

# Appendix G. Summary for 385 Migratory Bird Species Recorded from 1968 to 1999.

**Table 1** Occurrence and Seasonal Distribution of Birds on Southeast Farallon Island

Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Total	Residents
Red-throated Loon <i>Gavia stellata</i>	115	32	7 Mar– 11 Jul	21 Apr $\pm 36$	4 30 Mar 69	72	1 Aug– 19 Dec	2 Nov $\pm 27$	6 1 Nov 75	11	0
Pacific Loon <i>G. pacifica</i>	53,790	8850	1 Mar– 14 Jul	23 Apr $\pm 17$	1853 24 Apr 81	39,022	17 Jul– 19 Dec	11 Nov $\pm 11$	4000 15 Nov 83	5918	59
Common Loon <i>G. immer</i>	2049	238	2 Mar– 13 Jul	10 May $\pm 19$	100 8 May 84	1426	18 Jul– 19 Dec	3 Nov $\pm 16$	200 5 Nov 83	385	2
Yellow-billed Loon <sup>a</sup> <i>G. adamsii</i>	1	0	—	—	0	1	16 Dec	16 Dec	1 17 Dec 97 <sup>b</sup>	0	0
Pied-billed Grebe <i>Podilymbus podiceps</i>	13	1	14 Jul	14 Jul	1 14 Jul 86	12	26 Aug– 28 Oct	27 Sep $\pm 21$	2 29 Aug 89 <sup>b</sup>	0	0
Horned Grebe <i>Podiceps auritus</i>	92	12	1 Mar– 24 Mar	17 Mar $\pm 15$	4 5 Mar 77 <sup>b</sup>	58	16 Sep– 16 Dec	26 Oct $\pm 22$	6 2 Oct 96	22	7
Red-necked Grebe <i>P. grisegena</i>	154	30 <sup>c</sup>	1 Mar– 29 May	27 Mar $\pm 24$	3 10 Mar 85 <sup>b</sup>	71 <sup>c</sup>	12 Sep– 19 Dec	19 Nov $\pm 25$	6 19 Dec 87	53 <sup>c</sup>	12
Eared Grebe <i>P. nigricollis</i>	14,367	3213 <sup>c</sup>	1 Mar– 23 Jun	27 Mar $\pm 17$	1100 10 Apr 77	5559 <sup>c</sup>	17 Jul– 19 Dec	20 Nov $\pm 23$	350 19 Dec 76	5595 <sup>c</sup>	7578
Western Grebe <i>Aechmophorus occidentalis</i>	418	12	7 Mar– 7 Jul	3 May $\pm 40$	2 1 Jul 95 <sup>b</sup>	388	17 Jul– 12 Dec	22 Oct $\pm 21$	73 27 Oct 88	18	21
Clark's Grebe <i>A. clarkii</i>	47	11	19 Mar– 27 Jun	28 May $\pm 34$	3 15 Jul 77	35	23 Jul– 29 Nov	18 Oct $\pm 33$	4 24 Nov 99	1	0
Total W./Clark's Grebe <i>A. occidentalis/clarkii</i>	1039	124	1 Mar– 10 Jul	7 May $\pm 33$	8 24 Mar 74	864	17 Jul– 19 Dec	22 Oct $\pm 23$	74 27 Oct 88	51	32
Laysan Albatross <i>Phoebastria immutabilis</i>	5	2	21 Mar– 22 Mar	22 Mar $\pm 1$	1 22 Mar 95 <sup>b</sup>	2	7 Dec	7 Dec	1 7 Dec 83	1	0
Black-footed Albatross <i>P. nigripes</i>	294	243 <sup>c</sup>	1 Mar– 5 Jul	19 Apr $\pm 34$	32 22 Mar 95	43 <sup>c</sup>	19 Jul– 18 Dec	24 Sep $\pm 50$	5 9 Sep 99	8 <sup>c</sup>	0
Northern Fulmar <i>Fulmarus glacialis</i>	9536	1535 <sup>c</sup>	1 Mar– 28 Jun	18 Mar $\pm 17$	200 19 Apr 90	4254 <sup>c</sup>	28 Jul– 19 Dec	23 Nov $\pm 20$	990 2 Dec 90	3747 <sup>c</sup>	0

