ADDITIONAL NOTES ON LEUCISTIC EARED GREBES AT MONO LAKE

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Blumin's (2007) photograph essay on a leucistic grebe correctly identified it as an Eared Grebe (*Podiceps nigricollis*), which, incidentally, is an adult (red eye) and probably a male, judging by the apparent length of the bill (Jehl et al. 1998). Yet, 15 of 21 experts, perhaps relying on excessive caution regarding overlap in bill shape (Kaufman 1992), considered it to be a Horned Grebe (*P. auritus*). Actually, the bill shapes of the two species are quite different. In the Horned Grebe the culmen is strongly decurved for perhaps 25% or more of its length, whereas in the Eared it is essentially straight, slightly recurved, or occasionally very slightly downturned at the very tip. One of Blumin's photos (figure 5) appears to shows an Eared Grebe with a slightly decurved bill; the degree of curvature, if any, is not clear because the head is not shown in full profile.

Blumin concluded that the leucistic bird was an Eared Grebe because it lacked a light tip to the bill, which he considered an "unequivocal" feature of the Horned Grebe. Kaufman (1992:1188) rejected that criterion, noting that in winter "both species have fairly pale gray bills." There is, however, one distinction that has long been overlooked by birders. All grebes have a patch of bare skin between the base of the bill and the anterior corner of the eye. In the Horned Grebe it is 2–3 mm wide and extends upward at a 50–60° angle (Figure 1 top; see also illustration by L. A. Fuertes in Coues 1872:1073). At close range it can be seen in the field, but it is not easy to detect in specimens because of shrinkage, and many illustrators have failed to notice it. In the Eared Grebe it is barely a pencil line wide. In normally plumaged birds it is inconspicuous because the skin and feathers are dark, whereas in leucistic birds the patch contrasts with the white plumage, making it easier to see (Figure 1 middle and bottom).

The bare area is evidently a vestige of the much larger bare patch in chicks, in which it changes in color and intensity, signaling degrees of hunger (Fjeldså 2004). I know of no discussion of its function in adults. Because its color in Horned Grebes is said to vary ["bluish gray" (Audubon in Baird et al. 1884); "flesh-colored" (Palmer 1962:72); "dusky pink" (Cramp and Simmons 1977)] it may have some function in breeding displays.

At Mono Lake leucistic Eared Grebes are scarce but regular among the fall population, which recent studies put at approximately 1.5 million (e.g., Jehl et al. 1999, 2002). During all-lake censuses in the 1980s and 1990s, I often saw 10–15 in a day (maximum 24), and over the years have banded about a dozen, once catching two in successive attempts (Figure 2). Since Mono Lake holds about half of the North American population of Eared Grebes in autumn, we can estimate the frequency of leucism in its various degrees (illustrated in Jehl 1985) in the species as 1:100,000–150,000.

There is a general expectation that highly conspicuous individuals should be rapidly eliminated from the population—and white grebes are not only conspicuous on the surface but also under water, which makes them more detectable than normally plumaged grebes to banders and natural predators such as mink and large fish. Some do survive into adulthood. I have seen one nesting in Oregon, and all captured at Mono Lake for which I have detailed records at hand were in their second calendar year or later, as indicated by a red iris. In normal juveniles the iris is light brown, turning to pale orange by October. White juveniles surely occur but may have been overlooked.



Figure 1. Top: Horned Grebe, Wyoming, September. Middle: typical Eared Grebe, Salton Sea, March. Bottom: leucistic Eared Grebe, Mono Lake, August.

Photos by Joseph R. Jehl, Jr.



Figure 2. Jon Francine and two leucistic Eared Grebes. Mono Lake, September 1995. Photo by Joseph R. Jehl, Jr.

Also, young birds are less likely to be caught because they arrive later than adults, and catching conditions deteriorate as fall progresses.

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