

Swainson's Hawk vs. Rough-legged Hawk: An Overlooked Identification Pitfall

Tony Leukering

Though many birders might consider it unlikely that Swainson's Hawk could be confused with Rough-legged Hawk and vice versa, I believe that this very problem causes a number of incorrect reports of the two out of season. This is quite important, as the two species are virtual temporal replacements of each other in Colorado, with Rough-legged Hawk being quite rare or completely absent from mid-April through September, and Swainson's Hawk nearly non-existent in the state from October through March. I doubt that this temporal pattern is accidental. Both species are mouse specialists with low wing loading (i.e., large wing area relative to weight) that utilize hovering and kiting extensively in foraging over open country. Were they to occur together, they would certainly be direct competitors. Interestingly, the two species are also among the longest-migrating buteos of the Americas, that aspect being yet another feature of the two species' ecologies that encourages similarity of shape, particularly wing shape.

What many might consider to be typical plumages of the two—Rough-legged's overall pale plumage, distinct blackish belly, and wrist patches; Swainson's dark upperparts, dark bib, and pale belly—are certainly quite distinctive. However, certain plumages of the two species can fairly readily be misconstrued as belonging to the other. Oddly, these plumages belong to quite different age classes in the two species. In this essay, utilizing the pictures on the back cover of this journal, I treat the problems of separating juvenile and immature Swainson's Hawks from adult male Rough-legged Hawks. As these two species' typical plumages are well covered in the relevant field and specialty guides (particularly Liguori 2005 and Wheeler 2003), I mainly treat the potentially confusing plumages. Also, as plumage features are not as evident and thus less useful in dark morphs of the two species, I primarily discuss the light-morph plumages.

Swainson's Hawk

The first individuals of this species typically arrive in Colorado right around April Fool's Day, though in some years a few individuals are found in the last few days of March. In fall, the eastern plains often hold large concentrations of grasshopper-chasing Swainson's

Hawks of various ages, with numbers often peaking in mid-September. Nevertheless, virtually all have departed the state by 1 October, with just the occasional bird, almost always a youngster of some sort, still present into the first week of October or, very rarely, later. There are no acceptable records of the species in Colorado between mid-October and late March.

Like most raptors and all North American buteos, Swainson's Hawk retains its juvenal plumage (the plumage in which it leaves the nest) until it is nearly one year old. Unlike most North American buteos, the species has a distinct and juvenal-like formative plumage, which it molts into when about a year old. The juvenal and formative plumages are quite distinct from those of adults and are typified by an indistinct and streaky bib; variable extent and abundance of mottling/streaking on the breast, belly and wing linings; and more-or-less distinct black wrist commas. These two plumages can usually be told from each other, as the older birds are usually molting at least some flight feathers during their stay in Colorado. After their pre-formative molt is complete, they usually retain roughly the three outermost juvenal primaries, which can be distinguished from the newer feathers by their paler color and more worn appearance.

Rough-legged Hawk

This species typically arrives in Colorado after the first week of October, with the primary period of passage being mid-October to late November. After that period, most Rough-legs found in the state are wintering birds, though some movement into and through the state—often due to hard weather elsewhere—probably takes place well into winter. In spring, the return to the breeding grounds probably begins in mid- to late February and peaks in early to mid-March, with virtually all individuals having departed the state by 1 April. In most years, a few individuals, almost always juveniles, linger into the first week or two of April and as late as about the 20th. There are no acceptable Colorado records of the species between then and early October.

The species: Swainson's Hawk (*Buteo swainsonii*) and Rough-legged Hawk (*Buteo lagopus*).

The context: Almost anywhere in Colorado, at almost any season

The problem: Even though the two species rarely occur in the same season, there is surprising potential for confusion between young Swainson's and adult male Rough-legged Hawks.

(See photos on back cover.)

Unlike most raptors, adults of this species sport distinct male and female plumages, though a minority of birds exhibit something of an intermediate appearance. Although it is not well known or documented, my experience suggests that Rough-legged Hawks molt into a formative plumage that is variably distinct from definitive basic (full adult) plumage. The best clue that such birds are not adults is their retention of approximately the three outermost juvenal primaries, as mentioned above for Swainson's Hawks. This phenomenon, then, might account for the apparently intermediate plumages noted above. Such visibly formative-plumaged birds may very well all be immature males—because, since juvenal plumage in this species is quite similar to that of adult females, a distinct formative plumage in females would be much more difficult to detect.

As all juveniles and virtually all adult female Rough-legged Hawks exhibit the stereotypical large black wrist and belly patches, they run little risk of being mistaken for Swainson's Hawks. Adult males, however, tend to have little or no distinct belly patch and often have smaller wrist patches, which are occasionally reduced from square patches to thin commas and are often brown rather than black. The most lightly-marked such birds also tend to have little or no dark mottling in the wing linings and on the belly, the belly then contrasting fairly strongly with a dark-streaked bib of sorts.

Solutions

In identifying birds, it always pays to look beyond the one or two "obvious" features to assess as many characters as possible. Additionally, simply knowing what species is more likely at a given time of year helps to eliminate possibilities, and I hope that the explanation of the seasonal occurrence patterns of the two species being discussed can help in that matter. However, individual birds can and do occur outside normal temporal patterns, so a finer knowledge of identification features may assist in correctly identifying a puzzling bird. All features below are useful in separating Swainson's and Rough-legged Hawks of all colors.

One of the best features to help separate these two species is shape, as is typical in raptor identification. Though the two are more similar in shape than almost any other pair of ABA-area *buteos*, they are still different. Swainson's Hawks are well known to exhibit a strong dihedral when soaring, with the wings typically rounded smoothly upward above the horizontal from wing base to tip. Rough-legged Hawk, however, sports a modified dihedral, with the "arms" lifted above the horizontal, but the "hands" leveled parallel to the ground.

Tail patterns of the two are also quite different. Rough-legged

Hawk has a mostly white tail with a variable number of black bands, the largest being just subterminal, but with the basal half (or so) of the tail being white in most individuals. Swainson's Hawk has a darker tail, as the ground color is not quite white and the tail is narrowly banded throughout its length, though the subterminal band may be wider than the rest. Beware that Swainson's typically has a white or whitish rump that can be misconstrued as the base of the tail.

Though their coloring is much more subdued than that of adults, juvenile Swainson's Hawks still have flight feathers that are darker than are the wing linings (except in the very darkest of dark morphs), while Rough-legged Hawks have paler flight feathers with a trailing subterminal black band in adults (juveniles have a vague dusky terminal band). Finally, given good looks at a perched bird, one should be able to note that the Rough-legged's legs are feathered all the way to the toes, unlike the unfeathered yellow legs of Swainson's Hawks.

Corrigendum

In the previous installment of this column (Neotropic Cormorant), the references in the text to the two back-cover pictures of Neotropic Cormorant were reversed; the swimming bird is the one referred to second and does show the long tail well, as well as a fair bit of supraloral orange—a trait thought by many to be diagnostic of Double-crested. I apologize for any inconvenience.

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Tony Leukering, P.O. Box 660, Brighton, CO 80601, greatgrayowl@aol.com



Swainson's Hawk, Chico Basin Ranch, Pueblo County, 5 May 2007. Photo by Tony Leukering



Rough-legged Hawk, Salt Lake Valley, UT December 2002. Photo by Jerry Liguori

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