A BURNED AMERICAN KESTREL BREEDING IN VIRGINIA’S SHENANDOAH VALLEY

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LETTERS


On 14 June 2015, we captured a female American Kestrel (*Falco sparverius*) in a nest box 4.3 km west-southwest of Broadway, Virginia. While marking the bird with a U.S.G.S. bird band, we observed approximately 90% of the kestrel’s flight feathers had been damaged, and appeared pointed with irregular edges (Fig. 1). Most of the feather vanes on the outer portions of both wings and tail were burned away in a nearly symmetrical manner, with only the rachis remaining at the ends. Based on this damage, we hypothesize the kestrel was burned by a flame, probably while flying over or through a gas flare. The kestrel’s ability to fly was severely compromised. Upon release she was unable to quickly gain altitude to clear the tall grass (1 m high), lost airspeed, and became entangled in grasses after about 3 sec. We retrieved the bird and released it from a higher altitude. She exhibited labored flight, flew in a semi-circle about 65 m away, and landed in a tree about 5 m high. Because the kestrel had four eggs in the nest box, we reasoned that the best course of action was to release her rather than send her to a rehabilitation facility and leave her eggs to die. Despite the handicap of having damaged flight feathers, she laid four eggs in a late clutch, incubated them, and hatched at least one nestling; however, ultimately, her nest failed, possibly due to predation. Our nest-box protocol classifies a nest failure as "nest failed, possibly due to predation." Our subsequent recapture of this banded kestrel (Falco sparverius; bird banding, burn, methane, flare, recapture) highlighted the difficulties kestrels face when exposed to gas flares.

The subsequent recapture of this banded kestrel documents that she was a long-term survivor of significant damage to her feathers, molted successfully, and recovered sufficiently to lay eggs at the normal time the following spring. She probably survived because her mate provided her with food during nesting (Balgooyen 1976). The extent of feather damage documented herein may represent the maximum damage a kestrel can endure to survive without human intervention.

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