

APPENDIX 1

Table S1. Calendar of Black Swift surveys made in British Columbia, 2018 – 2020. For each survey timing (dawn, evening) for each week of the survey period per year, the total number of Black Swifts seen flying to or from a potential nest is provided. Importantly, the number is not a population size since the same birds may be detected at multiple points during the survey.

		2018								
SITE	Survey Type	Jun 25 – Jul 1	Jul 16 – Jul 22	Jul 23 – Jul 29	Jul 30 – Aug 5	Aug 6 – Aug 12	Aug 13 – Aug 19	Aug 20 – Aug 26	Aug 27 – Sep 2	
BRANDYWINE FALLS	Dawn		7 ^{†,‡}		1 ^{†,‡}	3 ^{†,‡}				
	Evening		0 [†]		0 [†]	2 [†]				
CANIM FALLS[!]	Dawn	2 ^{†,‡}		10 ^{†,‡}		1 ^{†,‡}		3 ^{†,‡}		
	Evening	6 [†]		2 [†]		0 [†]		0 [†]		
CLINTON FALLS[!]	Dawn			0 ^{†,‡}		0 ^{†,‡}		0 ^{†,‡}		
	Evening			2 [†]		0 [†]	0 [†]			
FLETCHER FALLS[!]	Dawn			2 [†]			0 [†]			
	Evening			1 [†]			0 [†]			
FROG FALLS	Dawn	0 ^{†,‡}		4 ^{†,‡}			11 ^{†,‡}	4 ^{†,‡}		
	Evening	0 [†]	0 [†]			0 [†]		1 [†]		
LYNN CANYON	Dawn					4 ^{†,‡}	7 ^{†,‡}		4 ^{†,‡}	
	Evening					1 [†]	1 [†]		1 [†] , 1 [†]	
MARBLE CANYON	Dawn			8 ^{†,‡}			19 ^{†,‡}	17 ^{†,‡}		
	Evening			10 [†]			1 [†]	1 [†]		
MULVEHILL CANYON	Dawn			1 ^{†,‡}			11 ^{†,‡}	15 ^{†,‡}		
	Evening			2 [†]			2 [†]	2 [†]		
SUTHERLAND FALLS	Dawn	1 ^{†,‡}		0 ^{†,‡}			1 ^{†,‡}	3 ^{†,‡}		
	Evening	1 [†]		0 [†]			0 [†]	1 [†]		
		2019								
		Jun 24 – Jun 30	Jul 1 – Jul 7	Jul 8 – Jul 14	Jul 15 – Jul 21	Aug 5 – Aug 11	Aug 12 – Aug 18	Aug 26 – Sep 1		
BRANDYWINE FALLS	Dawn	1 [†]			0 [†]					

CANIM FALLS¹	Dawn				6 ⁺	0 ⁺			
CLINTON FALLS¹	Dawn	0			0				
	Evening	0							
FLETCHER FALLS	Dawn				1				
	Evening				0				
FROG FALLS	Dawn	1 ⁺		2 ⁺					0 ⁺
	Evening	0 ⁺							
LYNN CANYON	Dawn		1 ⁺		3 ⁺				
MARBLE CANYON	Dawn	1 ⁺	3 ⁺	10 ⁺					
	Evening	2 ⁺							
MULVEHILL CANYON	Dawn	5 ⁺			4 ⁺				
NICOMEN FALLS	Dawn						1		
OPAL FALLS	Dawn							2	
RAINBOW FALLS	Dawn					6			
SUTHERLAND FALLS	Dawn				1 ⁺				
TWO VALLEY CANYON	Evening	2							

2020

		Jun 22 – Jun 28	Jul 13 – Jul 19	Jul 20 – Jul 26	Jul 27 – Aug 2	Aug 3 – Aug 9	Aug 10 – Aug 16	Aug 17 – Aug 23	Aug 24 – Aug 30	Aug 31 – Sep 2
BRANDYWINE FALLS	Dawn			2 ⁺					1 ^{+, §}	
CANIM FALLS¹	Dawn				3 ⁺					
CASCADE FALLS	Dawn				6					
CLINTON FALLS¹	Dawn				0					
DAVIS CREEK	Dawn	0					2 [§]			
DEADMAN FALLS	Dawn						1 [§]			
FROG FALLS	Dawn	0 ⁺	3 ⁺							
HEMLOCK FALLS	Dawn						2 [§]			
LYNN CANYON	Dawn			4 ⁺						

MARBLE CANYON	Dawn	13 [†]		7 [†]		1 ^{†, §}
MARGARET FALLS	Dawn					12 [§]
MULVEHILL CANYON	Dawn			5		
NICOMEN FALLS	Dawn		0			0
OPAL FALLS	Dawn					
RAINBOW FALLS	Dawn		3			
SUTHERLAND FALLS	Dawn	0		0		
WILSON CREEK	Dawn			10		

[†]Surveys used in the first model relating detections to survey timing (dawn, evening) and light levels.

[‡]Surveys used in the second model relating detections to time before and after sunrise with multiple surveys made between 2018 and 2020.

[§]Surveys used in the third model relating detections to time before and after sunrise for one August 2020 survey per site.

^{||} One or more nests confirmed active at the site in the year of study.

Note: Non-superscript surveys were not analyzed, either because they were not determined to be active in a given survey year (indicated with a “0” and no active nests were confirmed), and/or were not temporally replicated (2018-2019), they fell outside the August survey period (2020), or had a data recording error (2020).