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Red-Tailed Hawk

Buteo jamaicensis



By Nicole Lee

Red-tailed hawks (*Buteo jamaicensis*) are the most common species of hawk on the continent, living in nearly every part of North America, including most of Mexico. They are frequently found soaring in broad circles above open fields or grasslands; or perching on top of telephone poles or dead trees, searching for prey. Common in the wild, the species may be even more familiar than most people realize. The raspy, shrill scream of the red-tailed hawk is such a thrilling vocalization that any time a hawk or an eagle—of any species, anywhere in the world—appears in a movie, there is a good chance the sound track playing is the cry of a red-tailed hawk! With their sharp eyesight, these carnivores are effective hunters. As their name suggests, they are usually adorned with a rust-coloured tail; however, there are some individual and geographic variations to the colouration. In fact, one of the 14 recognized subspecies (commonly referred to as Harlan's hawk) is a red-tailed hawk without any red to its tail (instead, it is solid white or grey). *B. jamaicensis*, is sometimes also known by the names buzzard hawk or red hawk, has a stable and possibly increasing population across its range. However, its prevalence in North America does not make this creature any less fascinating!

Characteristics

Most red-tailed hawks have rich, dark brown upperparts, including their head and more lightly coloured underparts with mottled brown across the belly. Tail feathers are typically light on the underside with a brick or rust colour on top, giving this hawk its name. However, despite this general description, there is much variation to exact plumage colour and pattern across the species. The terms "light phase" and "dark phase", for example, can also be used to help categorize some of the variation, these phases sometimes corresponding to different geographical regions. While differences in plumage may make identification of

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the species difficult, most adults have in common a red-toned tail with a dark terminal band. All have dark patagial markings (or bands of colour on the leading edges of their underwings). Their legs and feet are yellow with strong, sharp talons.

Juvenile red-tails are duller in colour, have more streaking, and have grey-brown and darkly banded tails. If they are to have red tail feathers as an adult, these will molt in during their second year.

A large hawk—the second largest hawk in North America after the ferruginous hawk—*Buteo jamaicensis* exhibits the typical proportions found in members of its genus including broad, rounded wings; a short, wide body; and a wide tail. Although it may resemble an eagle from afar, if the two are seen side by side, the size difference is easily apparent, with the red-tailed hawk being much smaller than the eagle. Fully grown males and females overlap in size, but females are on average 25% larger than their male counterparts. Body lengths for the red-tailed hawk range from 45-65cm (17.7-22in) (45-56cm for males; 50-65cm for females) and wingspans range from 114-133cm (44.9-52.4in) (the same for both genders). While they are relatively large hawks, as with other birds capable of flight, they are exceptionally light for their size, weighing in at only 690-1,460g (31.7-51.5oz) (690-1300g for males; 900-1460g for females).

The red-tailed hawk may sometimes be confused with the red-shouldered hawk, Swainson's hawk, However, the red-shouldered hawk is unique from the red-tailed hawk as it has a banded tail, auburn barring on its underparts, and tends to be overall smaller. Swainson's hawk has a dark chest and the trailing edge (as opposed to the leading edge) of its underwing is dark.

Life Cycle

Red-tailed hawks usually do not start mating until their third year. Courting individuals perform an impressive sequence of aerial acrobatics, in which a male and female pair soars in large circles all the while gaining great height. The male dives down steeply and then returns, repeating this action several times. He then approaches the female from above, touching her briefly with his talons. The pair may lock talons and spiral down towards the ground before they let go, the whole sequence accompanied by shrill screams. The pair is monogamous and will remain together until one of the two dies.

Red-tailed hawks build their nests in high-up and in concealed locations, often choosing the tallest tree in an area, the edge of a cliff, or other manmade structures such as tall buildings, window ledges and billboard platforms. Both members contribute to building the nest (or restoring one used a previous year) by assembling piles of sticks. The inside is lined with softer materials including bark strips, both fresh and dry vegetation and feathers. After 4-7 days of work, nests can be as large as 2m (6.5ft) high and 1m (3ft) across.

Laid in March through May; a single clutch contains 1 to 5 eggs, with the average being 2 or 3 eggs. Much like the hawks themselves, eggs vary in colour, with a base colour of white or off-white and often some degree of mottling or speckling in a shade of brown or tan. These eggs' size is comparable to a chicken egg, at roughly 5.6cm (2.7in) X 5.0cm (2.0in). While the female does the majority of incubation as her partner brings her food, if she decides to take a break or have her turn hunting, the male will take over incubating the eggs, the entire stage lasting 28 to 35 days. The parents are aggressive defending their nest, chasing off threatening raptors including other hawks, eagles and great horned owls.

Hawk nestlings, are born tiny (57g or 2oz) and helpless, relying on their parents for food and protection. For 30 to 35 days after they hatch, the female broods the young. When prey is brought back by her partner she tears into small pieces for her young.