Murphy's Petrel	1	0	—	—	0	1	27 Aug	27 Aug	1	0	0
<i>Pterodroma ultima</i>								—	27 Aug 90		
Pink-footed Shearwater	18,895	1184	27 Feb–	23 May	50	17,711	19 Jul–	30 Sep	1093	0	0
<i>Puffinus creatopus</i>			14 Jul	±28	31 May 90		18 Dec	±27	7 Nov 97		
Flesh-footed Shearwater	25	0	—	—	0	25	15 Sep–	14 Oct	3	0	0
<i>P. carneipes</i>							7 Nov	±18	30 Oct 98		
Buller's Shearwater	40,243	0	—	—	0	40,243	3 Aug–	6 Oct	1570	0	0
<i>P. bulleri</i>							1 Dec	±16	3 Oct 86		
Sooty Shearwater	5,283,793	2,259,105 <sup>c</sup>	1 Mar–	29 May	400,000	3,024,309 <sup>c</sup>	15 Jul–	3 Sep	220,125	379 <sup>c</sup>	0
<i>P. griseus</i>			14 Jul	±22	18 Jun 74		19 Dec	±19	28 Aug 84		
Short-tailed Shearwater	477	7	1 Mar–	3 Mar	2	464	23 Aug–	12 Nov	80	6	0
<i>P. tenuirostris</i>			6 Mar	±2	4 Mar 91 <sup>b</sup>		12 Dec	±21	25 Nov 98		
Manx Shearwater <sup>a</sup>	7	1	22 Mar	22 Mar	1	6	31 Aug–	24 Sep	1	0	0
<i>P. puffinus</i>				—	21 Mar 95		15 Oct	±16	3 Oct 98 <sup>b</sup>		
Black-vented Shearwater	15,607	13	1 Mar–	14 Apr	4	15,593	19 Jul–	8 Nov	6924	1	0
<i>P. opisthomelas</i>			2 Jun	±40	2 Jun 92		12 Dec	±13	7 Nov 97		
Fork-tailed Storm-Petrel	1119	1065	13 Mar–	21 Mar	1000	13	27 Jul–	25 Sep	3	41	0
<i>Oceanodroma furcata</i>			23 Jun	±12	18 Mar 77		4 Nov	±29	14 Oct 97		
Black Storm-Petrel	45	0	—	—	0	45	22 Aug–	27 Aug	27	0	0
<i>O. melania</i>							28 Oct	±12	24 Aug 83		
Red-tailed Tropicbird <sup>a</sup>	2	1	3 Jul	3 Jul	1	1	11 Sep	11 Sep	1	0	0
<i>Phaethon rubricauda</i>				—	3 Jul 79			—	11 Sep 96		
Masked Booby <sup>a</sup>	1	0	—	—	0	1	9 Aug	9 Aug	1	0	0
<i>Sula dactylatra</i>								—	9 Aug 94		
Brown Booby <sup>a</sup>	11	2	25 May–	13 Jun	1	9	9 Aug–	25 Sep	1	0	0
<i>S. leucogaster</i>			1 Jul	±26	13 Jul 92 <sup>b</sup>		1 Nov	±27	7 Nov 99 <sup>b</sup>		
Red-footed Booby <sup>a</sup>	2	0	—	—	0	2	26 Aug–	19 Sep	1	0	0
<i>S. sula</i>							12 Oct	±33	12 Oct 75 <sup>b</sup>		
Brown Pelican	268,004	20,542 <sup>c</sup>	2 Mar–	11 Jun	2454	233,849 <sup>c</sup>	15 Jul–	29 Sep	5670	13,613 <sup>c</sup>	0
<i>Pelecanus occidentalis</i>			14 Jul	±28	8 Jun 88		19 Dec	±33	9 Sep 84		
Magnificent Frigatebird <sup>d</sup>	6	3	20 May–	13 Jun	1	3	16 Jul–	6 Sep	1	0	0
<i>Fregata magnificens</i>			2 Jul	±22	17 Jun 93 <sup>b</sup>		16 Dec	±87	16 Dec 88 <sup>b</sup>		
Great Frigatebird <sup>a, d</sup>	1	1	14 Mar	14 Mar	1	0	—	—	0	0	0
<i>Fregata minor</i>				—	14 Mar 92						

(continued)

**Table 1** (Continued)

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Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Total	Residents
American Bittern <i>Botaurus lentiginosus</i>	5	0	—	—	0	5	16 Sep– 26 Oct	10 Oct $\pm 16$	1 16 Sep 91 <sup>b</sup>	0	0
Great Blue Heron <i>Ardea herodias</i>	212	12 <sup>c</sup>	3 Mar– 14 Jul	11 Jun $\pm 44$	2 6 Jul 88 <sup>b</sup>	198 <sup>c</sup>	16 Jul– 6 Dec	9 Sep $\pm 24$	6 18 Sep 92	2 <sup>c</sup>	3
Great Egret <i>A. alba</i>	58	2	13 Jun– 14 Jun	14 Jun $\pm 1$	1 13 Jun 75 <sup>b</sup>	55	24 Jul– 19 Nov	24 Sep $\pm 31$	4 14 Sep 93	1	0
Snowy Egret <i>Egretta thula</i>	45	7	27 Apr– 13 Jul	16 Jun $\pm 31$	1 11 May 89 <sup>b</sup>	38	18 Jul– 19 Dec	20 Sep $\pm 40$	7 8 Oct 88	0	1
Cattle Egret <i>Bubulcus ibis</i>	104	1	18 May	18 May	1 18 May 94	95	16 Sep– 19 Dec	22 Nov $\pm 17$	21 23 Nov 84	8	6
Green Heron <i>Butorides virescens</i>	25	5	29 Apr– 13 Jul	16 Jun $\pm 30$	1 14 Jun 87 <sup>b</sup>	20	1 Aug– 14 Oct	17 Sep $\pm 17$	1 22 Sep 98 <sup>b</sup>	0	0
Black-crowned Night-Heron <i>Nycticorax nycticorax</i>	12	1	18 Mar	18 Mar	1 18 Mar 95	10	18 Aug– 12 Nov	24 Sep $\pm 30$	2 21 Oct 97 <sup>b</sup>	1	0
White-faced Ibis <i>Plegadis chihi</i>	1	0	—	—	0	1	17 Sep	17 Sep	1 18 Sep 99 <sup>b</sup>	0	0
Turkey Vulture <i>Cathartes aura</i>	2	2	22 May	22 May $\pm 0$	2 22 May 79	0	—	—	0	0	0
Greater White-fronted Goose <i>Anser albifrons</i>	306	3	10 Mar– 6 Jul	28 Mar $\pm 31$	2 10 Mar 80	380	20 Sep– 6 Nov	10 Oct $\pm 13$	97 2 Oct 99	1	0
Emperor Goose <sup>d</sup> <i>Chen canagica</i>	2	0	—	—	0	0	—	—	0	2	1
Snow Goose <i>C. caerulescens</i>	146	0	—	—	0	146	15 Oct– 1 Dec	5 Nov $\pm 3$	128 6 Nov 90	0	1
Ross' Goose <i>C. rossii</i>	14	0	—	—	0	14	6 Nov– 11 Dec	9 Nov $\pm 9$	13 6 Nov 90	0	0
Canada Goose <i>Branta canadensis</i>	915	2	15 Mar– 30 Apr	7 Apr $\pm 33$	1 30 Apr 80 <sup>b</sup>	889	19 Sep– 18 Dec	8 Nov $\pm 11$	401 4 Nov 78	24	10
Brant <i>B. bernicla</i>	16,413	1451	18 Mar– 22 May	11 Apr $\pm 22$	440 22 Mar 79	14,960	2 Oct– 18 Dec	7 Nov $\pm 6$	7200 4 Nov 83	2	1

