

PREY CACHING BY NON-BREEDING NORTHERN HAWK OWLS IN ALBERTA

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Caching prey for later consumption has been reported for a number of wild owl species, although most accounts are of birds breeding or likely to be breeding: Short-eared Owl during May in Idaho⁹; breeding Northern Hawk Owls in Alaska⁸; non-breeding and breeding Northern Hawk Owls in Minnesota and throughout Manitoba³; a Northern Hawk Owl during the breeding season in Quebec⁶; Boreal Owls during the breeding season⁵; and an Eastern Screech Owl

during April in Ontario.⁷ Collins² reviewed caching by captive owls: pre-breeding Northern Hawk Owls; breeding Great Horned Owls; and non-breeding Barn Owls.

Reports of caching by wild owls outside the breeding season are rare. The following documentation of caching by wild non-breeding Northern Hawk Owls during the winter in Alberta provides additional information on this behaviour.

On 26 January 1990 a Northern Hawk Owl was found perched, northwest of Calgary (51°39' N, 114°34' W), on top of a tree in a small grove of aspens next to a stubble field. For over an hour I tried to entice the bird to a free-ranging dark-coloured laboratory mouse in the stubble but elicited little response and did not effect a capture. As a last resort I moved into the aspen grove and immediately the owl came in and actually managed to steal the mouse and elude capture. I set up again and offered another mouse. The owl appeared to become agitated and cached the first mouse behind a piece of bark on a windfallen poplar. It then came in to the second mouse and was captured. Upon release no additional live mice were offered and the owl showed no interest in a frozen mouse carcass dragged with thread. On several previous occasions hawk owls have taken dead mice offered to them in this way by the author. Similarly, Duncan and Duncan³ found that only rarely did hawk owls not take small rodent carcasses when offered.



Cached Northern Hawk Owl prey

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On 8 January 1994 a Northern Hawk Owl was found perched, southwest of Calgary (50°50' N, 114°29' W), in an open aspen grove some 300 m distant on a south-facing hillside. It was lured in after several minutes to a free-ranging dark-coloured laboratory mouse and was netted for banding. After release the bird perched on a power pole overhead. Upon being offered a mouse on a fencepost the owl swooped down and took the prey item back to the power pole where the mouse was beheaded. The owl allowed the head to drop to the ground. When a second mouse was offered on the fencepost the owl flew to a nearby spruce tree within which it stashed the carcass of the first mouse. It then returned to the power pole and immediately swooped down to take the second mouse. This second mouse was taken to another spruce tree approximately 150 m distant and stashed. The owl then returned to the power pole and glowered expectantly at the "magic" fencepost. No additional live mice were provided and the owl did not respond to a frozen mouse carcass dragged with thread or an artificial lure.

Caching of prey is thought to be an adaptive advantage for any species dependent on a food source that fluctuates.² The availability of small rodents, that many owls depend on, is known to fluctuate yearly, seasonally, daily, and due to weather. Caching by non-breeding Northern Hawk Owls could be an adaptation to deal with daily fluctuations in prey abundance and the periodic occurrence of adverse weather. The Northern Hawk Owl is a resident of the northern boreal forest and is subject to extreme weather conditions year-round. Although thawing frozen cached prey is an energy drain on an

owl, it may still be advantageous to store prey, especially during extreme cold.¹ Northern owls, like the Northern Hawk Owl, may exhibit more highly developed caching behaviour due to the capacity of prey to be preserved for long periods in the cold northern climate.⁴

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