

The CROSSLEY



GUIDE

This sampler presents plates and text from *The Crossley ID Guide: Raptors*. Part of the revolutionary Crossley ID Guide series, *The Crossley ID Guide: Raptors* is the first raptor guide with lifelike scenes composed from multiple photographs--scenes that allow you to identify raptors just as the experts do. Experienced birders use the most easily observed and consistent characteristics--size, shape, behavior, probability, and general color patterns. The complete book features 101 scenes--including thirty-five double-page layouts--to provide a complete picture of how these features are all related. Even the effects of lighting and other real-world conditions are illustrated and explained. Detailed and succinct accounts from two of North America's foremost raptor experts, Jerry Liguori and Brian Sullivan, stress the key identification features. This complete picture allows everyone from beginner to expert to understand and enjoy what he or she sees in the field. The mystique of bird identification is eliminated, allowing even novice birders to identify raptors quickly and simply.

For more information about *The Crossley ID Guide: Raptors*, please visit Princeton University Press (<http://press.princeton.edu/titles/9966.html>). The book is also available through all major retailers of books and nature products.

An interactive website--www.crossleybirds.com--includes expanded captions for the plates and species updates

Princeton University Press has also published the award winning: *The Crossley ID Guide: Eastern Birds* (<http://press.princeton.edu/titles/9384.html>).



PHOTO BY MICHAEL ENGELMEYER

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PHOTO BY AARON BARNA

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PHOTO BY JESSIE BARRY

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Red-tailed Hawk (East) *Buteo jamaicensis* **RTHA** L 17–22 in, WS 43–56 in, WT 1.5–3.8 lb, page 203

The quintessential roadside raptor, Red-tailed Hawk is familiar and common throughout much of North America, frequently seen sitting motionless in roadside trees and on power poles, white breast gleaming in the sun. Heavily built with broad wings and a relatively short, broad tail; appears particularly large and stocky when perched. Though highly variable in plumage, across the majority of its range light morphs predominate, so becoming familiar with the field marks of light Red-taileds will enable you to id most Red-taileds encountered range-wide. East of the Great Plains, Red-tailed Hawks show little variation, occurring

mainly as light morphs, with dark and rufous birds occurring very rarely during migration and winter. Light Red-tailed Hawks can be identified by their distinctly dark patagium (leading edge of the wing), dark bellyband contrasting with unmarked white breast, and red tail (adults). Adult Eastern Red-taileds have whitish-buff underparts with dark-spotted bellybands, and generally lack the strong rufous wash underneath of western birds. Eastern adults breeding in the Lower 48 usually lack distinct dark tail bands, but some Florida breeders and boreal forest breeders can show this. Eastern Red-taileds occasionally have dark throats.

Hunt efficiently from the air, often hovering and kiting from mid- to high elevation, as well as from a perch, typically a roadside power pole or tree, and can stoop at high speeds to surprise, flush, or overtake prey. Large and powerful with even-paced, moderately heavy wingbeats; its wingbeats and flight style differ from all other buteos. The broad wings usually held in a shallow dihedral when soaring, but sometimes flat. 1st-years lack the adult's red tail, instead having a brownish-banded tail throughout the first year, becoming adult-like in the second fall. 1st-years also pale-eyed; eastern birds tend to be pale-throated with white

to buffy underparts and blobby dark bellybands. 1st-years rangier than adults, with narrower wings and longer tails, lack the adult's bold dark trailing edge to the wings in flight and show distinct pale wing panels on the outerwings. 2nd-years sometimes identifiable by retained juvenile outer primaries and secondaries. Found in a variety of open habitats; generally avoids dense tracts of continuous forest. A true generalist, feeding on everything from mice to rabbits, as well as birds and snakes. The typical call is the Hollywood raptor scream, very familiar even to nonbirders, but often passed off as an eagle on the big screen.



