

Dark Red-tailed Hawks

Introduction

The Red-tailed Hawk is the most polymorphic raptor in North America, ranging from almost completely whitish to completely blackish underneath, with numerous plumage variations in between. There are three main categories (sometimes referred to as

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“phases” or “forms”; more correctly referred to as “morphs”)

of the Red-tailed Hawk—light, intermediate (rufous), and

dark, and there is plumage

variation within all three. Intermediate- and dark-morph “Western” Red-tailed Hawks (*Buteo jamaicensis calurus*) occur primarily in the western regions

of the United States and Canada. Intergrades

between two colorations result in offspring

that may exhibit plumage characteristics of both parents, or that may appear similar

to either parent. The same is true for

intergrades between Western

and “Harlan’s” (*B. j. harlanii*)

Red-tailed Hawks, which some-

times interbreed where their ranges overlap in Alaska and Cana-

da. Surprisingly, I have observed that pair-

ings between light-morph and dark-morph indi-

viduals are more common than pairings between

two dark-morph individuals.

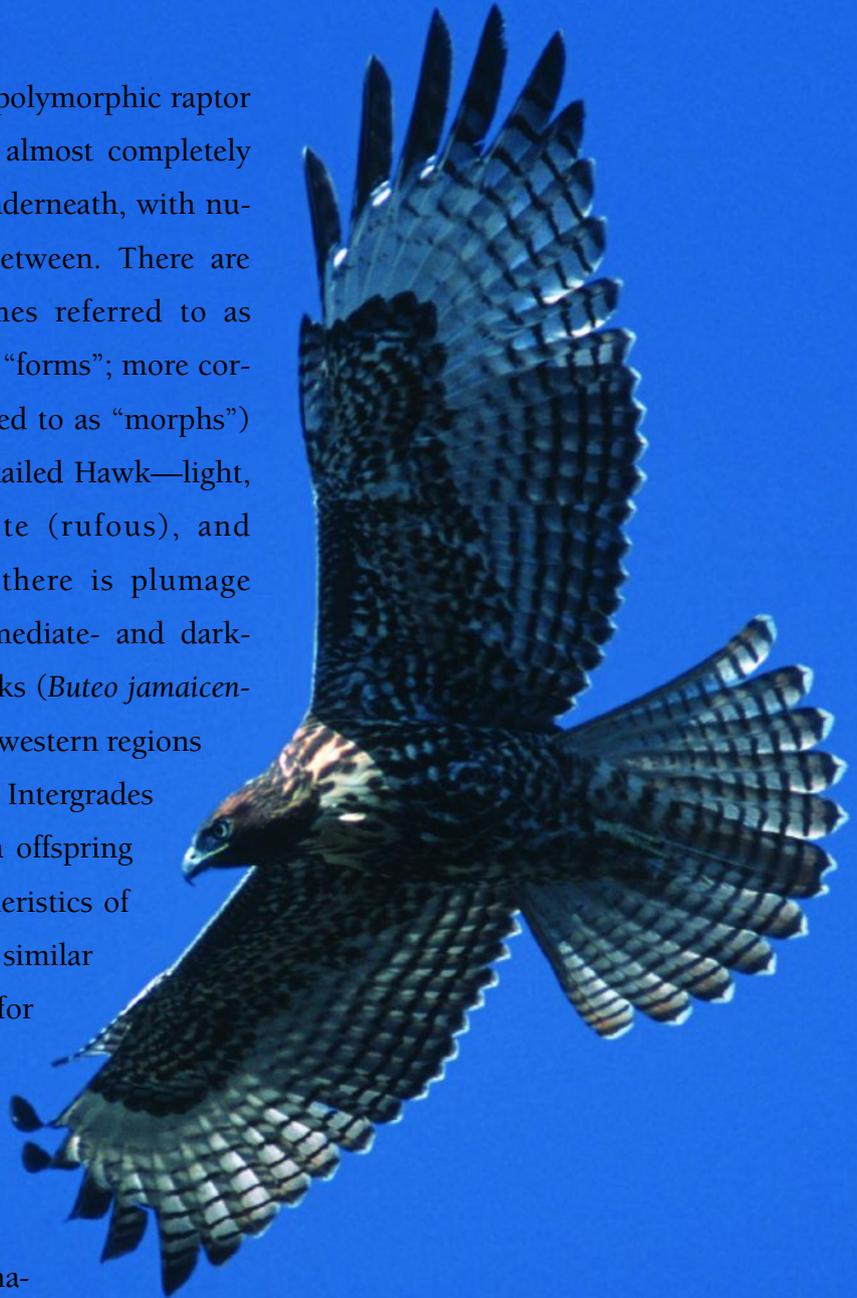


Fig. 1. This typical intermediate-morph Western Red-tailed Hawk has streaking across the underside, but it is less heavily marked on the breast. Because this bird appears pale-breasted due to the lighting, it could be mistaken for a light-morph individual at a distance. Wasatch Mountains, Utah; October 2002. © Jerry Liguori.

Under normal field conditions, specific plumage traits of raptors may be impossible to view. Even close-up views can be insufficient when attempting to observe specific plumage traits that separate intermediate- and dark-morph Red-tailed Hawks. Since Western intermediate- and dark-morph birds can appear identical in the field, I often categorize them together as “dark” birds in the field. This article is meant to call attention to the difficulty in distinguishing among “dark” Red-tailed Hawks as they typically appear in flight.

General discussion of variation in the Red-tailed Hawk has been provided by Clark and Wheeler (1997, 2001) and Wheeler (2003), and further information will be presented in Liguori (in press). For an introduction to the specific problem of light-morph Red-tailed Hawks (which is not a major focus of the present article), see Liguori (2001). The material presented below is summarized in Table 1 (p. 504), but the table should not be used as a substitute for the text that follows; rather, the two resources should be used in combination.

Juvenile Western and Harlan’s

