

## NOTES

### RE-USE OF RUFIOUS HUMMINGBIRD NEST BY ANNA'S HUMMINGBIRD IN BRITISH COLUMBIA

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In British Columbia, the re-use of old nests are well known for some birds, especially Ospreys (*Pandion haliaetus*) and Bald Eagles (*Haliaeetus leucocephalus*), who instead of building a new nest each year add fresh materials. Others, like the Great Horned Owl (*Bubo virginianus*), do not build their own nest but use the old nests of hawks, ravens, and crows (Campbell et al. 1990). Less known, is the re-use of nests by smaller birds in the province, including songbirds, which usually build a new nest each year (see Campbell et al. 2007). Nests of the latter groups of birds are more fragile and usually do not survive northern winter conditions, especially heavy snows. For example, in a study in Iowa, in which 489 nests were built by nine species and followed over the winter period, only the more hardy nests of American Robin (*Turdus migratorius*), Baltimore Oriole (*Icterus galbula*), and Mourning Dove (*Zenaida macroura*) remained (McClure 1944).

The scientific literature for the four species of hummingbird breeding in British Columbia suggest that re-use of old nests is the exception and occurs mostly in southern parts of their North American ranges (Calder 1993, Calder and Calder 1994, Russell 1996, Baltosser and Russell 2000). The occasional re-use of the same nest by the same species, however, and likely re-conditioned by the same female, has been reported for the Black-chinned Hummingbird (*Archilochus alexandri*), Calliope Hummingbird (*Stellula calliope*), and Rufous Hummingbird (*Selasphorus rufus*) (Bent 1940, Baltosser 1978, 1989, Brunton et al. 1979, Campbell et al. 1990). We have been unable to locate any reference for one species of hummingbird re-using the nest of another

species.

For the past six years Geoff has been locating and reporting all hummingbird nests found at the Swan Lake Christmas Hill Nature Sanctuary (Figure 1) in Victoria to the British Columbia Nest Record Scheme. In autumn 2006, Wayne Campbell notified Geoff that one of his nest cards documented a previously unrecorded incident involving the re-use of a Rufous Hummingbird nest. That communication prompted the co-authoring of this article.



**Figure 1.** Tall riparian shrubs and mixed woodlands surrounding Swan Lake Christmas Hill Nature Sanctuary attract substantial numbers of feeding and nesting Anna's Hummingbirds each year. 15 July 2000 (R. Wayne Campbell).

#### *Rufous and Anna's Hummingbirds at Swan Lake*

The Rufous Hummingbird has been a regular annual migrant and summer visitor to Swan Lake since at least the late 1890s while the Anna's Hummingbird (*Calypte anna*) (Figure 2) is a recent arrival first reported in 1964, seven years after it was first recorded in Victoria (Guiguet 1959). Over the next two decades the species was found infrequently, but by the mid-1980s, the Anna's Hummingbird was being observed throughout the year feeding at shrubs, flowers, and woodlands surrounding Swan Lake. There were still no reports of males defending nesting territories or evidence of breeding.

Since 1991, Geoff has been birding at Swan Lake and in 1995 he began leading bird walks around the sanctuary. The latter activity gave him the opportunity to regularly cover the same routes and record

birds that his group encountered. In the summer of 1998 he observed the first territorial male Anna's Hummingbird (Table 1). Of note is that the males often take up a territory in October and November, and show up again in January. Geoff noticed this in 2000 when there were only two birds with territorial behaviour, but he had no evidence that they were the same birds. Numbers of defended territories increased as did nests located until 2006 when a nest was found for all 11 established territories. There was no correlation with display territories and nesting sites. Most nests were found in grand firs (*Abies grandis*) near the nature house, with a secondary cluster close to the small pond along the Galloping Goose Trail. Several nests were also located in shrubs along the west side of the lake.

A composite map showing all nests sites, as well as annual nest locations, is on file at the Swan Lake Christmas Hill Nature Sanctuary.

#### **Re-use of Rufous Hummingbird Nest**

Each nesting season Geoff would check previous nesting sites as well as try to locate new nests at Swan Lake so he had a history of knowing the specific location of nests and their occupancy. Most nests

located have been Anna's Hummingbird which are presently a common nesting species at Swan Lake (Table 1).