Golden Eagle *Aquila chrysaetos* **GOEA** L 28–35 in, WS 72–89 in, WT 6.6–14 lb, page 186

Golden Eagles are birds of the mountainous West and Northeast, using cliffs almost exclusively as a substrate for their massive stick nests. Adults are nondescript, lacking any striking characters. They are dark brown with a golden hindneck and pale mottling along the upperwings. Adults

lack white in the tail or wings shown by immature birds. The wings and tail have faint grayish banding that is difficult to see without exceptional views. Immature (1st- to 4th-year) Golden Eagles have either considerable white in the wings or none at all, but 1st-, 2nd-, and 3rd-year birds always have a

Golden Eagle—immature

white-based tail. 4th-year birds and some 5th-year birds have remnants of white in the tail, but it is usually toward the base of the outer tail feathers only. 1st-years differ from other ages in their lack of pale mottling along the upperwings, clean,

same-age flight feathers in fall showing no signs of molt and a crisp white-based tail with well-defined blackish terminal band. 2nd- to 4th-year birds can be impossible to tell apart in the field, and many should be dubbed as “unknown age.”



Bald Eagle (sitting) *Haliaeetus leucocephalus* **BAEA** L 27–35 in, WS 71–96 in, WT 4.4–14.5 lb, page 183

Bald Eagles are often found near water, especially lakes, rivers, and bays. They eat mainly fish, and their talons are perfect for grasping slippery prey, and their powerful bills are needed to break through a fish's tough skin. Bald Eagles are exceptional predators catching their own fish throughout the year but they also steal fish from Ospreys and

eat carrion. Bald Eagles congregate in large numbers, sometimes hundreds, in areas where food is plentiful. They sit peacefully together on ice packs one minute, then aggressively tail-chase each other the next, usually in squabbles over food. When perched, Bald Eagles are massive, bulky overall with large heads and bills. It takes roughly 5 years for birds

to attain their familiar adult plumage. Immatures are trickier to identify. 1st-years are mainly dark with brown heads and tails, dark brown eyes, and a blackish bill. Subadults (2nd–4th year) become progressively more adult-like, with the head, tail, bill, and eye color changing most notably. Younger immatures have white bellies and upper backs,

and older birds generally get darker in these areas. Some 4–5 year-olds looks essentially adult-like, but retain small signs of immaturity, such as dark flecks on the head or tail. Bald Eagles build massive stick nests in large trees, adding on to the nest each year. Some nests become so large and heavy that the braches supporting them collapse from the weight.



Peregrine Falcon *Falco peregrinus* PEFA L 14–18 in, WS 37–46 in, WT 1–2.1 lb, page 251

Peregrine Falcons are found in a variety of habitats. They nest on steep cliff faces in the Arctic, and on bridges and buildings in the middle of big cities where they are conspicuous and easy to see. In wild, remote places, they feed on all types of birds, from shorebirds to waterfowl, but hunt mainly pigeons in urban areas. Regardless of their environment, they rely on their amazing hunting abilities and lightning speed to pursue and overtake prey. The Peregrine’s legendary missile-like stoop has been clocked at speeds faster than any other land or sea animal in the

world. Reintroduced birds have a great array of appearances, making subspecific identification of many birds impossible. Tundra Peregrines are the palest, least marked of the races. They average slightly smaller and slimmer than other races. Adults are blue-gray on top with a black head and “sideburns”. They are pale below with barred bellies and “checkered” underwings. 1st-years are brown above (typically with a distinctive pale golden forehead extending on to the crown) and pale below but heavily streaked on the body. The mustachial is typically narrower at all ages than



Peregrine Falcon—Peale’s and Anatum

other races. 2nd-year birds may have leftover juvenile body and flight feathers that are brown and faded and sometimes visible in the field. *Anatum* Peregrines inhabit western mountainous regions in summer and are found in mostly coastal areas in winter. They are similar in appearance to Tundra birds, and plumage overlap between the races occurs, but adult *anatum* is typically more heavily marked underneath and slightly darker on top. 1st-year *anatum* is heavily streaked on the underbody, which has an orangey wash, and usually lacks the pale forehead

of Tundra. Peale’s Peregrine originates from the Pacific Northwest and is the darkest and largest of the races. Both adult and 1st-year birds are heavily marked below and dark on top compared with Tundra and *anatum*. The head is nearly solid blackish. Peale’s is uncommon and usually found along the West Coast in winter, but it is rare throughout the Interior West outside the breeding season. Reintroduced birds are widespread, particularly in the East. They show characteristics of several races and make subspecific identification of many birds impossible.