Juvenile intermediate-morph Western Red-tailed Hawks have heavily mottled bellies, with streaking on the breast that appears slightly paler overall than the belly. The underwing coverts are heavily mottled as well, often masking the patagial bars, which can be a recognizable field mark on light Red-tailed Hawks (Fig. 1). However, some intermediate-morph birds and intergrades between dark- and intermediate-morph birds are evenly streaked throughout the underbody (Fig. 2). Juvenile dark-morph Western Red-tailed Hawks have solid-brown bodies and underwing coverts, although it is often difficult to make the distinction between intermediate- and dark-morph birds under typical field conditions (Fig. 3). Some solid-dark birds may have faint speckling on the belly, but this mark is difficult to see at any distance.



Fig. 2. This intermediate-morph Western Red-tailed Hawk is evenly streaked across the undersides, with little contrast between the breast and belly. *Wasatch Mountains, Utah; October 2003. © Jerry Liguori.*



Fig. 3. Juvenile intermediate- (left) and dark-morph (right) Red-tailed Hawks can both appear dark overall, and they often look similar to each other under typical field conditions. *Composite photograph. Goshute Mountains, Nevada; October 1998. © Jerry Liguori.*



Fig. 4. Many intermediate-morph Harlan’s Hawks, such as this one, have streaked breasts similar to what is shown by intermediate-morph Western Red-tailed Hawks. Note the black-and-white coloration, the heavily banded flight feathers with band-tipped primaries, the mottled head, and the white throat. *Goshute Mountains, Nevada; November 2001. © Jerry Liguori.*



Fig. 5. Typical intermediate-morph Harlan's Hawks, such as this one, are similar to intermediate-morph Western Red-tailed Hawks. Note the black-and-white coloration and the heavily banded flight feathers with band-tipped primaries. *Yellowstone National Park, Wyoming; November 2003. © Chris Neri.*

Juvenile intermediate- and dark-morph Harlan's are extremely difficult to distinguish from Western Red-taileds in flight. Generally, Harlan's are blackish (not brown) underneath with white (not buff) mottling. Intermediate-morph Harlan's, which are the most common morph of Harlan's Red-tailed Hawks, have white throats and pale mottling on the head, whereas intermediate- and dark-morph Westerns do not; these traits can be helpful in the identification of Harlan's, especially when viewed from a head-on angle (Fig. 4). Most Harlan's are heavily streaked underneath, but some may have faintly streaked breasts (intermediate-morph birds), while others may be solidly dark (Figs. 5 & 6).

