

## LETTERS

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### FIRST NORTH AMERICAN RECORD OF A MELANISTIC FEMALE NORTHERN HARRIER

Melanism, or dark coloration that results from the excessive deposition of melanin pigments (Sage 1962, *Brit. Birds* 55:201–225), occurs in a diverse array of birds (Sage 1962; Gross 1965, *Bird-Banding* 36:240–242). Melanism is especially common in birds of prey, many of which display a well-documented dark-morph plumage (Brown and Amadon 1968, Eagles, hawks and falcons of the world, Vols. 1 and 2, McGraw-Hill Book Company, New York, NY U.S.A.). In these polychromatic species, dark morphs do not appear to be any less successful than their light-morph counterparts. In addition, melanistic birds reproduce successfully with both light and dark conspecifics (Palmer 1988, Handbook of North American birds, Vol. 5, Part 2, Yale Univ. Press, New Haven, CT U.S.A.).

Interestingly, given their prevalence in a variety of raptor species (e.g., Rough-legged Hawk [*Buteo lagopus*], Ferruginous Hawk [*Buteo regalis*], Eleonora's Falcon [*Falco eleonora*]), melanistic individuals appear to be exceedingly rare in certain birds of prey. Despite the fact that melanism has been documented for several Palearctic harriers (Brown and Amadon 1968; Cramp and Simmons 1980, Handbook of the birds of Europe, the Middle East and North Africa, Vol. 2, Oxford Univ. Press, Oxford, U.K.; Clark 1987, *Brit. Birds* 80:61–72), including the Hen Harrier (*Circus cyaneus cyaneus*) (Watson 1977, The Hen Harrier, T. & A.D. Poyser, Berkhamsted, U.K.), only one record exists of a melanistic Northern Harrier (*Circus cyaneus hudsonius*), a male observed in California (Howell et al. 1992, *West. Birds* 23:79–80). Here, we report the first North American record of a melanistic female Northern Harrier.

At 1334 H MST on 12 November 1998, we observed a dark harrier coursing over a field 5 km northwest of Charlo, Lake County, Montana (47°27'30"N, 114°13'30"W). We observed the harrier for approximately 40 min. Observations were made in good light with 10 × 50 binoculars and a 20–60 zoom spotting scope at distances ranging from 100–400 m. Despite its dark coloration, the harrier was easily identifiable by its characteristic flight and shape, its underwing markings, facial disk and hunting behavior. The bird's most notable feature was the absence of the characteristic white uppertail coverts (i.e., rump patch). Its head, back, uppertail coverts, breast and belly appeared to be black. On the upper wing, the marginal coverts were a dark brown with a hint of rufous. The location of this rufous area matched that of the tawny coloration on the upper marginal coverts of typical-morph birds. The dorsal side of the remiges were brownish-black giving them a slightly lighter appearance than the body. Although the upperside of the tail was darker overall, it was very similar to that of a typical female harrier and consisted of 3–4 bold gray and black bands and uniformly dark central rectrices.

The melanistic harrier's underwing coverts were uniformly blackish-brown, whereas ventrally the remiges were light grayish-silver with fairly dark barring on the secondaries and primaries, including the outer primaries. The underside of the tail was similar to the dorsal side in that it consisted of bold gray and black bands. Finally, the bird had a yellow cere and irides, the latter confirming this bird's status as an adult. Typical adult female Northern Harriers show dark barring on the underside of the remiges, particularly on the outer primaries, whereas typical adult males exhibit inky-black wing tips on the underside and a light underwing with a bold subterminal band along the secondaries (Clark and Wheeler 1987, A field guide to hawks, Houghton Mifflin Company, New York, NY U.S.A.). The overall pattern, particularly the barring of the underwing, of the melanistic individual that we observed helped confirm that it was a female. Howell et al. (1992) also determined the age and sex of a melanistic male Northern Harrier by eye color, underwing pattern and size. The melanistic female interacted with a juvenile Northern Harrier that was noticeably smaller and believed to be a male. Several minutes after finding the melanistic harrier, it stooped twice on the juvenile, which turned and presented its talons each time and then left the area. A few minutes later we watched the melanistic harrier catch and consume what appeared to be a vole (*Microtus* spp.). In the following 5 min, it made two more capture attempts (both on small mammals), one of which was successful. Overall, during our brief observation period, the melanistic harrier appeared to be hunting successfully, free of harassment by other harriers.

Despite daily visits to the area where we first observed this melanistic harrier and continued surveys over the next six months, we were unable to locate it again.