Sharp-shinned Hawk Ageing. At migration sites such as Cape May Point, NJ, thousands of Sharp-shinned Hawks can be seen in a single day. They often fly at low altitude in high winds, but way up high during light wind conditions. Sharpies are small, stocky birds with long, narrow tails and small heads. The tail is short for an accipiter and typically square-tipped when closed, but sometimes

rounded. Shape and flight style are often more easily seen in the field than plumage, so using these characters to tell it from the similar Cooper's Hawk is more reliable. Sharp-shinned Hawks are unsteady and buoyant in flight, and they have rapid, snappy wingbeats that lack power. They rise quickly in a soar and flap more frequently than other raptors. Age all the Sharp-shinned Hawks. Answers p.263



Red-shouldered Hawk (East) *Buteo lineatus* **RSHA** L 15–19 in, WS 37–42 in, WT 1.1–1.9 lb, page 220

Eastern Red-shoulders are found in swampy woodlands in summer, but they occur in more open habitats during migration and winter, especially along field edges. They take flight less frequently than most raptors, remaining perched for long periods waiting for prey. 1st-years are brown on top and pale below with dark streaks on the underbody. The tail is banded

brown and blackish, but fairly indistinct, and usually the brown bands are narrower than the blackish ones, showing a hint of the adult tail pattern. All ages and races have unique, pale, comma-shaped, translucent “windows” on the outer primaries that show up from below and above. The primary commas are white on adults and buffy on 1st-years. Adults are gorgeous, with strik-



Red-shouldered Hawk—Florida

ing black-and-white banded flight and tail feathers, rufous underparts, and rufous upperwing coverts or “shoulders”! Florida Red-shouldered Hawks are found in semiopen swamps or dense, swampy woodland. They fly in only short spurts, sitting most of the day, and they are tamer than the other races, often allowing close approach. They may hunt and display right in front of

people, while other raptors are much more aware of their personal space. Adults are similar in plumage to eastern adults but are considerably paler overall, and especially pale gray on the head. 1st-years are similar in plumage to 1st-year Eastern as well; oddly, they are often more heavily marked underneath than eastern birds. Birds of southern peninsular Florida average palest.



Harrier ageing and sexing. Harriers are found over open country, hunting by quartering low on teetering wings in search of prey, mainly small mammals. All ages and sexes have a bold white rump, but which of the birds here is a male, female, or immature? Male Harriers are always stark whitish below and grayish above, and these are fairly straightforward to ID in the field. Adult females can be more difficult and more like juveniles since they are brownish overall. But note the strongly streaked

underparts of adult females and the tawny upper wing bar. Adult females also tend to have grayish barred primary coverts on the upperwings. Juveniles are similar, though females are generally brown-eyed and males greenish yellow (tough to see in the field). Both sexes show strongly rufous-tinged underparts in fall and fade to an even buff in spring. Many times, however, you won't be able to tell the age/sex of a Harrier and should be satisfied to leave the identification at the species level. Answers p.262



Osprey behavior. Ospreys hover and soar over lakes and waterways in search of fish below the water's surface. Although they expend significant energy while hunting, they are well adapted with great stamina and may be airborne for hours at a time. Unlike Bald Eagles, they rarely pluck fish off the surface of the water and are not known to scavenge. They are efficient hunters but must adjust their aim to their underwater target, coming up "empty-handed" much more often than Bald Eagles. When they spot a fish close to the surface, they dive feet-first into the water, partially submerging

to grab the fish with their sharply curved talons. After catching their prey, Ospreys use a great deal of force to propel themselves from the water. As soon as they take flight, they "shake off" any water so they are able to fly more easily with their weighty prey, which they hold aerodynamically head-first. Ospreys are uniquely adapted with acutely curved talons and rough spines, called spicules, on the bottom of their feet that help them to easily hang on to their slippery prey.



