

RED-TAILED HAWK IDENTIFICATION

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Red-tailed Hawks (*Buteo jamaicensis*) are found across all of North America, from northern Canada and central Alaska south into Central America. This species tends to be the most commonly observed raptor throughout much of its range.

Typical Red-tailed Hawks

Almost every birder can identify an adult Red-tailed Hawk. Beginners can easily recognize this raptor's reddish tail, with a black terminal band. Intermediate birders learn the bird's silhouette—its outer primaries (except for the outermost) are more or less the same length, giving the bird a stocky, somewhat rounded, wing shape (Wheeler, 2003). Furthermore, the bird's tail is relatively short. Usually Red-tailed Hawks show a line of streaks between the breast and the belly. Advanced birders know to look for a dark line on the leading edge of the undersides of each wing (the patagials), as well as dark lines on the trailing wing edges. Finally, in all plumages Red-tailed Hawks lack feathered tarsi.

Juvenile birds are a bit more difficult. Their tails are pale brown with about a half dozen or so uniform dark bars. Beginners should learn the Red-tailed Hawk silhouette to identify immatures. Note, however, that juvenile hawks have longer primaries and shorter secondaries, factors that can contribute to silhouette confusion. Beginners should beware of juvenile Swainson's Hawks. Swainson's tend to have more pointed wing tips, and they soar with their wing tips held higher than their bodies, somewhat like a Turkey Vulture.

So, if Red-tailed Hawks are so easily recognized, why did our editor Douglas Chapman urge me to write this article? With Red-tailed Hawks things rapidly get complicated. This species is extremely variable, with the existence of several races (= subspecies), color morphs, and abnormal plumages (see Photo 4). Birders tend to attempt accurate identification of these birds but this is often impossible in the field. I will try to explain the situation simply and with a focus on South Dakota.

Eastern and Western Red-tailed Hawks

Red-tailed Hawks vary across North America, and ornithologists recognize several races. I use the terms race and subspecies as meaning the same thing—a morphologically distinct population of a species with a discernible geographic range during the breeding season. Little overlap exists among races. Where ranges do overlap in the breeding season, genetic blending occurs. The Red-tailed Hawk has two major and wide-ranging races, the Eastern Red-tailed (the *borealis* group) and the Western Red-tailed (the *calurus* group). Irrespective of subspecies, the breast band tends to be more pronounced in the west and in the north. Western birds also tend to be darker (Clark and Wheeler 1987) (See Photo 1). Eastern birds often appear to be hooded, with a white throat (Photos 2 and 3). Despite these trends, birds of both races are extremely variable, so it is probably not wise to identify Red-tailed Hawk subspecies in the field. Furthermore, the two races meet and interbreed in South Dakota, bisecting the state from northeast to southwest. Birds breeding in Aberdeen and Rapid City should be *calurus*, birds breeding in Sioux Falls probably are *borealis*, and birds from the Pierre area are intermediate.

Polymorphism and Krider's Hawk

Matters quickly become more complicated. Western Red-tailed Hawks, in addition to normally plumaged birds, come in three color morphs: dark (Photo 5), intermediate (Photo 8), and light. Color morphs differ from races in that they are not geographically distinct and often occur together in the same nest. These morphs merge into one another, varying from some birds being nearly black to others quite white. Eastern birds have a pale morph, and, rarely, a dark one (Preston and Beane 2009).

Red-tailed Hawks in the Dakotas and Montana have a fourth, even paler morph. These birds have nearly white heads, often show red only toward the outer half of their tails (the tails being otherwise whitish), and have whitish windows on the upper wing surfaces. These traits cause this palest color morph to appear superficially similar to Ferruginous Hawks. These very pale morph birds are often called "Krider's" Red-tailed Hawks (Photo 6). To give this very pale morph bird a distinct name, however, makes for considerable confusion. It is not a race of Red-tailed Hawk, because subspecies, by definition, have a distinct breeding range and do not overlap more than marginally with other subspecies. Other polymorphic species, such as the red and gray morphs of Eastern Screech-Owls, do not bear multiple names for their color morphs. Speaking of races, you will notice I have not said to which race Krider's Hawks belong. Most references indicate they are Eastern birds. The map in Preston and Beane (2009), in the definitive *Birds of North America*, concurs, but the range map shows the Krider's Red-tailed Hawk overlapping the range of the Western Red-tailed Hawk. Perhaps Krider's is actually, then, a morph of intermediate Eastern/Western birds! Whatever a Krider's Hawk actually is, extreme caution should be used differentiating pale and very pale morphs of Red-tailed Hawks.

