

IMPACT OF COOPER'S HAWK PREDATION ON A NESTING COLONY OF BREWER'S BLACKBIRDS ON VANCOUVER ISLAND, BRITISH COLUMBIA

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Throughout its breeding range in North America, the Cooper's Hawk (*Accipiter cooperii*) preys primarily on live medium-sized birds and mammals that are usually captured in the air by direct pursuit. The hawk, however, is versatile in its hunting tactics and has been observed using shrubs as concealment close to the ground to capture prey (Figure 1), chasing prey on the ground, grabbing prey roosting in small shrubs, and by a "perch-and-scan" approach near bird feeders (Meng 1959, Rosenfield and Bielefeldt 1993, R. Wayne Campbell pers. obs., Barbara Begg pers. obs.). Less is known about other forms of foraging techniques because they are seldom observed in the field.

Hammerstrom and Hammerstrom (1951) reported that in Michigan "at least 8.4 per cent" of the food of Cooper's Hawks were nestling birds but how they obtained them was unclear. Actual nest-robbing has rarely been documented. Linduska (1943), reported a Cooper's Hawk carrying a nest of young American Goldfinches (*Carduelis tristis*). Nelson (1968) and Stewart (2003), however, document the only direct observations of the Cooper's Hawks taking nestlings, both from nests of American Robins (*Turdus migratorius*) in British Columbia. This note describes observations of the Cooper's Hawk



Figure 1. Adult Cooper's Hawk using shrub cover for concealment during hunting at Reifel Bird Sanctuary, Delta, BC. 16 January 1995 (Michael I. Preston).

preying on nestling Brewer's Blackbirds (*Euphagus cyanocephalus*) and the impact on a small nesting colony situated at the south end of the Victoria International Airport near Sidney, British Columbia.

On 27 April 1985 the senior author noticed an adult Cooper's Hawk hopping along the top of an ornamental cedar hedge located at the south end of the Victoria International Airport in North Saanich northwest of Sidney, British Columbia (Figure 2). At least 12 adult Brewer's Blackbirds, both males and females, were calling and flying around the hedge and remained agitated while the hawk remained on the hedge. The hawk was obviously searching for nests and would stop, look around, and continue to hop along the flat top of the hedge and peer through the branches. After about 8 to 10 min the hawk reached down and grabbed a nestling and flew northwest towards the forest. The site was checked and the nest, a Brewer's Blackbird's, contained three nestlings about six days old (see Campbell et al. 2006; Figure 3). The nest was built among branches 23 cm from the top of the hedge.



Figure 2. Location of the Brewer's Blackbird nesting colony in an ornamental cedar hedge at the Victoria International Airport near Sidney, British Columbia. 5 August 2006 (R. Wayne Campbell).



Figure 3. Brewer's Blackbird nestlings, about six days old, the age estimated to be taken by a Cooper's Hawk on 27 April 1985, near Sidney, BC. Hudson's Hope, BC. 23 June 1998 (R. Wayne Campbell).

The entire hedge, about 300 m long, 2.2 m high, and 2.5 m wide, was thoroughly checked for nests. Seven additional nests were found; two were complete but empty and five held eggs (Table 1). Over the next five weeks the colony was checked weekly, and only once, on 19 May, was a Cooper's Hawk actually seen perched on top of the hedge. It was scared off. On 2 June a Cooper's Hawk (likely the same bird) was seen soaring over the colony.

It seems plausible that the opportunistic hawk had located a readily available source of food and

returned to the colony to take advantage of nestling blackbirds. All unsuccessful nests (presumed predated) were 20 to 30 cm from the top of the hedge and were within easy reach of the long-legged predator. The other four nests, ranging from 61 to 96 cm from the top of the hedge, appeared unmolested and successfully fledged young.

The impact of predation on this colony of eight breeding pairs was substantial (50%) and may help explain disappearances at other sites with nests built near the outer parts of hedgerows and shrublands.

Table 1. Breeding chronology of a Brewer's Blackbird colony at the Victoria International Airport near Sidney, British Columbia, in 1985. Ordered by increasing nest distance from top of hedge. Nest contents: E=egg(s), Y=young, and MT=nest empty.

Nest	Nest distance from top of hedge (cm)	Date					
		27 Apr	5 May	11 May	19 May	26 May	2 Jun
1	20	3 E	5 E	5 E	5 Y	MT	MT
2	23	3 Y	1 Y	MT	MT	MT	MT
3	25	5 E	5 E	3 Y	MT	MT	MT
4	30	4 E	4 Y	3 Y	MT	MT	MT
5	61	4 E	4 Y	4 Y	4 Y	MT	MT
6	66	MT	MT	3 E	3 E	3 Y	3 Y
7	76	MT	1 E	4 E	4 E	4 Y	4 Y
8	96	1 E	4 E	4 E	4 Y	4 Y	MT

Coincidentally, there is another observation of the Cooper's Hawk taking nestling Brewer's Blackbirds in the same general area of southern Vancouver Island. On 23 April 1987, a Cooper's Hawk was observed by Barbara Begg, at 9350 Cresswell Road, near the Victoria International Airport, searching a hedgerow in her front yard. The hawk grabbed a nestling Brewer's Blackbird from the top of the hedge and departed while being pursued by the adult blackbirds. The hawk was observed again on 27 April taking another young from the nest. The age of the nestling was unknown but it must have only recently hatched, since the earliest date for young reported for British Columbia is 28 April (Campbell et al. 2001).

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About the Author

Barbara Begg is an active field naturalist who was born in Victoria and lived most of her life on the Saanich Peninsula of southern Vancouver Island. Since the early 1980s she has regularly been involved in a number of volunteer efforts including Christmas Bird Counts, Breeding Bird Surveys, and Beached Bird Surveys. She has also monitored Sky Lark populations on southern Vancouver Island for 20 years and is affectionately known as the "Sky Lark" lady because of her willingness to show visiting birders the songsters from Britain.