BALD EAGLE SURVIVES TWO YEARS IN WILD WITH ONE FOOT

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Abstract.—We report survival in the wild for two years of an immature Bald Eagle (Haliaeetus leucocephalus) that had lost its left leg at the mid-tarsometatarsus.

INDIVIDUO DE *HALIAEETUS LEUCOCEPHALUS* SOBREVIVE POR DOS AÑOS EN EL ESTADO SILVESTRE CON TAN SOLO UNA PATA

Sinopsis.—Se informa de un individuo inmaduro de *Haliaeetus leucocephalus* que sobrevivió por dos años en el estado silvestre con una pata amputada a nivel de la parte media del tarsometatarso.

Long-term survival of one-footed raptors in the wild has always been doubtful. Numerous anecdotal accounts exist but published references are virtually non-existent. We report the 2-year survival in the wild of an immature Bald Eagle that lost its foot in a leghold trap.

The Massachusetts Division of Fisheries and Wildlife (MDFW) initiated a Bald Eagle restoration program in 1982. Through 1988, 42 5– 7 week-old eaglets have been translocated for hacking at the Quabbin Reservation in New Salem, Franklin County, Massachusetts.

One of these eagles, released from the hack tower on 9 Aug. 1985, was recovered by a trapper on 15 Nov. 1986, with its left leg caught in a number 3 jump trap near Jackman, Somerset County, Maine. A local veterinarian treated the bird and gave it to the Maine Department of Inland Fisheries and Wildlife. On 26 Nov., it was transferred to the Tufts University School of Veterinary Medicine in North Grafton, Massachusetts, where veterinarians determined that nerves and blood vessels in the leg were irreparably damaged. The leg was amputated at the middle of the tarsometatarsus. A 1-cm portion of the extensor tendons was also removed to reduce post-release trauma to the stump, because the tarsi are thrust forward when landing. The bird was rebanded (originally L-629-07065; changed to R-629-16011).

After post-operative rehabilitation, the bird was equipped with a tailmounted radio transmitter and returned to the Quabbin hack tower on 6 Jan. 1987. Following an overnight stay, during which the bird had an opportunity to observe other eagles, it was released on the morning of 7 Jan. The bird remained near the Quabbin Reservoir through 9 Jan. (possibly 10 Jan.); no signal was received at the reservoir on 11 Jan. On 16 Jan., a wildlife biologist, using radio telemetry from a fixed-wing aircraft, picked up the signal and visually located the bird along the lower Connecticut River at the mouth of the Salmon River in Haddam, Connecticut, about 24.1 km from Long Island Sound.

This eagle was not reported again until 17 Jan. 1988. A one-legged eagle, thought to be the same bird, was observed at the Connecticut River rapids in Enfield, Connecticut. On 21 Jan., the bird appeared at an observation blind baited with deer carcasses at Quabbin Reservoir and was positively identified (leg band read). In 1988, it was last seen and photographed there on 12 Mar. The bird reappeared at the bait station from 3–24 Feb. 1989.

The bird was able to successfully compete for food with other eagles at the bait station. On 21 Jan. 1988, along with 22 other eagles present at the station during the day, the bird fed until it had a bulging crop. In both years the bird tended to remain at the bait station through the late afternoon after most available food had been consumed by other birds. On 3 Feb. 1989, after all the other eagles had departed the bait station, the bird was observed feeding from 1715-1732 hours and flew to roost in almost total darkness. At other times it interacted aggressively with other birds, alternately gaining and losing feeding rights at bait items. When feeding, the bird balanced itself on its right leg and braced itself against the deer carcass with its amputated leg, which enabled it to pull and tear at the bait with its beak. The bird's talons appeared clearly longer than those of other eagles, suggesting normal wear was not occurring. Common Ravens (Corvus corax) harassed this bird as they do many feeding eagles. With its impaired mobility, the one-legged eagle was unable to keep the ravens from pulling at its tail and primary feathers. Instead of kicking out with one leg, as most eagles do, this bird was forced to turn and face the persistent ravens. These distractions did not prevent the eagle from eating, however.

On one occasion after feeding, the bird stood on the ice and attempted to scratch its head with the amputated leg. No contact was made even though the bird turned its head and closed its nictitans in anticipation. The bird then flapped to a patch of bare ground on the shoreline of the reservoir, assumed a squatting posture and rested briefly. It remained vigilant, however, and flew off after approximately 10 min.

One-legged raptors face many survival difficulties. Limited evidence suggests experienced older birds might be better able to cope with the loss of a foot. "Adult one-footed birds" were noted on a few occasions when admitted to a Minnesota raptor clinic for other reasons (Durham 1981). We could locate no previously documented instance of any eagle surviving in the wild with one foot. A Tawny Eagle (*Aquila rapax*) with one foot was treated by a veterinarian and lived over 10 yr in a Tanzanian zoo (Cooper 1978).

We conclude, based on observed behavior and survival for over 25 mo. in the wild, that this bird had adjusted to life with one leg.

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