The dark bands on the remiges (i.e., the flight feathers of the wing) of Harlan's are relatively broad and



Fig. 6. Dark-morph Harlan's Hawks are blackish underneath, as opposed to warm-brown as on Western Red-tailed Hawks. However, the difference in coloration between the two races is difficult to assess in flight. Note the heavily banded flight feathers with band-tipped primaries. *Lucky Peak, Idaho; October 2001. © Ryan Brady.*

often wavy, making Harlan's appear heavily marked throughout the underwings. One of the most telling features of a juvenile intermediate-morph Harlan's is the bright, white mottling on the upperwing coverts and flight feathers, which is often extensive and which often contrasts with a blackish upperside (Fig. 7). Western Red-tailed Hawks have less extensive buff (not white) mottling on the upperwing (Fig. 8), and the flight feathers are not as boldly banded underneath. Both Western and Harlan's that are solidly dark underneath can lack mottling on the upperwings. Intermediate- and dark-morph Western Red-tailed Hawks have heavily barred, brown (juveniles) or rufous (adults) uppertail coverts, which appear dark overall in the field. Heavily marked light-morph Westerns can have completely rufous uppertail coverts (Figs. 8 & 11); however, if a Western Red-tailed Hawk shows pale uppertail coverts that contrast with the tail, it is a light morph.



Fig. 7. The upperside of an intermediate-morph Harlan's Hawk is blackish overall, with bright white mottling along the upperwing coverts and black-and-white-banded flight feathers. *Same bird as Fig. 4. © Jerry Liguori.*

Fig. 8. Juvenile intermediate-morph Western Red-tailed Hawks, such as this one, are brown on top with moderate pale mottling and heavily barred uppertail coverts. *Wasatch Mountains, Utah; October 2002.* © Jerry Liguori.



Adult Western and Harlan's

Adult dark-morph Western Red-tailed Hawks have solid-brown bodies and underwing coverts (Fig. 9). Adult intermediate-morph birds show a dark underwing with sparse mottling and a dark-brown belly that contrasts with a dark-rufous breast. Intermediate-morph birds are much more common (about 90% of all "dark" Westerns) than dark-morph birds; discerning the two in flight can be impossible under typical field conditions (Fig. 10). Solid-dark Westerns are more common in the Pacific Northwest than they are in other areas. The upperwing of adult dark-morph and intermediate-morph birds is similar to that of light-morph birds, but it is often darker brown and it often lacks mottling (Fig. 11). All morphs may or may not have blackish banding throughout the tail.

Dark-morph Harlan's resembles Western, but it is black-and-white overall. Adults can be solid-dark underneath, but most show some white mottling on the breast (Figs. 12 & 13). Dark- and intermediate-



Fig. 9. Adult dark-morph Western Red-tailed Hawks are solid brown (not blackish) underneath, with contrasting pale flight feathers. *Goshute Mountains, Nevada; October 1998.* © Jerry Liguori.



Fig. 10. Adult intermediate-morph Western Red-tailed Hawks are brown underneath, with rufous breasts that are slightly paler than those of dark-morph birds. However, they appear similar to dark-morph birds under typical field conditions or at any fair distance (see inset). *Composite photograph. Goshute Mountains, Nevada; October 1998.* © Jerry Liguori.



Fig. 11. Adult dark-morph Western Red-taileds are darker brown on top and lack a golden nape, compared to light-morph birds. Note the lack of mottling to the upperwing and the lack of contrast between the uppertail coverts and tail. *Wasatch Mountains, Utah; October 2002.* © Jerry Liguori.

DARK RED-TAILED HAWKS

Table 1. Summary of distinguishing features between “Western” and “Harlan’s” Red-tailed Hawks. Key marks are given for juvenile vs. adult plumages and for intermediate-morph vs. dark-morph plumages.