Tundra Swan	11	0	—	—	0	11	11 Nov– 18 Dec	14 Nov ±11	10 11 Nov 78	0	0
<i>Cygnus columbianus</i>											
Wood Duck	2	0	—	—	0	2	21 Sep– 31 Oct	11 Oct ±20	1 31 Oct 95 <sup>b</sup>	0	0
<i>Aix sponsa</i>											
Gadwall	8	0	—	—	0	8	14 Aug– 19 Dec	10 Oct ±45	3 30 Oct 96	0	0
<i>Anas strepera</i>											
Eurasian Wigeon	1	0	—	—	0	1	1 Oct	1 Oct	1 1 Oct 98	0	0
<i>A. penelope</i>											
American Wigeon	98	0	—	—	0	98	11 Sep– 24 Nov	15 Oct ±15	20 18 Oct 99	0	0
<i>A. americana</i>											
Mallard	101	7	31 Mar– 30 Apr	13 Apr ±12	2 10 Apr 88 <sup>b</sup>	94	13 Aug– 8 Dec	24 Oct ±25	13 16 Oct 99	0	0
<i>A. platyrhynchos</i>											
Blue-winged Teal	7	0	—	—	0	7	22 Sep– 13 Oct	2 Oct ±8	2 5 Oct 90 <sup>b</sup>	0	0
<i>A. discors</i>											
Cinnamon Teal	115	10 <sup>c</sup>	1 Mar– 2 Mar	2 Mar ±0	7 2 Mar 79	88	5 Sep– 10 Nov	24 Sep ±12	17 20 Sep 91	17 <sup>c</sup>	0
<i>A. cyanoptera</i>											
Northern Shoveler	56	1	27 Jun	27 Jun	1 27 Jun 89	55	14 Aug– 14 Nov	5 Oct ±20	12 1 Oct 98	0	0
<i>A. clypeata</i>											
Northern Pintail	3554	5	12 Mar– 20 Mar	15 Mar ±3	3 15 Mar 77	3546	27 Jul– 8 Dec	22 Sep ±25	175 19 Oct 78	3	0
<i>A. acuta</i>											
Green-winged Teal	381	0	—	—	0	380	14 Aug– 17 Dec	13 Oct ±25	39 13 Oct 87	1	0
<i>A. crecca</i>											
Canvasback	2	0	—	—	0	2	24 Oct– 28 Nov	11 Nov ±25	1 24 Oct 88 <sup>b</sup>	0	0
<i>Aythya valisineria</i>											
Ring-necked Duck	1	0	—	—	0	1	7 Oct	7 Oct	1 8 Oct 87 <sup>b</sup>	0	0
<i>A. collaris</i>											
Greater Scaup	128	1	24 Apr	24 Apr	1 24 Apr 93	125	19 Sep– 11 Dec	22 Oct ±14	18 27 Oct 88	2	0
<i>A. marila</i>											
Lesser Scaup	13	0	—	—	0	13	29 Sep– 8 Nov	25 Oct ±14	6 30 Oct 89	0	0
<i>A. affinis</i>											
Harlequin Duck	23	3	25 Mar– 20 May	22 Apr ±28	2 24 Apr 81 <sup>b</sup>	11	23 Jul– 19 Dec	6 Oct ±52	2 2 Dec 78	9	5
<i>Histrionicus histrionicus</i>											
Surf Scoter	5405	2245	2 Mar– 5 Jul	4 Apr ±21	200 21 Apr 82 <sup>b</sup>	2406 <sup>c</sup>	16 Jul– 19 Dec	12 Nov ±20	233 13 Nov 89	754	474
<i>Melanitta perspicillata</i>											

(continued)

**Table 1** (Continued)

Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Total	Residents
White-winged Scoter	469	188	1 Mar– 6 Jul	5 Apr $\pm 20$	33 9 Apr 85	197	14 Sep– 19 Dec	7 Nov $\pm 19$	35 30 Oct 71	84	28
<i>M. fusca</i>											
Black Scoter	25	2	7 Mar– 23 Mar	15 Mar $\pm 11$	1 23 Mar 95 <sup>b</sup>	13	9 Oct– 9 Dec	5 Nov $\pm 27$	5 9 Oct 85	10	0
<i>M. nigra</i>											
Long-tailed Duck	31	5 <sup>c</sup>	2 Mar– 10 Mar	8 Mar $\pm 3$	2 10 Mar 81 <sup>b</sup>	14 <sup>c</sup>	16 Oct– 11 Dec	16 Nov $\pm 24$	3 20 Nov 80 <sup>b</sup>	12 <sup>c</sup>	0
<i>Clangula hyemalis</i>											
Bufflehead	8	6	2 Apr– 7 Apr	6 Apr $\pm 2$	5 7 Apr 82	2	13 Nov– 17 Dec	30 Nov $\pm 24$	1 13 Nov 89 <sup>b</sup>	0	0
<i>Bucephala albeola</i>											
Common Goldeneye <sup>d</sup>	19	5	12 Apr– 6 Jun	7 May $\pm 22$	2 15 May 70	2	7 Dec– 17 Dec	12 Dec $\pm 7$	2 17 Dec 78	12	2
<i>B. clangula</i>											
Barrow's Goldeneye <sup>d</sup>	1	0	—	—	0	0	—	—	0	1	0
<i>B. islandica</i>											
Red-breasted Merganser	388	53 <sup>c</sup>	4 Mar– 17 May	28 Mar $\pm 19$	6 18 Mar 86 <sup>b</sup>	193 <sup>c</sup>	16 Oct– 19 Dec	24 Nov $\pm 14$	10 23 Nov 73	142 <sup>c</sup>	112
<i>Mergus serrator</i>											
Ruddy Duck	29	1	11 Apr	11 Apr	1 11 Apr 97	26	27 Sep– 7 Dec	25 Oct $\pm 18$	15 25 Oct 70	2	0
<i>Oxyura jamaicensis</i>											
Osprey	51	7	29 Mar– 31 May	6 May $\pm 23$	1 27 Apr 92 <sup>b</sup>	44	23 Jul– 20 Nov	19 Sep $\pm 22$	2 24 Sep 89	0	0
<i>Pandion haliaetus</i>											
White-tailed Kite	23	0	—	—	0	23	11 Sep– 8 Dec	12 Oct $\pm 20$	2 19 Sep 99 <sup>b</sup>	0	0
<i>Elanus leucurus</i>											
Bald Eagle	7	0	—	—	0	5	1 Oct– 22 Nov	30 Oct $\pm 24$	1 10 Oct 98 <sup>b</sup>	2	0
<i>Haliaeetus leucocephalus</i>											
Northern Harrier	237	1	6 Apr	6 Apr	1 6 Apr 82	236	27 Jul– 13 Dec	20 Oct $\pm 25$	6 6 Oct 94 <sup>b</sup>	0	0
<i>Circus cyaneus</i>											
Sharp-shinned Hawk	333	0	—	—	0	331	11 Sep– 29 Nov	8 Oct $\pm 19$	13 18 Sep 88	2	0
<i>Accipiter striatus</i>											
Cooper's Hawk	28	0	—	—	0	28	12 Sep– 22 Oct	1 Oct $\pm 8$	3 29 Sep 74	0	0
<i>A. cooperii</i>											
Red-tailed Hawk	16	4	6 Apr– 22 May	21 Apr $\pm 21$	1 14 Apr 99 <sup>b</sup>	10	24 Sep– 12 Dec	2 Nov $\pm 21$	1 7 Nov 97 <sup>b</sup>	2	3
<i>Buteo jamaicensis</i>											