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About 6 weeks after hatching (42 to 46 days), the young leave the nest, but at this point, they still cannot fly. At about 2 to 3 weeks later, they develop skills for flight and at about 6 to 7 weeks later, they are able to catch their own food. However, some individuals may remain in contact with their parents for up to 6 months after their initial departure from the nest.

The average lifespan for the species is 21 years old, with the oldest individual recorded at 28 years and 10 months old.

Habitat

The red-tailed hawk is found in a variety of different habitats that offer the species sufficient open space for hunting, elevated perches, and food sources. These habitats can include open country, woodlands, and even roadsides, mountains, and tropical rainforests. The red-tailed hawk only seems to be restricted from extremely dry deserts, freezing tundra, and very dense forest.

It is possible that *B. jamaicensis* is the most common hawk species in North America, its range spanning the entire continent including Central America and the West Indies. The breeding range stretches across the continent; however, breeding densities are lower in areas with the lowest density of preferred prey individuals – these places include the boreal forest in northern areas, Haida Gwaii, the northern portion of the mainland coast and Vancouver Island. The highest breeding densities in the province of British Columbia are within the Fraser Valley.

Whether these hawks migrate depends on location. There is a tendency for more northern populations to move south for the winter. Wintering grounds often include areas from southern British Columbia and further south.

Behaviour

A large portion of red-tailed hawks' diet is made up of small mammals including voles, mice, squirrels and rabbits. They also eat birds such as pheasants, bobwhites, quails, starlings and blackbirds; and occasionally some reptiles. This keen-eyed hawk "sits and waits" on a perch, scanning for its next prey. Once something is spotted, in a slow and controlled dive, the red-tailed hawk outstretches its legs to seize its meal. On occasion, the species has been observed use teamwork to catch prey (e.g. catching tree squirrels by guarding opposite sides of the same tree).

Like other hawks, this bird makes use of thermals and updrafts to save energy when soaring.

Adults communicate through a variety of vocalizations. They make a hoarse, screaming kee-eeee-arr, which lasts 2-3 seconds and is usually given while soaring. During courtship, they also make a shrill chirp, sometimes giving several of these calls in a row.

Threats

As adults, these birds are top predators. However, at earlier life stages the species is vulnerable. As eggs, they are at risk of predation by crows; and as nestlings, they are at risk of predation by great horned

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owls. These hawks compete with other raptors for sustenance and have been known to steal food from and have food stolen by bald eagles, golden eagles and ferruginous hawks.

The red-tailed hawk population is increasing across North America, and as such, the species has received a conservation status of Least Concern from the International Union for Conservation of Nature (IUCN). The increase is believed to be linked an increase in suitable habitat for the species, as human activity has led to forest fragmentation, creating many tree-bordered open areas in which to hunt. However, this same change in landscape has been detrimental to countless other species, breaking up areas of suitable habitat. The increase in red-tailed hawks has also come at the cost of some other hawks, including red-shouldered hawks, ferruginous hawks and Swainson's hawks

Humans also pose threats to red-tailed hawks, particularly through shootings and automobile collisions. Even if not directly shot, ingestion of lead shots can be lethal. Human activity near nesting sites may also be harmful as it can be stressful for the hawks. Formerly, electrical wires were a threat because they could electrocute red-tailed hawks and other raptors. Fortunately though, newer raptor-safe replacement lines have been developed and have replaced many of the older wires.

In addition, pollutants can enter the ecosystem and into the food chain, and when hawks ingest their rodent prey, can suffer from the consequences.

What We Can Do To Help

As with other species that can become susceptible to changes in their environment or habitat loss, red-tailed hawks require habitat that is free from pollution and overall degradation. No species can survive without their habitat and we need to do all that we can to protect natural spaces for a great diversity of species.

Other Interesting Facts

The red-tailed hawk has a thrilling, raspy scream that sounds exactly like a raptor should sound. At least, that's what Hollywood directors seem to think. Whenever a hawk or eagle appears onscreen, no matter what species, the shrill cry on the soundtrack is almost always a red-tailed hawk.

The first red-tailed hawk specimen scientifically studied was from Jamaica, hence their scientific name *Buteo jamaicensis*.

These keen-eyed raptors can spot a mouse from up to 2km in the sky!

Where & When to view the animal.

This hawk species is commonly seen above fields or other large open areas such as grasslands, deserts, and farmland either soaring in wide circles high in the sky or perched atop a high post (perhaps a telephone pole, fence post, or some other structure like a billboard or a tall building), searching for prey. They can often be seen alongside the road. There is a good chance the first hawk you see will be a red-tailed hawk (be sure to check the field marks – buteo shape and dark bar patagial markings). These

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birds are more numerous in developed environments in the winter time when the year round population is joined migrants from the far north.

During nesting seasons, from March to July, these birds choose the tallest tree in a cluster of trees or other high perches. Locally along North America's western coast, red-tailed hawks tend to make their nests in hardwood trees such as alder.

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