Harlan's Hawk

What I have written above is both complicated enough and probably over-simplified. To further confuse matters, consider the Harlan's Hawk (Photo 9). Currently this raptor is considered to be a subspecies of the Red-tailed Hawk found in central Alaska, eastern Northwest Territory and northwestern British Columbia. It winters in the western United States and in the Great Plains. Since its discovery in 1830, this population has at least twice been treated as a separate species, and twice as a race of the Red-tailed Hawk. Even today the subject of Harlan's Hawks can elicit heated arguments among advanced birders.

In coloration, Harlan's Hawks are quite similar to Western Red-tailed Hawks, and, indeed, may often be indistinguishable in the field (Liguori 2004), but on average, they are "colder/blacker" in hue. Harlan's Hawks exhibit both light and dark morphs, including intermediate-plumaged individuals. Sibley (2000) depicts typical light and dark Harlan's Hawks, clearly showing their dusky white tails that lack red. Also, their wing tips are clearly shorter than the tips of their tails. Their tarsi may also be shorter than those of Western Red-tailed Hawks (Clark 2009a). Remember, however, that some juvenile Red-tailed Hawks also have dusky tails (see Photo 7).

Apparently, Harlan's Hawk tails can show variable amounts of red, equal to some Western Red-tailed Hawks (see photos in Clark 2009b). Currently, because it interbreeds with adjacent populations of Red-tailed Hawks, Harlan's Hawks are considered a race of the Red-tailed Hawk (Preston and Beane 2009). Birds with red in the tail have been considered to be the result of mixed race breeding. Recently, however, Clark (2009b) maintained that in all mixed Western/Harlan's pairs, the presumed Western Red-tailed Hawk is actually a misidentified Harlan's Hawk with more reddish than usual in the tail! Thus, Clark is lobbying to reinstate the Harlan's Hawk as a distinct species from the Red-tailed Hawk.

Conclusions

Birders of all abilities should be wary when identifying races and color morphs of Red-tailed Hawks. Be sure you know your field marks and taxonomic definitions. Are you identifying a race or a color morph? Be on the lookout for the re-emergence of the Harlan's Hawk as a full species. And, finally, be prepared to leave some forms of the Red-tailed Hawk unidentified! To see how complex and contrary Red-tailed Hawk identification (and experts) can be, refer to photos 10 and 11 below and the discussion at <<<http://www.dyesscreek.com/miscellaneous_pages/kriders.html>>>.

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Photos. Here is a gallery of Red-tailed Hawk photos. Note that many of these birds do not show red tails!



Photo 1. A Western Red-tailed Hawk. Note the more prominent breast band than on the Eastern bird below. Madison, SD.

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Photo 2. An Eastern Red-tailed Hawk. Note dark leading edge to the wing and streaky band on lower breast. Grant Co., MN

©Paula Perdon



Photo 3. An Eastern Red-tailed Hawk. This bird lacks much, if any, of a breast band.

©Jim Williams.



Photo 4. A leucistic Red-tailed Hawk. This plumage is even paler than pale Red-tailed Hawk morphs. Cold Spring, MN.

©Pete Sufka



Photo 5. A dark morph Red-tailed Hawk. A completely melanistic individual will be completely black.

©Diane Gulbrandson.



Photo 6. The head of a Krider's Red-tailed Hawk.

©Kenneth Cantley.



Photo 7. An immature Red-tailed Hawk.

©Terry Sohl



Photo 8. An intermediate morph Red-tailed Hawk.

©Terry Sohl.



Photo 9. Harlan's Hawk. Note the pale gray tail and the white and gray-barred flight feathers. Compare this photo to that of the immature Red-tailed Hawk (Photo 7)

©Doug Backlund.



Photo 10. Mystery Red-tailed Hawk. With a white head (too white?) and a pale red tail, shouldn't this bird be a Krider's Hawk? See <<<http://www.dyesscreek.com/miscellaneous_pages/kriders.html>>> for an extended argument as to this bird's identity. At least one expert believes this bird is a Harlan's Hawk, but see note for the next photo. Photo taken in Louisiana.

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Photo 11. Mystery Red-tailed Hawk 2. This is the same individual as in the photo above. Note that its wing tips extend at least to the tip of the tail (=not a Harlan's Hawk?). Photo taken in Louisiana.

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