	UNDERPARTS	UPPERPARTS	TAIL
“Western” Red-tailed Hawk			
INTERMEDIATE MORPH			
JUVENILE	Heavily mottled throughout; breast slightly paler than rest of underparts	Dark overall with pale mottling on upperwing coverts; pale primary wing panels	Brown, with multiple, narrow, pale bands; similar to light-morph birds
ADULT	Solidly dark-brown belly and underwing coverts, with paler rufous-brown breast	Solidly dark-brown, with limited mottling on upperwing coverts	Reddish-orange; tends to have multiple, narrow, black bands throughout
DARK MORPH			
JUVENILE	Solidly dark-brown across underside, with paler flight feathers	Dark overall, with limited pale mottling on upperwing coverts and faint, pale primary panels	Brown, with multiple, narrow, pale bands; similar to light-morph birds
ADULT	Solidly brownish-black across underside, with paler flight feathers	Solidly brownish-black; tends to lack mottling on upperwing coverts	Reddish-orange; tends to have multiple, narrow, black bands throughout
“Harlan’s” Red-tailed Hawk			
INTERMEDIATE MORPH			
JUVENILE	Heavily mottled blackish-and-white overall; breast slightly paler than rest of underparts; heavily banded flight feathers	Blackish overall with bold white mottling on upperwing coverts; whitish primary panels	Blackish, with multiple, narrow, whitish bands; “spiked” tail-tips are difficult to observe
ADULT	Solid blackish belly and underwing coverts, with white mottling on breast; flight feathers may lack banding	Solid brownish-black; tends to lack mottling on upperwing coverts	Mottled grayish with broad, smudgy, dark tip; some intermediate adults have a pinkish tail with pinkish tip
DARK MORPH			
JUVENILE	Solid blackish overall; heavily banded flight feathers	Blackish overall; lacks mottling on upperwing coverts and has faint, pale primary panels	Blackish, with multiple, narrow whitish bands; “spiked” tail-tips are difficult to observe
ADULT	Solid blackish overall; may have sparse white flecking on breast; flight feathers may lack banding	Solid brownish-black; lacks mottling on upperwing coverts	Mottled grayish with broad, smudgy, dark tip; tails of some birds are completely banded black-and-white

morph adult Harlan’s sometimes have pale carpals, which are not shown by “dark” Westerns. Harlan’s usually has a pale grayish or whitish tail with a dark tip, similar to the tail of an immature Golden Eagle or light-morph Rough-legged Hawk; however, the tail-tip of Harlan’s is narrow, smudgy, and less distinct (Figs. 14 & 15). From below, the tail of any adult Red-tailed Hawk can appear whitish, but all Harlan’s Hawks’ tails appear particularly white, and the dark tail-tip of Harlan’s appears broader than the dark sub-terminal band on Western Red-tailed Hawks (Fig. 12). The tail of Harlan’s may also be completely banded black-and-white, although this tail type is uncommon and typically occurs only on birds that are solid-dark underneath. Alternatively, the tail may show rufous tones throughout, especially on light adults and on intergrades between Harlan’s and Western. Dark-morph Harlan’s Hawks can be tricky to identify in flight, but simply put, an adult “dark” Red-tailed Hawk that has white mottling on the breast or that lacks a reddish tail is a Harlan’s.

Pitfalls

Some adult light-morph Western Red-tailed Hawks have a distinct rufous tone to the underside and can appear dark in the field (Fig. 16). Also, some juvenile light-morph Western birds have heavily marked underwing linings and belly bands, combined with streaking to the sides of the breast, making them appear dark at certain angles. Intergrades between light and “dark” birds occur and are extremely difficult to categorize in the field (Figs. 17 & 18). Of course, birds of all colorations can appear dark when shadowed or on overcast days. On true dark-morph birds, the pale flight feathers con-

Fig. 12. Even at a distance, the following marks are noticeable on an adult intermediate Harlan's Hawk: black body and underwing coverts; white mottling on breast; whitish tail with broad dark tip; lack of banding on the remiges; and broad terminal band on the trailing edge of the wings. *Brockway Mountain, Michigan; April 2003. © Jerry Liguori.*



trast with the darker body and underwing coverts. Conversely, juvenile and adult intermediate-morph birds often look paler than usual on the breast (and thus similar to light-morph birds), especially at certain angles or when the sun illuminates the breast directly (Fig. 1).