Rough-legged Hawk <i>B. lagopus</i>	49	0	—	—	0	47	28 Sep– 11 Dec	9 Nov ±17	12 27 Oct 73	2	4
Golden Eagle <i>Aquila chrysaetos</i>	1	0	—	—	0	1	28 Oct	28 Oct	1 28 Oct 71	0	0
American Kestrel <sup>d</sup> <i>Falco sparverius</i>	475	4	8 Mar– 26 Jun	25 May ±52	14 Mar 89 <sup>b</sup>	2 460	24 Jul– 15 Dec	8 Oct ±26	5 1 Oct 98 <sup>b</sup>	11	32
Merlin <i>F. columbarius</i>	246	0	—	—	0	246	7 Sep– 24 Nov	10 Oct ±18	5 30 Sep 98	0	0
Peregrine Falcon <sup>d</sup> <i>F. peregrinus</i>	531	75	1 Mar– 29 Jun	20 Apr ±28	29 Mar 95 <sup>b</sup>	4 428	22 Jul– 18 Dec	14 Oct ±26	6 7 Oct 97 <sup>b</sup>	28	103
Prairie Falcon <i>F. mexicanus</i>	1	0	—	—	0	1	23 Sep	23 Sep	1 23 Sep 80	0	0
Virginia Rail <i>Rallus limicola</i>	8	0	—	—	0	8	11 Aug– 21 Sep	30 Aug ±12	2 26 Aug 87	0	0
Sora <i>Poranza carolina</i>	24	3	28 Mar– 30 Jun	18 May ±48	28 Mar 90 <sup>b</sup>	1 21	21 Jul– 15 Oct	11 Sep ±21	2 15 Oct 82	0	0
Common Moorhen <i>Gallinula chloropus</i>	3	2	13 May– 6 Jun	25 May ±17	22 May 89 <sup>b</sup>	1 1	—	—	0	0	0
American Coot <i>Fulica americana</i>	18	2	11 May– 12 May	12 May ±1	12 May 81 <sup>b</sup>	1 16	11 Aug– 27 Oct	30 Sep ±17	2 29 Sep 96 <sup>b</sup>	0	0
Black-bellied Plover <i>Pluvialis squatarola</i>	1156	62	1 Mar– 11 May	30 Mar ±16	14 Mar 80 <sup>b</sup>	11 1068	17 Jul– 15 Dec	25 Sep ±35	42 26 Oct 81	26	365
American Golden-Plover <sup>e</sup> <i>P. dominica</i>	5	0	—	—	0	5	5 Sep– 17 Sep	13 Sep ±5	2 17 Sep 91 <sup>b</sup>	0	0
Pacific Golden-Plover <sup>e</sup> <i>P. fulva</i>	32	0	—	—	0	32	17 Sep– 2 Dec	11 Oct ±18	8 5 Oct 91	0	1
Total Lesser Golden-Plover <sup>e</sup> <i>P. dominica/fulva</i>	161	3	28 Apr– 28 May	8 May ±17	28 May 80 <sup>b</sup>	1 157	8 Aug– 9 Dec	7 Oct ±23	14 17 Oct 89	1	1
Snowy Plover <i>Charadrius alexandrinus</i>	4	0	—	—	0	4	27 Aug– 5 Oct	17 Sep ±16	1 22 Sep 91 <sup>b</sup>	0	0
Semipalmated Plover <i>C. semipalmatus</i>	300	0	—	—	0	300	21 Jul– 28 Oct	31 Aug ±14	30 26 Aug 75	0	0
Killdeer <sup>d</sup> <i>C. vociferus</i>	578	18	16 Mar– 16 Jun	14 May ±26	4 May 80 <sup>b</sup>	2 488	12 Jul– 19 Dec	19 Oct ±30	27 26 Oct 88	72	23

(continued)