American Kestrel is a beautiful raptor. Sadly, it is declining rapidly in many areas as a result of habitat loss. Is it worth protecting?



Merlin *Falco columbarius* **MERL** L 9–12 in, WS 21–27 in, WT 4.5–8.3 oz, page 248

Boreal forest is the home of the Taiga Merlin. The taiga race is the most widespread and common of the three races. It does not nest within earshot of Bald Eagles (on nest), but does occupy the same habitat. Recently, like a number of other raptors, it has adapted to humans and is increasingly moving to urban areas to feed and nest. Adult males have slate-blue upperparts with bold tail band-

ing. They are paler below with rufous-brown streaking and a yellow-orange wash, especially the leg feathers and wrists on many males. Adult females are dark slate-brown above with multiple whitish tail bands, and heavily streaked below with “checkered” underwings. They often appear dark. A prominent broad white tail tip on barred tail is distinctive. All Merlins are similar in size



Merlin

to Kestrels, but are more compact, with slightly stockier wings and chests, and exhibit much stiffer wingbeats and direct, dashing flight. Their speed in a full sprint humiliates the Kestrel. They are partial to sitting on the top of snags where they can scope out the surrounding countryside. 1st-year Taiga Merlins of both sexes are extremely similar in plumage to adult females, and it is often

impossible to tell them apart in the field. They often lack the slaty tone to the upperside and head of adult females, but some 1st-year birds appear slaty on top. The streaks on the underbody are often less blobby or teardrop-shaped, and the undertail coverts are less heavily marked; however, because of plumage variability, it may be difficult to see clear differences between the two ages.



Turkey Vulture (East) *Cathartes aura* TUVU L 24–28 in, WS 63–71 in, WT 3.5–5.3 lb, page 175

On the ground, easily identified by its large size, dark plumage, featherless head, and clumsy movements. But in flight becomes graceful and elegant, and at a distance can be confused with other large, dark soaring birds (especially Zone-tailed Hawk). Unsteady in flight, wobbling from side to side. Always holds wings in a strong dihedral. Appears comparatively smaller-headed than other raptors, and shows plain silvery flight feathers that contrast with otherwise blackish plumage. Long tail usually rounded at tip. Sexes similar in plumage and size. Adult has

featherless red head and ivory bill. Ageing 1st-years is straightforward in fall, but harder in spring. 1st-year has neat, same-age flight feathers with no signs of molt, and broad buffy tips on the upperwing coverts; head and bill grayish changing to pinkish with a dusky-tipped bill as early as 3–4 months old (timing varies). Over the course of the first year, head becomes darker red, completely featherless, and the bill more wholly whitish, as on adult. Some 2nd-years retain faint dusky bill tip in the second fall, usually hard to see in the field. Occurs in any habitat, but



Turkey Vulture (West)

favors woodland and cliffs for nesting. Highly aerial and social, soars in large “kettles,” rising and spinning tornado-like on the horizon, and gathers in numbers at kills, during migration, and at roosts. Eats primarily carrion detected mainly by smell. Frequently scavenges along roadsides, attending roadkills with Black Vulture and Crested Caracara. Tears prey with powerful bill, but has relatively weak feet, unlike stronger talons of raptors. The “Turkey Buzzard” leaves its prey reluctantly and rarely retreats far. Often perches on dead snags, radio towers, and util-

ity poles, and frequently holds wings outstretched to help condition flight feathers and increase body temperature (lowering it at night to conserve energy). Partly migratory, mostly retracts from the northern parts of range in winter, especially the Great Basin and northern Great Plains, but has been found in recent years with increasing regularity farther north than usual. Eastern birds average slightly larger and usually have more prominent “tubercles” (colorful, wartlike protuberances near the eyes) on the face than western birds, but some birds appear intermediate.



