FURTHER COMMENTS ON EAR-FLASHING AS A PREDATOR CONFUSION ADAPTATION IN HARES (LEPUS)

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Previous authors have commented on color patches located on animal appendages and attributed these markings to an evolutionary strategy to confuse predators (see e.g., Vorhies and Taylor [1933] and Powell [1982]). Specific examples include black patches on the ears of black-tailed jackrabbits (Lepus californicus) and Cape hares (L. capensis), both of which have been documented flashing their ears during high speed chases (Kamler and Ballard 2005, Kamler 2008). We too have noted this behavior, and one of us (CS) photographed a stationary black-tailed jackrabbit flashing its ears in response to a perceived aerial threat (Fig. 1A and 1B).

This behavioral strategy appears widespread among the genus Lepus, most species of which inhabit open country. Black ear tips are also present in white-tailed jackrabbits (L. townsendi), arctic hares (L. arcticus), and snowshoe rabbits (L. americanus) in both summer brown and white winter pelage. In Eurasia black ear tips (and often the dorsum of tails) can be found in the mountain hare (L. timidus), desert hare (L. tibetanus), Chinese hare (L. sinensis), Yunan hare (L. comus), and wooly hare (L. oistolus) (Smith and Xie 2008).

It is also of interest that black or dusky patches are restricted to the inner ears of the white-sided jackrabbit (Lepus callotis) and absent in the tropic-subtropic antelope and Tehuantepec jackrabbit s (L. alleni, L. flavigularis, respectively). These species flash their white sides and rumps when alarmed, thus supporting the use of contrasting color swatches as a predator confusion hypothesis (Vorhies and Taylor 1933, Leichleitner 1958, Brown et al. 2014).

LITERATURE CITED