Black Turnstone	3851	139	1 Mar-	18 Apr	71	3459	21 Jun-	17 Sep	106	253	1824
<i>A. melanocephala</i>			10 Jun	±29	5 Mar 85		15 Dec	±35	25 Sep 75		
Surfbird	261	21	21 Mar-	20 Apr	5	226	17 Jul-	2 Sep	19	14	19
<i>Aphriza virgata</i>			2 May	±9	21 Apr 90 <sup>b</sup>		19 Dec	±30	8 Aug 68		
Red Knot	6	0	—	—	0	6	7 Sep-	17 Sep	1	0	0
<i>Calidris canutus</i>							3 Oct	±10	15 Sep 91 <sup>b</sup>		
Sanderling	195	3	23 Mar-	25 Mar	2	189	6 Jul-	12 Sep	14	3	0
<i>C. alba</i>			29 Mar	±3	23 Mar 90		14 Dec	±31	17 Sep 75		
Semipalmated Sandpiper <sup>e</sup>	12	0	—	—	0	12	3 Aug-	18 Aug	2	0	0
<i>C. pusilla</i>							16 Sep	±10	20 Aug 77		
Western Sandpiper	976	0	—	—	0	970	5 Jul-	31 Aug	96	6	0
<i>C. mauri</i>							14 Dec	±18	17 Aug 89		
Least Sandpiper	508	9	6 Mar-	31 Mar	6	496	10 Jul-	2 Sep	24	3	0
<i>C. minutilla</i>			10 May	±18	31 Mar 90		15 Dec	±21	16 Aug 97		
Baird's Sandpiper	286	1	11 May	11 May	1	285	10 Jul-	26 Aug	16	0	0
<i>C. bairdii</i>				—	11 May 69		11 Oct	±14	16 Aug 87		
Pectoral Sandpiper	362	1	4 May	4 May	1	361	27 Jul-	20 Sep	60	0	0
<i>C. melanotos</i>				—	4 May 68		23 Oct	±12	20 Sep 91		
Sharp-tailed Sandpiper <sup>e</sup>	6	0	—	—	0	6	2 Sep-	29 Sep	1	0	0
<i>C. acuminata</i>							7 Nov	±27	17 Sep 96 <sup>b</sup>		
Rock Sandpiper	18	0	—	—	2	16	19 Oct-	10 Nov	2	2	12
<i>C. ptilocnemis</i>					3 Apr 80 <sup>b</sup>		5 Dec	±14	18 Dec 79 <sup>b</sup>		
Dunlin	174	1	20 May	20 May	1	172	14 Sep-	13 Oct	70	1	2
<i>C. alpina</i>				—	20 May 71		9 Dec	±11	14 Oct 87		
Buff-breasted Sandpiper	7	0	—	—	0	7	15 Aug-	30 Aug	2	0	0
<i>Tryngites subruficollis</i>							8 Sep	±8	29 Aug 78		
Ruff	1	0	—	—	0	1	15 Oct	15 Oct	1	0	0
<i>Philomachus pugnax</i>								—	15 Oct 93		
Short-billed Dowitcher	1002	13	6 Apr-	3 Jun	11	989	2 Jul-	24 Aug	150	0	0
<i>Limnodromus griseus</i>			13 Jun	±24	13 Jun 93		19 Oct	±20	4 Sep 85		
Long-billed Dowitcher	367	2	11 May-	13 May	1	364	18 Jul-	1 Oct	41	1	0
<i>L. scolopaceus</i>			15 May	±3	15 May 90 <sup>b</sup>		10 Dec	±25	22 Sep 86		
Wilson's Snipe	148	6	3 Apr-	6 May	1	141	18 Jul-	11 Oct	4	1	0
<i>Gallinago delicata</i>			28 May	±19	9 May 89 <sup>b</sup>		12 Dec	±27	27 Oct 88		



**Table 1** (Continued)

Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Total	Residents
Wilson's Phalarope <i>Phalaropus tricolor</i>	3	0	—	—	0	3	20 Jul- 17 Aug	1 Aug $\pm 14$	1 17 Aug 88 <sup>b</sup>	0	0
Red-necked Phalarope <i>P. lobatus</i>	179,227	31,174	12 Apr- 12 Jun	9 May $\pm 12$	6300 30 Apr 82	148,053	19 Jul- 28 Nov	1 Sep $\pm 18$	19,500 22 Aug 68	0	0
Red Phalarope <i>P. fulicarius</i>	262,901	21,682	5 Mar- 12 Jun	15 May $\pm 13$	3500 8 May 96	240,734	14 Jul- 19 Dec	18 Sep $\pm 33$	30,000 4 Sep 94	485	0
South Polar Skua <i>Stercorarius maccormicki</i>	24	0	—	—	0	24	26 Aug- 31 Oct	7 Oct $\pm 15$	2 3 Oct 99	0	0
Pomarine Jaeger <i>S. pomarinus</i>	773	7	1 Mar- 27 Apr	25 Mar $\pm 29$	2 1 Mar 90	764	3 Aug- 10 Dec	8 Oct $\pm 20$	26 5 Nov 97	2	0
Parasitic Jaeger <i>S. parasiticus</i>	229	1	9 Jun	9 Jun —	1 9 Jun 95	227	20 Aug- 22 Nov	30 Sep $\pm 19$	18 2 Oct 97	1	0
Long-tailed Jaeger <i>S. longicaudus</i>	14	1	29 Apr	29 Apr —	1 29 Apr 71	13	24 Aug- 23 Oct	7 Sep $\pm 41$	1 11 Oct 99 <sup>b</sup>	0	0
Laughing Gull <i>Larus atricilla</i>	2	1	2 Jun	2 Jun —	1 3 Jun 88 <sup>b</sup>	1	3 Aug	3 Aug —	1 3 Aug 77	0	0
Franklin's Gull <i>L. pipixcan</i>	2	1	19 May	19 May —	1 19 May 91	1	4 Sep	4 Sep —	1 4 Sep 83	0	0
Bonaparte's Gull <i>L. philadelphia</i>	40,139	37,516	2 Mar- 28 May	24 Apr $\pm 6$	30,000 26 Apr 70	2597	28 Sep- 19 Dec	6 Nov $\pm 9$	475 27 Oct 91	26	0
Heerman's Gull <i>L. heermanni</i>	17,789	288	2 Mar- 14 Jul	15 Apr $\pm 65$	40 20 Jun 97	17,249	15 Jul- 19 Dec	2 Oct $\pm 30$	820 9 Aug 83	252	42
Mew Gull <i>L. canus</i>	968	43	1 Mar- 9 May	17 Mar $\pm 14$	3 24 Mar 85 <sup>b</sup>	725	31 Aug- 19 Dec	8 Nov $\pm 19$	50 14 Oct 70	200	18
Ring-billed Gull <i>L. delawarensis</i>	160	20	3 Mar- 14 Jul	22 Apr $\pm 49$	1 18 Apr 93 <sup>b</sup>	127	30 Jul- 15 Dec	18 Oct $\pm 31$	6 5 Oct 68 <sup>b</sup>	13	0
California Gull <i>L. californicus</i>	53,725	1189	1 Mar- 14 Jul	2 Apr $\pm 25$	250 27 Mar 90	51,376	16 Jul- 19 Dec	26 Oct $\pm 31$	2500 7 Nov 97	1160	3

