

## Buteos

Buteos are medium-sized to large hawks with robust bodies, long, broad wings, and relatively short, fan-shaped tails. Two species are common in many parts of Alaska, the red-tailed hawk (*Buteo jamaicensis*) and rough-legged hawk (*B. lagopus*); Swainson's hawks (*B. swainsoni*) are accidental to rare in Interior and southcentral Alaska. Buteos prey primarily on small mammals but are adaptable and opportunistic, capable of taking larger prey such as hares, grouse, ptarmigan, and waterfowl. They are large and intimidating to smaller raptors, from whom they sometimes steal prey.

Buteos hunt from treetops, utility poles, or high ground perches, sometimes hovering on the wind, watching and waiting for prey, which they capture by diving quickly from overhead. Their broad wings enable them to soar on thermal updrafts, and they are commonly seen hunting by circling high in the air for long periods. Buteos build bulky stick nests in trees or on cliffs or bluffs, which are often re-used in subsequent years by raptors that do not build nests, including gyrfalcons, great horned owls, and great gray owls.

### Red-tailed Hawk (*Buteo jamaicensis*)

Red-tails are large hawks, 18-26 inches (45-65 centimeters) long, with wingspans of 45-52 inches (115-130 cm). Sexes are similarly colored, but show a pronounced reverse sexual size dimorphism. Males weigh from 1.5 – 3.0 pounds (690 to 1300 grams), with females tipping the scales at 2.0 – 4.5 pounds (900 – 2000 g).

A typical red-tail is chocolate brown on the back and wings, buffy or whitish underneath, streaked or spotted with brown, often with a dark band across the belly, and a dark head. The tail is brownish-red or brick red, often barred with brown with a dark, narrow terminal band above, and pinkish or light brown below. However, red-tailed hawks in Alaska are highly variable in color.

The western form, *B. j. calurus*, displays three common color morphs, light, dark, and rufous, and may present as anywhere from whitish all over, blotched or mottled with brown, to blackish-brown, front and back, from head to toe.

Previously considered a separate species, the Harlan's red-tailed hawk (*B. j. harlani*), occurs commonly, especially in eastern Alaska. Harlan's redtails are generally dark all over and have grayish or whitish tails marbled with brown. Intergrades between various forms are common across this raptor's range in Alaska, and may resemble none of the standard images in bird identification manuals.

The beak is stout, dark, and deeply hooked. Ceres, legs and feet may be yellow to bluish gray. Juveniles of all forms often appear similar to or darker and blotchier than adults, but are highly variable. Immature birds show light or yellowish eyes, while adults have reddish brown to dark brown eyes.

Red-tails typically still-hunt from high perches or by circling and soaring overhead. Flight is powerful and direct, with wings held horizontally. The call is a raspy "keeyeeaaarrrrr," recordings of which are commonly used in film and television to depict the voices of nearly any raptor.

Red-tailed hawks are common throughout the forested regions of central and southcentral Alaska, from the Canadian border westward to the treeline. In the spring, courting pairs soar together high in the air, with males occasionally diving steeply, then pulling up nearly vertically to rejoin females. Frequently, birds extend their legs during these aerial maneuvers and touch or even grasp each other's feet, sometimes spiraling and tumbling earthward until letting go and resuming their circling flight.

Pairs build large bowl-shaped nests of sticks, frequently in spruce trees, but they will use other species and even build nests on rocky outcrops or cliffs. Females lay from 1-5 eggs and pairs typically raise three or four young. Both sexes incubate, although females are the primary incubators and defenders of the nest. Males provide virtually all food for their mates through incubation and through the early growth of nestlings. For their first week or so, young hawks are unable to thermoregulate, i.e., maintain their own body temperatures, and must be brooded constantly by the adults. Nestlings grow quickly, replacing their downy coats with new feathers. They are voracious and after a few weeks, both adults must actively hunt to meet the hungry nestlings' demands for food.

Red-tailed hawks winter in the Lower 48 states and Mexico.

### Rough-legged Hawk (*Buteo lagopus*)

Rough-legged hawks are 19-21 inches (45-60 centimeters) in length, with wingspans of 52-54 inches (130-140 cm). Males weigh 1.6-2.9 pounds (715-1325 grams), and the similarly-colored females 2.4-3.0 pounds (1100-1400g).

