

Field identification note on the immature Golden Eagle (*Aquila chrysaetos*)

*Field observers need an eagle eye to catch all of
the detail necessary for a positive identification*

Robert M. Schutsky

MOST NORTH AMERICAN field guides indicate the potential problem in distinguishing between the adult Golden Eagle (*Aquila chrysaetos*) and the immature Bald Eagle (*Haliaeetus leucocephalus*). Bull and Farrand (1977) describe the pale wing linings and massive bill of the immature Bald Eagle in comparison to the uniformly dark coloration and smaller, darker bill of the adult Golden Eagle. Robbins *et al.* (1966) emphasize the irregular mottled coloration, heavy bill, large head, short tail, and partially bare tarsi of the Bald Eagle compared to the Golden Eagle. Peterson (1947) offers a special warning: "If you lack experience, be very careful. The adult [Golden Eagle] resembles the immature Bald Eagle . . ." He then explains differences in body and tail coloration, wing linings, feathering of the tarsi, flight pattern, head and bill size, and proportions of wings and tail.

However, none of them discusses the possibility of confusing an immature Golden Eagle with an adult or sub-adult Bald Eagle due to the appearance of white in the head and nape. The following account describes such an observation.

On January 23, 1979, at 12:30 pm, I observed an eagle at Muddy Run Pumped Storage Pond, Lancaster County, Pennsylvania, perched on a cross-member of an electrical transmission tower. The sky was clear and the wind was blowing from

the SE at 8 to 11 km/h. Initially, I observed the bird through seven power, 50 mm binoculars at a distance of approximately 1000 meters. Depending on the position of the eagle, white feathering on the head, suggesting a Bald Eagle, could be observed. The tail was partially hidden behind the cross-member, and no white was visible. A 45 power scope was positioned and focused on the eagle, which revealed the following: when the bird faced into the wind, no white was visible on the head. When the head was turned to the right, the wind lifted the feathers on the back of the head and nape, revealing white feathers beneath. As the bird turned its head forward, the feathers fell back into place and the white was no longer visible.

Bent (1961) describes basal white in the back and breast feathers of the immature Golden Eagle, but makes no mention of any white in the head or nape. However, Walter Spofford (*pers. comm.*) indicates that contour feathers of the head and nape are white at the base. This white was exposed for extended periods of time (up to 45 seconds) by a "Venetian blind effect" produced by the wind.

As the eagle changed position on the cross-member, the fully feathered tarsi, banded tail, and golden head and nape feathers became clearly evident, confirming its identification as a Golden Eagle. It eventually soared overhead, which revealed the white wing patches of an immature bird.

A casual observation without the aid of high-power magnification could have resulted in the identification of this bird as a Bald Eagle, probably a sub-adult with only a partially white head. Since Golden Eagles are much scarcer (only in the East) than Bald Eagles and may not be expected by some observers, careful observation is necessary before identifying these species.

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—Muddy Run Ecological Laboratory,
1921 River Road, P.O. Box 10,
Drumore, PA 17518