Herring Gull	9763	2187 <sup>c,f</sup>	1 Mar- 12 Jul	19 Mar ±14	125 4 Mar 77	3171 <sup>c</sup>	19 Aug- 19 Dec	21 Nov ±20	120 7 Dec 96	4405 <sup>c</sup>	563
<i>L. argentatus</i>											
Thayer's Gull	470	90 <sup>c</sup>	1 Mar- 30 May	19 Mar ±15	8 10 Mar 91	222 <sup>c</sup>	2 Jul- 19 Dec	18 Nov ±20	8 31 Oct 85	158 <sup>c</sup>	2
<i>L. thayeri</i>											
Glaucous-winged Gull	17,395	4012 <sup>c,f</sup>	1 Mar- 4 Jul	18 Mar ±14	350 13 Mar 94	4670 <sup>c</sup>	20 Jul- 19 Dec	30 Nov ±23	440 18 Dec 79	8713 <sup>c</sup>	1796
<i>L. glaucescens</i>											
Glaucous Gull	59	18 <sup>c</sup>	2 Mar- 6 May	20 Mar ±18	3 8 Mar 97 <sup>b</sup>	10 <sup>c</sup>	24 Oct- 15 Dec	20 Nov ±17	1 21 Nov 98 <sup>b</sup>	31 <sup>c</sup>	4
<i>L. hyperboreus</i>											
Sabine's Gull	1939	16	26 Mar- 16 Jun	14 May ±18	10 18 May 77	1923	20 Aug- 11 Nov	13 Sep ±12	600 22 Sep 96	0	0
<i>Xema sabini</i>											
Black-legged Kittiwake	28,168	22,903	1 Mar- 1 Jun	16 Mar ±11	4000 4 Mar 76	1315	16 Aug- 19 Dec	12 Nov ±12	450 19 Nov 70	3950	0
<i>Rissa tridactyla</i>											
Caspian Tern	33	8	26 May- 9 Jul	16 Jun ±16	2 13 Jun 89 <sup>b</sup>	25	15 Jul- 10 Oct	27 Aug ±26	3 17 Jul 83 <sup>b</sup>	0	0
<i>Sterna caspia</i>											
Elegant Tern	2933	0	—	—	0	2933	2 Aug- 14 Nov	27 Sep ±16	671 28 Sep 97	0	0
<i>S. elegans</i>											
Common Tern	12	0	—	—	0	12	31 Aug- 28 Sep	13 Sep ±9	1 5 Sep 99 <sup>b</sup>	0	0
<i>S. hirundo</i>											
Arctic Tern	13,978	1	24 May	24 May	1 24 May 92	13,977	23 Aug- 9 Oct	6 Sep ±9	7500 31 Aug 93	0	0
<i>S. paradisaea</i>											
Forster's Tern	1	0	—	—	0	1	28 Oct	28 Oct	1 28 Oct 86	0	0
<i>S. forsteri</i>											
Thick-billed Murre <sup>a</sup>	2	0	—	—	0	2	31 Oct	1 Nov ±1	1 1 Nov 94	0	0
<i>Uria lomvia</i>											
Marbled Murrelet	3	0	—	—	0	3	11 Oct- 24 Nov	9 Nov ±25	2 24 Nov 99	0	0
<i>Brachyramphus marmoratus</i>											
Xantus's Murrelet	22	5	7 Mar- 12 May	18 Apr ±31	2 12 May 91	17	17 Jul- 16 Dec	31 Aug ±42	2 20 Jul 99 <sup>b</sup>	0	0
<i>Synthliboramphus hypoleucus</i>											
Craveri's Murrelet	26	0	—	—	0	26	7 Sep- 15 Nov	13 Oct ±15	10 13 Oct 98	0	0
<i>S. craveri</i>											
Ancient Murrelet	692	59 <sup>c</sup>	1 Mar- 10 Jun	27 Mar ±25	10 2 Mar 96	241 <sup>c</sup>	16 Jul- 19 Dec	22 Nov ±30	30 11 Dec 75	392 <sup>c</sup>	41
<i>S. antiquus</i>											
Horned Puffin <sup>a</sup>	27	16	7 Mar- 22 Jun	6 May ±40	4 29 Mar 90	7	26 Sep- 2 Nov	19 Oct ±19	2 25 Oct 75	4	0
<i>Fratercula corniculata</i>											

(continued)

**Table 1** (Continued)

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Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean ± S.D.	High Count and Date	Seasonal Total	Date Range	Mean ± S.D.	High Count and Date	Total	Residents
Rock Dove <i>Columba livia</i>	183	89	2 Mar– 14 Jul	10 May ±31	3 15 May 77 <sup>b</sup>	85	15 Jul– 16 Dec	29 Sep ±32	12 14 Sep 75	9	0
Band-tailed Pigeon <i>C. fasciata</i>	373	157	24 Mar– 14 Jul	27 May ±29	6 7 Jul 70 <sup>b</sup>	214	15 Jul– 11 Dec	17 Sep ±37	4 21 Oct 72	2	0
White-winged Dove <i>Zenaida asiatica</i>	19	0	—	—	0	19	20 Jul– 24 Nov	29 Sep ±28	1 7 Oct 98 <sup>b</sup>	0	0
Mourning Dove <i>Z. macroura</i>	871	192	29 Mar– 14 Jul	17 May ±21	14 29 Apr 68	675	17 Jul– 8 Dec	16 Sep ±23	20 3 Sep 72	4	0
Black-billed Cuckoo <sup>a</sup> <i>Coccyzus erythrophthalmus</i>	2	0	—	—	0	2	26 Aug– 18 Oct	22 Sep ±38	1 26 Aug 87 <sup>b</sup>	0	0
Yellow-billed Cuckoo <i>C. americanus</i>	23	10	14 Jun– 7 Jul	23 Jun ±9	1 15 Jun 97 <sup>b</sup>	13	21 Jul– 7 Nov	31 Aug ±32	1 10 Oct 96 <sup>b</sup>	0	0
Barn Owl <i>Tyto alba</i>	15	1	13 Jul	13 Jul	1 13 Jul 73	14	3 Aug– 27 Oct	28 Sep ±27	5 27 Oct 99	0	4
Great Horned Owl <i>Bubo virginianus</i>	1	0	—	—	0	1	21 Nov	21 Nov	1 21 Nov 70	0	0
Burrowing Owl <i>Athene cunicularia</i>	304	30	2 Mar– 20 May	4 Apr ±20	6 10 Mar 97	268	28 Aug– 17 Dec	9 Oct ±21	10 12 Oct 89 <sup>b</sup>	6	72
Long-eared Owl <i>Asio otus</i>	57	5 <sup>f</sup>	6 Mar– 14 Jul	31 May ±53	1 6 Mar 95 <sup>b</sup>	52	17 Jul– 26 Nov	15 Sep ±37	3 5 Aug 74 <sup>b</sup>	0	0
Short-eared Owl <i>A. flammeus</i>	261	4	16 Apr– 5 Jul	3 Jun ±35	1 16 Apr 88 <sup>b</sup>	249	16 Jul– 7 Dec	13 Oct ±18	17 27 Oct 88	8	4
Northern Saw-whet Owl <i>Aegolius acadicus</i>	20	0	—	—	0	18	20 Sep– 21 Nov	27 Oct ±16	2 19 Nov 87 <sup>b</sup>	2	0
Lesser Nighthawk <i>Chordeiles acutipennis</i>	52	44	18 May– 14 Jul	14 Jun ±17	2 30 Jun 80 <sup>b</sup>	8	19 Jul– 9 Sep	10 Aug ±20	1 24 Jul 91 <sup>b</sup>	0	0
Common Nighthawk <i>C. minor</i>	4	2	2 Jun– 16 Jun	9 Jun ±10	1 2 Jun 99 <sup>b</sup>	2	8 Sep	8 Sep	1 8 Sep 87 <sup>b</sup>	0	0
Common Poorwill <i>Phalaenoptilus nuttallii</i>	8	0	—	—	0	8	9 Sep– 31 Oct	11 Oct ±18	1 29 Oct 93	0	0

