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LETTERS

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MERLIN TAKES HUMMINGBIRD IN FLIGHT OVER LAKE

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On 27 September 2021, I observed a Merlin (*Falco columbarius*) capture a hummingbird in flight over Norfolk Lake (89 km²) in the Ozark Mountains in northern Arkansas, USA. The Merlin perched in an isolated oak on Robinson Point (36°21.02'N, 92°14.54'W) and likely targeted the distant hummingbird before it took flight toward the south shore. I followed the Merlin through Zeiss 10 × 54 binoculars from my position on Robinson Point, about 75 m from the perch tree. As the Merlin approached the midpoint of the 1.5 km-wide channel, the hummingbird, which I had not previously seen, ascended abruptly in front of the Merlin. The hummingbird then dove toward the lake. The Merlin stooped sharply but I did not see the capture because my view was blocked by a tree on Robinson Point. The Merlin returned to its original perch carrying the hummingbird (Fig. 1). After dispatching the prey with bites to the head, it flew eastward along the shoreline holding the intact hummingbird with one foot. Examination of the flight photograph indicated that the hummingbird was a female or immature male, most likely a Ruby-throated Hummingbird (*Archilochus colubris*) given the geographic location.

Adult hummingbirds in North America appear to have few predators in temperate latitudes (Miller and Gass 1985). Avian predation on the Ruby-throated Hummingbird has been reported four times in peer-reviewed literature. Lowery (1938) found the remains of a hummingbird in a Merlin stomach, Wright (1962) observed a Baltimore Oriole (*Icterus galbula*) capture and kill a hummingbird feeding at a flowering shrub, Mayr (1966) described an American Kestrel (*Falco sparverius*) swooping low to capture a hummingbird

feeding on a garden flower, and Zenzal et al. (2013) observed a Sharp-shinned Hawk (*Accipiter striatus*) capture a hovering hummingbird. The eyewitness accounts of Wright (1962), Mayr (1966), and Zenzal et al. (2013) describe predation on hummingbirds foraging near ground level.

The present report appears to be the first of a raptor capturing a hummingbird crossing an open body of water or of a hummingbird captured in sustained flight over open terrain. Ruby-throated Hummingbirds have been clocked in level flight at speeds of 54–63 km/hr with an 8–16 km/hr crosswind (Chartier 1998). The present sighting adds to the vast literature that documents the superb ability of the Merlin to take small birds in flight (Cramp and Simmons 1980, Warkentin et al. 2020). This record also highlights the predation hazards faced by migrating hummingbirds and songbirds that attempt diurnal crossings of the east-west chain of human-made reservoirs in the Ozark Mountains. I thank the Smoketree Trust for support.

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Figure 1. Merlin (*Falco columbarius*) killing and carrying a hummingbird captured over Norfolk Lake in the Ozark Mountains, Arkansas, USA.

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