from 1000 feet, wait on, conduct low-level searching flights, or run on the ground after quarry. Part of its success lies in its ability to adapt to circumstance. Red-tailed hawks feed on a wide variety of prey, using their powerful claws as weapons. Eighty to eighty-five percent of their diet consists of small rodents. Mammals as large as eastern cottontail rabbits may also be taken. Reptiles and other birds make up the rest of the diet. Male red-winged blackbirds are common prey because they are so visible when guarding their nests. Red-tailed hawks do most of their hunting from a perch. They are not known to store food.

Use In Falconry:

The Red-tailed Hawk is commonly used as an 'apprentice bird' because of its wide distribution and hearty constitution. It is a powerful and adaptable raptor, capable of taking a variety of quarry, including rabbits, pheasant, small mammals, and waterfowl. Though it is a bird used by apprentices, the Red-tailed is not as easy to train as some other hawks. Passage birds can be stubborn and lazy, imprints can be positively dangerous if incorrectly handled due to their strength. A properly trained Red-tailed Hawk can be a Master's hawk, as falconers like Gary Brewer, Liam McGranahan, and Bill Oakes have shown.

Habitat/Range:

Red-tailed hawks are found throughout North America south of the arctic circle. Some have speculated that the Red-tailed Hawk has thrived in areas it would not otherwise occupy due to the presence of power poles, which provide ample perches from which to hunt.

The Red-tailed Hawk is a true generalist and opportunist; it will handily catch small to medium mammals such as mice, voles, squirrels, rabbits, jack rabbits and prairie dogs. But why stop there? It will also thrive upon rattlesnakes, large insects, ducks, and pheasant. If conditions permit, it is not above the occasional meal on reasonably fresh carrion.

Home range sizes range from 1.3 to 5.2 square kilometers. The size of red-tailed hawk home ranges varies with the quality of habitat, the sex of the individual, and the season.

Reproduction:

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. Mating usually takes place following these flights. The male and female land on a perch and preen each other. The female then tilts forward, allowing the male to mount her. Copulation lasts 5 to 10 seconds.

Red-tailed hawk nests are usually 28 to 38 inches in diameter. They are sometimes used for several years, and can be up to 3 feet tall. The male and female both construct the nest in a tall tree, 4 to 21 m above the ground. Where trees are scarce, they are sometimes built on cliff ledges or artificial structures such as on buildings. The nests are constructed of twigs and lined with bark, pine needles, corn cobs, husks, stalks, aspen catkins and other soft plant matter. Fresh bark, twigs, and pine needles are deposited into the nest throughout the breeding season to keep the nest clean. Owls compete with the red-tailed hawks for nest sites. Each species is known to kill the young and destroy the eggs of the other in an attempt at taking a nest site.

The female lays 1 to 5 eggs around the first week of April. The eggs are laid approximately every other day and are incubated for 28 to 35 days. Both parents incubate the eggs. Males may spend less time incubating than females, but bring food to the female while she is on the nest. The young hatch over the course of 2 to 4 days, and are altricial at hatching. During the nestling stage, the female broods the young, and the male provides most of the food to the female and the chicks. The female feeds the nestlings by tearing the food into small pieces. The chicks begin to leave the nest after 42 to 46 days. The fledgling period lasts up to 10 weeks, during which the chicks learn to fly and hunt.

Breeding season: Breeding occurs in the spring.

Eggs per season: 1 to 5

Time to hatching: 28 to 35 days; avg. 30 days

Time to fledging: 42 to 46 days

Time to independence: 10 weeks (high)

Age at sexual or reproductive maturity (female): 3 years (average)

Age at sexual or reproductive maturity (male): 3 years (average)

Lifespan / Longevity:

Red-tailed hawks are relatively long-lived birds. While many of these birds die young (most live less than two years), those that survive the first few years can live for many 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.

Behavior:

Red-tailed hawk pairs remain together for years in the same territory. These birds are very territorial, and defend territories that range in size from 0.85 to 3.9 square kilometers, depending on the amount of food, perches, and nest sites in the territory. The female is usually the more aggressive partner around the nest itself, whereas the male more aggressively defends the territory boundaries. The birds will soar over their territory, mostly on clear days, looking for intruders. Red-tailed hawks are diurnal (active during the day).

Communication:

Adult red-tailed hawks make what is called a horse scream, "kee-eeee-arr." It is often described as sounding like a steam whistle. The length and pitch of this call varies with the age, gender, and geographic region of the individual red-tailed hawk.

Young red-tailed hawks communicate with their parents by making soft, low "peep"-ing sounds.

As they get older, the sounds they make deepen in tone, and are usually sounds of hunger.

Red-tailed hawks also communicate through body language. In an aggressive posture, the body and head of the red-tailed hawk are held upright and its feathers are standing up. In submission, the hawk's head is lower to the ground and the feathers are smooth. Red-tailed hawks also display many aerial behaviors. In the talon-drop, during courtship, they swoop down trying to touch one another with their talons. Undulating-flight is an up and down movement that is mainly used in territorial display. Finally, in the dive-display the bird performs a steep dive. This is also a territorial display.

Red-tailed hawks have extraordinarily keen vision, which allows them to detect prey movements at great distances.