Black Swift	20	7	16 May– 8 Jul	11 Jun ±15	3 11 Jun 75	13	1 Aug– 9 Oct	3 Sep ±21	2 9 Aug 89 <sup>b</sup>	0	0
<i>Cypseloides niger</i>											
Chimney Swift	24	11	26 May– 9 Jul	10 Jun ±11	4 11 Jun 75	13	8 Sep– 2 Oct	21 Sep ±8	2 16 Sep 99 <sup>b</sup>	0	0
<i>Chaetura pelagica</i>											
Vaux's Swift	1412	14	16 Apr– 7 Jul	25 May ±23	3 22 May 83 <sup>b</sup>	1398	21 Jul– 27 Oct	27 Sep ±8	102 23 Sep 85	0	0
<i>C. vauxi</i>											
White-throated Swift	19	14	6 Apr– 25 May	14 May ±19	10 25 May 99	5	15 Aug– 26 Oct	8 Oct ±30	1 26 Oct 97 <sup>b</sup>	0	0
<i>Aeronautes saxatalis</i>											
Ruby-throated Hummingbird <sup>a</sup>	4	0	—	—	0	4	21 Aug– 12 Sep	1 Sep ±10	1 7 Sep 94 <sup>b</sup>	0	0
<i>Archilochus colubris</i>											
Black-chinned Hummingbird	5	0	—	—	0	5	28 Aug– 27 Oct	16 Sep ±24	1 9 Sep 99 <sup>b</sup>	0	0
<i>A. alexandri</i>											
Anna's Hummingbird	582	45	1 Mar– 14 Jun	25 Apr ±30	2 24 Mar 74 <sup>b</sup>	518	21 Jul– 10 Dec	14 Oct ±22	7 9 Oct 89	19	0
<i>Calypte anna</i>											
Costa's Hummingbird	21	16	26 Mar– 13 Jul	12 May ±30	2 28 May 85	5	13 Aug– 11 Oct	16 Sep ±31	1 8 Oct 90 <sup>b</sup>	0	0
<i>C. costae</i>											
Calliope Hummingbird	10	8	5 Apr– 8 May	23 Apr ±14	1 13 Apr 88 <sup>b</sup>	2	16 Sep– 5 Oct	26 Sep ±13	1 25 Sep 99 <sup>b</sup>	0	0
<i>Stellula calliope</i>											
Rufous Hummingbird	496	291 <sup>f</sup>	15 Feb– 4 Jun	11 Apr ±16	50 13 Apr 78 <sup>b</sup>	205 <sup>f</sup>	19 Jul– 11 Nov	26 Aug ±17	10 26 Aug 87 <sup>b</sup>	0 <sup>f</sup>	0
<i>Selasphorus rufus</i>											
Allen's Hummingbird	92	74 <sup>f</sup>	5 Feb– 11 Jul	3 May ±38	3 8 May 95 <sup>b</sup>	18 <sup>f</sup>	23 Jul– 12 Sep	7 Aug ±12	3 3 Aug 87	0 <sup>f</sup>	0
<i>S. sasin</i>											
Total Rufous/Allen's Hummingbird	681	407 <sup>f</sup>	5 Feb– 13 Jul	17 Apr ±25	51 13 Apr 78 <sup>b</sup>	274 <sup>f</sup>	19 Jul– 11 Nov	24 Aug ±17	10 26 Aug 87 <sup>b</sup>	0 <sup>f</sup>	0
<i>S. rufus/sasin</i>											
Belted Kingfisher	143	23	2 Mar– 11 Jul	4 May ±40	2 14 Apr 77	116	17 Jul– 1 Dec	9 Sep ±29	4 15 Sep 74	4	24
<i>Ceryle alcyon</i>											
Lewis' Woodpecker	8	5	29 Apr– 8 May	4 May ±5	2 8 May 77 <sup>b</sup>	3	6 Sep– 27 Sep	19 Sep ±9	1 12 Sep 95 <sup>b</sup>	0	0
<i>Melanerpes lewis</i>											
Acorn Woodpecker	14	0	—	—	0	13	24 Aug– 25 Nov	4 Oct ±28	2 12 Sep 89 <sup>b</sup>	1	0
<i>M. formicivorus</i>											
Yellow-bellied Sapsucker	2	0	—	—	0	2	18 Oct– 29 Oct	24 Oct ±8	1 29 Oct 95 <sup>b</sup>	0	0
<i>Sphyrapicus varius</i>											
Red-naped Sapsucker	5	1	18 Jun	18 Jun	1	4	13 Sep– 13 Oct	29 Sep ±12	1 13 Sep 94 <sup>b</sup>	0	0
<i>S. nuchalis</i>											

(continued)