**Figure 2.** Since its arrival in British Columbia in 1964 at Victoria, the Anna's Hummingbird has expanded its range and is now breeding along eastern Vancouver Island and throughout the Fraser River valley, Victoria, BC. 15 February 1996 (Mark Nyhof).

**Table 1.** Number of territorial males observed and active nests located for Anna's and Rufous Hummingbirds at Swan Lake, British Columbia, 1996-2006.

	<b>Anna's Hummingbird</b>		<b>Rufous Hummingbird</b>	
	<b>Males<sup>1</sup></b>	<b>Nests<sup>2</sup></b>	<b>Males<sup>1</sup></b>	<b>Nests<sup>2</sup></b>
<b>1996</b>	none	none	none	1
<b>1997</b>	none	none	none	none
<b>1998</b>	1	none	none	none
<b>1999</b>	1	none	none	none
<b>2000</b>	2	1	none	2
<b>2001</b>	3	1	none	none
<b>2002</b>	5	2	none	none
<b>2003</b>	7	none	none	none
<b>2004</b>	9	4	none	none
<b>2005</b>	13	5	none	1
<b>2006</b>	11	11	none	1

<sup>1</sup>Total number of males on territory.

<sup>2</sup>Total number of active nests located.

On 3 June 2005, Geoff located a Rufous Hummingbird nest, about 3.7 m (12 ft) above the ground saddled on the limb of a grand fir (Figure 3). The nest with the female sitting was shown to visitors at the sanctuary but on 15 June the nest was abandoned. Geoff was unable to determine the contents although incubation was suspected. The following year, on 12 April, a female Anna's Hummingbird occupied and re-furbished the old Rufous Hummingbird nest. This nest site was within 30.5 m (100 ft) of another Anna's Hummingbird nest that was started 12 February and had fledged young by 25 March. On 26 April the female Anna's was sitting on the old Rufous Hummingbird nest and was doing some building. The nest was not disturbed but on 26 April the nest was gone, with no visible traces on the ground.

There is another unpublished report of a similar situation that was recently discovered by Wayne in historical notes and therefore not included by



**Figure 3.** Female Rufous Hummingbird on a nest in a grand fir that was subsequently re-used by an Anna's Hummingbird the following year. Swan Lake, Victoria, BC. 6 June 2005 (Geoffrey W. Barnard). BC Photo 3561.

Campbell et al. (1990) in the Anna's Hummingbird account. On 14 May 1985, Enid K. Lemon discovered a Rufous Hummingbird nest at Blenkinsop Lake near Victoria, British Columbia. The nest was built 4.3 m (14 ft) above the ground on the main stem of

a Douglas-fir (*Pseudotsuga menziesii*) branch and was well protected above by drooping branches. The female was in an incubating position. On 4 June, the female was observed feeding an unknown number of nestlings and by 15 June two large nestlings appeared close to fledging.

The following year, while looking for migrating warblers at Blenkinsop Lake on 10 April, Enid checked the old Rufous Hummingbird nest and to her surprise an Anna's Hummingbird occupied it. The female was busy feeding two large nestlings which fledged from the nest by 28 April. Enid noted that the nest was a bit larger and suspected the female Anna's had brought additional nesting materials to refurbish the old nest. While the nest was still intact during visits to the lake in June and July it remained unoccupied. No males were observed on territory or in the vicinity of the nest site.

The latter nesting of the Anna's Hummingbird found by Enid Lemon in 1986 is now the earliest breeding record for the province (see Campbell et al. 1990).

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### ***About the Author***

Prior to moving to Victoria in 1991, Geoffrey only had a passing interest in birds. While visiting Swan Lake, and participating in nature walks, his interest grew as staff and volunteers encouraged him. In 1995, Geoffrey started leading the outdoor walks and continued his hummingbird monitoring two days a week until November 2006.

Wayne is a co-founder of the Biodiversity Centre for Wildlife Studies. He is an active field biologist and currently his research interests include colonial-nesting fresh-water marsh birds in British Columbia.

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