Some field marks, such as the banded tips to the outer primaries and the narrow dark "spikes" on the tips of the tail feathers on juvenile Harlan's, are nearly impossible to see on moving birds, even when close-up. Also, most adult Harlan's Hawks have unbanded tips to the primaries, whereas some juvenile Red-taileds of other races show banded tips to the primaries and faintly "spiked" tail-tips. Unlike



Fig. 13. Adult dark-morph Harlan's are solid blackish underneath and look similar to adult dark-morph Western Red-tailed Hawks. Some dark-morph Harlan's, such as this one, have minimal white flecking on the breast. Note the marbled appearance to the remiges. *Cache Valley, Utah; November 2003. © Mark Vekasy.*



Fig. 14. Adult intermediate-morph and dark-morph Harlan's often possess a whitish tail with a dark tip, and they often lack pale mottling along the upper wing. *Boise, Idaho; December 2003. © Jerry Liguori.*



Fig. 15. Some adult dark-morph Harlan's Hawks, such as this one, have nondescript dark tails with broad black tips. This individual lacks mottling to the upperwing coverts and has boldly banded remiges. *Farmington Bay, Utah; December 2002. © Jerry Liguori.*

Fig. 16. Adult light-morph Western Red-tailed Hawks with a strong rufous wash to the underside, such as on this individual, can resemble intermediate-morph birds, especially at a distance. *Tooele, Utah; November 2000. © Jerry Liguori.*

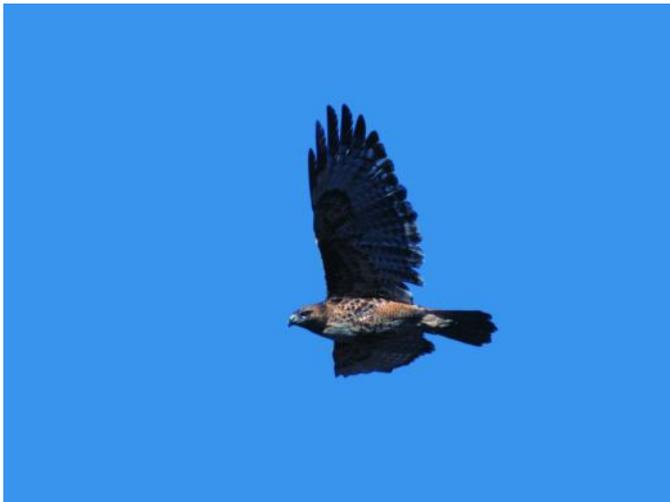


Fig. 17. Intermediate-morph Western Red-tailed Hawks are variable in plumage, and intergrades are known. This bird (a juvenile) is most likely an intergrade between the light and intermediate morphs. Note the faint streaks to the breast, the moderately marked underwing, and the streaked throat. *Wasatch Mountains, Utah; October 2002. © Jerry Liguori.*

Fig. 18. This adult Western Red-tailed Hawk is slightly paler overall than a typical intermediate-morph bird and is most likely an intergrade between the light and intermediate morphs. Note the distinct patagial bars and belly band. *Wells, Nevada; August 2002. © Jerry Liguori.*



Western Red-tails, many adult dark-morph Harlan's lack banding to the remiges, instead appearing "marbled" underneath.

Summary

Although it is sometimes impossible to assign Western and Harlan's Red-tailed Hawks to subspecies in the field, observers can do so more accurately and more often by understanding the nuances between the two. Observing specific plumage characteristics that separate the races can be difficult, but Table 1 points out the traits that observers need to focus on in order to classify "dark" Red-tailed Hawks correctly.

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