Unlike albinism, melanism is a heterozygous dominant trait (Sage 1962). However, Clark (1998, *Wilson Bull.* 110: 289–290) suggested that in monochromatic species, the spread of melanism may be inhibited by the inability of melanistic individuals to acquire mates and produce offspring. Although the occurrence of melanism in both female

and male Northern Harriers has now been documented, whether such individuals do in fact attract mates and reproduce successfully remains unknown.—**Chad V. Olson, Montana Cooperative Wildlife Research Unit, University of Montana, Missoula, MT 59812 U.S.A. and Sophie A.H. Osborn, Division of Biological Sciences, University of Montana, Missoula, MT 59812 U.S.A.**

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### OBSERVATIONS AT AN AYRES' HAWK-EAGLE NEST IN KIBALE NATIONAL PARK, UGANDA

The Ayres' Hawk-Eagle (*Hieraaetus ayresii*), an inhabitant of forested and wooded areas of sub-Saharan Africa, has long been considered inexplicably rare throughout its range (Brown et al. 1982, *Birds of Africa*, Vol. 1. Academic Press, London, U.K.). Its breeding behavior has been observed at no more than six nests in Kenya (Brown 1955, *Ibis* 97:38–64, 183–221; Brown 1966, *Ibis* 108:531–572; Dewhurst et al. 1988, *Gabar* 3:85–93) and Zimbabwe (Phillips 1978, *Honeyguide* 94:27–39; Steyn 1982, *Birds of prey of southern Africa*, Tanager Books, Dover, U.K.), and some aspects of its biology and ecology are still considered unknown (Virani and Watson 1998, *J. Raptor Res.* 32:28–39). Here, I present information on the nest site, breeding phenology, and behavior of a nesting pair of Ayres' Hawk-Eagles in western Uganda.

In August 1997, I located an Ayres' Hawk-Eagle nest in the unlogged K-30 forestry compartment of Kibale National Park (0°13'–0°41'N, 30°19'–30°32'E), an area of moist, evergreen forest in western Uganda. A complete description of habitat and climate are provided by Struhsaker (1997, *Ecology of an African rainforest*, Univ. Presses Florida, Gainesville, FL U.S.A.). I monitored the nest through November 1997, checking it at least twice every month. Using 10 × 40 binoculars, I observed the nest from the ground about 30 m upslope of the nest. I observed the nest for 35.5 hr during 7 d of the incubation period and 50.5 hr during 7 d of the nestling period. Adult gender was initially determined by size dimorphism, but once confirmed, the darker female was easily distinguished from the lighter male.

Located on an 18° slope with a WSW aspect, the nest tree was a live *Lovoa brownii*, 38 m tall and 98 cm diameter at breast height. The tree had no vines, few epiphytes, and the crown was completely isolated from the surrounding canopy. The stick nest was positioned at a height of 32 m, at a four-way fork of a major branch. Located near the base of the crown, the nest was plainly visible from the ground, but well-shaded from the sun. I estimated from the ground that the nest measured 1.25 m across and 0.75 m tall. When first observed on 21 August 1997, the female was already incubating. Based on the behavior of the adults, I estimated that one nestling hatched 31–33 d later, between 30 September–2 October 1997. The nestling was first observed approximately three weeks later, when its head was visible above the rim of the nest. Observations were discontinued on 24 November 1997, approximately 54 d after hatching, when the nestling was nearly fully feathered and it spent most of its time standing at the edge of the nest.

During the incubation period, the female spent most of her time at the nest, either incubating (88%) or perched nearby (5%). The female was out of sight for only 7% of this time, for periods ranging from 2–32 min. In contrast, the male never incubated, made only short visits to the nest (2–14 min) and nest tree (15–19 min), and was out of sight for 97% of this time. I observed no deliveries of prey or nesting material to the nest during incubation; possibly some prey exchanges occurred away from the nest, where the female fed before returning.

After the nestling hatched, the female remained the primary nest attendant spending 61% of the observation hours brooding or feeding the nestling. When not tending the nestling, the female was perched at or near the nest 16% of the time and out of sight of the observer for 23% of the time. The amount of time the female spent away from the nest increased as the nestling grew. As during the incubation period, the male was out of sight for most (98%) of the observation hours. The male made seven visits to the nest during the nestling period delivering nesting material twice and prey once. Possibly some prey exchanges during the nestling period also occurred at some distance from the nest. Most prey arrived at the nest apparently plucked of fur or feathers; the female spent little time handling prey prior to feeding the nestling. I checked for prey remains beneath the nest tree throughout the incubation and nestling periods, but found none. Except for an unidentified, pigeon-sized bird, I was unable to identify prey fed to the nestling.

These observations showed the breeding behavior of Ayres' Hawk-Eagle in the Kibale National Park was similar to