Like red-tailed hawks, rough-legs are variable in coloration, from very dark to light, but nearly all forms share several characteristics: a dark band across the chest; light tail with wide, dark terminal band; dark wingtips; conspicuous dark patches on the undersides of the wings at the wrist joints; and a prominent light patch at the base of the upper side of the tail. A wide variety of intermediate forms exist between the dark and light extremes.

Rough-legged hawks generally have lighter heads than red-tails, with small beaks. They have slightly longer wings and fly more buoyantly, usually with wings held above the horizontal in a dihedral "V" shape. Rough-legs sometimes hover while hunting, a behavior not commonly seen in red-tails. They commonly still-hunt from high ground perches, tree snags, or utility poles.

This hawk's name refers to its legs being feathered all the way to its toes (lagopus means "hare-footed"). Among diurnal raptors, this trait is seen only in golden eagles and ferruginous hawks, and may protect the birds from the bites of mammalian prey. Rough-legs have comparatively small feet for their body size, and concentrate on catching small rodents, although they are



opportunistic and capable of managing large shorebirds, ptarmigan, ground squirrels, snowshoe hares, and even arctic hares. They sometimes eat carrion or road-killed prey.

Rough-legged hawks are circumpolar in distribution. In Alaska, they inhabit open, mostly treeless tundra on the North Slope, across the Interior and the western coastal plain, and on the Yukon-Kuskokwim delta. They build stick nests on bluffs, cliffs, and prominent points of hilltops and crests of ridges, and occasionally in treetops. Sometimes on the tundra where woody vegetation is scarce, rough-legs incorporate caribou and other bones into their nests. In tundra areas, large expanses of appropriate hunting territory are unexploited by rough-legged hawks due to a lack of suitable nest sites.

Females typically lay 2-5 eggs, but when prey is abundant, may lay up to seven. Conversely, when prey is scarce, they may lay few eggs or not breed at all. Pairs tend to be sensitive to disturbance at nests, and frequently defend fiercely against intruders.

Rough-legs are complete migrants, i.e., virtually all members of the species leave the breeding range during the non-breeding season. Birds from remote tundra nesting areas migrate to Lower 48 farmlands for the winter, and often seem unusually tame and tolerant of human disturbance.

#### **Swainson's Hawk** (*Buteo swainsoni*)

Unusual visitors to Alaska's Interior, Swainson's hawks appear smaller, slimmer, and with narrower wings than red-tails and rough-legs. They are variable in coloration, but typically display a dark breast band or "bib" between belly and chin, and the major flight feathers appear much darker than those of most red-tails and rough-legs. They eat small mammals and large insects. Swainson's hawks migrate long distances, wintering as far away as southern South America.

**Conservation, management, and protection:** Neither red-tail nor rough-leg populations are well-studied or diligently monitored, but casual observations suggest numbers are stable. Possible threats include environmental pollution, although as consumers of small mammals which are not generally exposed to persistent organochlorine pesticides in the U.S. portions of the hawks' ranges, buteos have not suffered reproductive failures seen in some other raptors. Still, some can be subjected to contaminant hazards, especially those buteos that migrate to countries where chemicals banned in North America are still in use. The deaths of thousands of Swainson's hawks in Argentina in the mid-1990s were traced to pesticides.

Loss of habitat appears less a threat to buteos than to other raptors, especially to the adaptable and cosmopolitan red-tail, which is perfectly capable of chasing voles in either wilderness forest clearings or urban industrial parks. Localized destruction of habitat may affect local hawks significantly, but not at a population level. Large-scale changes in habitat and prey populations resulting from global climate change could exert major influences on buteos in the future, especially on rough-legs nesting in tundra habitats underlain by permafrost. Widespread habitat destruction in wintering areas and along migration corridors also presents significant problems.

Buteos face similar hazards to other raptors, especially starvation. Making a living as a predator is difficult and dangerous business, and many inexperienced hawks do not live through their first year. Bad weather, parasites, and accidental injuries all contribute to starvation deaths of many buteos each year. Eagles, large owls, large falcons, and mammalian predators sometimes kill buteos, often while attempting to pirate prey from them.

Even though state and federal laws protect all raptors, buteos are sometimes shot illegally or trapped and killed at poultry farms, game bird pens, and pigeon coops. Because they often seem tame on wintering grounds, rough-legged hawks are tempting targets for illegal shooters. Hawks also collide with large windows, are electrocuted on utility poles, strike telecommunication towers and their associated guy wires, and are struck and killed on roads and highways. One or two red-tails are taken from Alaska nests by falconers each year.