Widespread Eastern Raptors. In the East all the breeding buteos occur only as light morphs, so you needn't worry about the great variation that exists in these species in the West. Of the 3 common eastern buteos, Red-tailed is by far the most widespread and frequently encountered, and it pays to become familiar with it. Red-taileds of all ages show fairly prominent dark bellybands in the East and usually dark patagial marks (leading edge of the underwing). Look at the birds on the plate and try

to find the Red-taileds. If the bird has a plainer underwing pattern, it's a Broad-winged or a Red-shouldered. Red-shouldered usually show streaked breasts and a more square-handed look to the wingtips than Broad-winged, which are quite variable below but always have more tapered wingtips. Identify and age these widespread buteos in upstate New York on fall migration. Answers p.270



The Widespread Common Raptors. In many areas, raptors of all sorts can be seen. Several species are common or widespread throughout North America, so your understanding of which species to expect in a certain area or habitat may narrow your choices. Then try to decide what type of raptor (falcon, accipiter, buteo...) you are watching; this helps to narrow your choices

even further. Mastering the identification of these species will create a great platform for wherever you travel. See if you can identify, age, and sex all these common raptors that are frequently encountered. Answers p.274



Into the Sun! How many times have you followed a flying raptor until it has reached the sun, but still haven't made the ID? Most silhouettes, even of the most boldly marked birds, appear blackish. Some species with pale areas in the flight and tail feathers will show bold

patterns where the sun shines through. When birds are near the sun, their shape and plumage may appear altered, but there are still traits that will tell them from the others. Be aware of this altering effect, but try to identify these hawks with confidence. Answers p.283



Cooper's Hawk *Accipiter cooperii* **COHA** L 14–19 in, WS 28–34 in, WT 10–24 oz, page 197

Cooper's Hawks are a fairly common and increasing inhabitant of low- and mid-elevation forest. They have adapted to humans and are now frequent in urban areas, where they sneak in low and fast to snatch unsuspecting feeder birds. They feed mostly on doves and starlings, but birds their own size are also fair game. In the West, their habitat preference is streamside forest or patches of woodland within open city areas, such as canyon washes, parks, and golf courses, but they also hang out in places such as downtown Los Angeles. Adults are bluish on

top and rusty-barred below with fluffy, white undertail feathers, and orange eyes that turn dark red at a few years old. The tail is indistinctly banded with a bold white tip, and the head is dark with a paler nape. The white tail tip is usually more prominent than on Sharp-shinned Hawk. Adult males are bluer on top, with a grayer cheek and more vibrant in color underneath than females, especially birds more than 2 years old. 1st-year Cooper's Hawks are brown on the upperparts and lightly to moderately streaked on the underparts with large, tear-dropped



Cooper's Hawk—juvenile

streaks. The underparts typically appear paler than on other 1st-year accipiters with streaking usually most concentrated on the breast fading to cleaner white on the belly and undertail coverts. Western birds average more heavily streaked below, and can be confusing. 1st-year Cooper's Hawks are similar in appearance to Sharp-shinned and Northern Goshawks. It is intermediate in size and this is sometimes, but not always, distinctive. Size differences between the sexes are significant: males are close to female Sharp-shins and male Goshawks.

Compared with that of female Sharp-shinned Hawk, the tail tip is more rounded with a broader white terminal band. In flight the longer, broader and more rounded tail are usually distinctive. Wings are narrower-based and longer with a straighter leading edge. The head projects farther beyond the wings and looks contrastingly tawny in juveniles. Cooper's Hawk flies with stiff, shallow wingbeats that come from the shoulder. Adults have broader and rounder-looking wings than juveniles, making them appear more similar to Sharp-shinned Hawk.