**Table 1** (Continued)

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Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Total	Residents
Red-breasted Sapsucker <i>S. ruber</i>	21	2	25 Mar– 19 Apr	7 Apr $\pm$ 18	1 19 Apr 81 <sup>b</sup>	19	27 Sep– 2 Nov	8 Oct $\pm$ 9	4 2 Oct 68 <sup>b</sup>	0	0
Northern Flicker <i>Colaptes auratus</i>	604	90	1 Mar– 6 Jun	6 Apr $\pm$ 17	8 4 Apr 73	502	5 Aug– 18 Dec	16 Oct $\pm$ 19	18 3 Oct 86	12	32
Yellow-shafted Flicker <i>C. a. luteus</i>	70	7	23 Mar– 22 May	13 Apr $\pm$ 20	3 5 Apr 84	62	13 Sep– 27 Nov	15 Oct $\pm$ 17	5 8 Oct 72	1	1
Yellow $\times$ Red-shafted Flicker intergrade	59	5	26 Mar– 23 Apr	7 Apr $\pm$ 12	2 26 Mar 82	54	26 Sep– 5 Dec	16 Oct $\pm$ 15	3 8 Oct 86 <sup>b</sup>	0	3
Red-shafted Flicker <i>C. a. cafer</i> subspecies group	371	65	8 Mar– 6 Jun	7 Apr $\pm$ 17	7 4 Apr 73	297	5 Aug– 18 Dec	17 Oct $\pm$ 20	14 5 Oct 72	9	28
Olive-sided Flycatcher <i>Contopus cooperi</i>	185	104	22 Apr– 27 Jun	22 May $\pm$ 13	10 27 May 70 <sup>b</sup>	81	16 Jul– 27 Oct	8 Sep $\pm$ 16	8 6 Sep 85	0	0
Western Wood-Pewee <i>C. sordidulus</i>	1695	1138	20 Apr– 12 Jul	29 May $\pm$ 12	80 28 May 83	557	15 Jul– 19 Nov	11 Sep $\pm$ 14	60 6 Sep 85	0	0
Eastern Wood-Pewee <sup>a</sup> <i>C. virens</i>	2	1	15 Jun	15 Jun	1 15 Jun 75	1	5 Sep	5 Sep	1 5 Sep 98	0	0
Yellow-bellied Flycatcher <sup>a</sup> <i>Empidonax flaviventris</i>	6	0	—	—	0	6	25 Aug– 27 Sep	10 Sep $\pm$ 11	1 10 Sep 97 <sup>b</sup>	0	0
Alder Flycatcher <sup>a</sup> <i>E. alnorum</i>	2	0	—	—	0	2	27 Aug– 2 Sep	30 Aug $\pm$ 4	1 27 Aug 88 <sup>b</sup>	0	0
Willow Flycatcher <i>E. traillii</i>	414	124	22 Apr– 12 Jul	2 Jun $\pm$ 14	20 5 Jun 69	290	20 Jul– 29 Oct	11 Sep $\pm$ 14	6 25 Aug 87 <sup>b</sup>	0	0
Least Flycatcher <sup>a</sup> <i>E. minimus</i>	116	7	17 May– 8 Jul	5 Jun $\pm$ 16	1 17 May 85 <sup>b</sup>	109	17 Aug– 22 Nov	23 Sep $\pm$ 17	4 26 Sep 76	0	0
Hammond's Flycatcher <i>E. hammondii</i>	158	116	25 Mar– 17 Jun	8 May $\pm$ 15	12 9 May 77	42	1 Aug– 28 Oct	25 Sep $\pm$ 16	3 4 Oct 86 <sup>b</sup>	0	0
Gray Flycatcher <i>E. wrightii</i>	99	84	18 Apr– 26 May	4 May $\pm$ 10	7 21 Apr 77	15	24 Aug– 14 Oct	13 Sep $\pm$ 14	2 6 Sep 85	0	0
Dusky Flycatcher <i>E. oberholseri</i>	110	80	14 Apr– 9 Jul	9 May $\pm$ 15	8 9 May 69	30	1 Aug– 21 Oct	17 Sep $\pm$ 17	1 10 Sep 99 <sup>b</sup>	0	0

Western Flycatcher	1277	305	19 Mar-	20 May	50	972	15 Jul-	12 Sep	65	0	0
<i>E. difficilis/occidentalis</i>			14 Jul	±24	5 Jun 69 <sup>b</sup>		14 Nov	±14	15 Sep 93		
Black Phoebe	413	15	4 Mar-	2 Apr	7	377	21 Jul-	10 Oct	10	21	68
<i>Sayornis nigricans</i>			17 May	±24	2 Mar 87 <sup>b</sup>		18 Dec	±22	31 Oct 96 <sup>b</sup>		
Eastern Phoebe	23	4	18 May-	29 May	1	19	24 Sep-	3 Nov	1	0	0
<i>S. phoebe</i>			6 Jun	+8	2 Jun 91 <sup>b</sup>		21 Nov	±15	29 Oct 99 <sup>b</sup>		
Say's Phoebe	263	12 <sup>f</sup>	22 Feb-	1 Apr	2	251	22 Jul-	24 Sep	10	0 <sup>f</sup>	4
<i>S. saya</i>			14 May	±26	22 Feb 84		3 Nov	±13	29 Sep 68		
Ash-throated Flycatcher	214	77	16 Apr-	2 Jun	6	136	16 Jul-	31 Aug	7	1	0
<i>Myiarchus cinerascens</i>			10 Jul	±17	12 Jun 75		20 Nov	±25	16 Aug 87		
Great-crested Flycatcher <sup>a</sup>	10	0	—	—	0	10	5 Sep-	29 Sep	1	0	0
<i>M. crinitus</i>							13 Oct	±11	30 Sep 96 <sup>b</sup>		
Brown-crested Flycatcher	1	0	—	—	0	1	17 Sep	17 Sep	1	0	0
<i>M. tyrannulus</i>								—	18 Sep 83 <sup>b</sup>		
Tropical Kingbird	14	1	6 Jun	6 Jun	1	13	7 Aug-	7 Oct	1	0	0
<i>Tyrannus melancholicus</i>					7 Jun 91 <sup>b</sup>		18 Nov	±29	23 Sep 95 <sup>b</sup>		
Cassin's Kingbird	2	1	6 Jun	6 Jun	1	1	25 Aug	25 Aug	1	0	0
<i>T. vociferans</i>					7 Jun 91 <sup>b</sup>			—	25 Aug 83		
Western Kingbird	192	69	19 Mar-	5 May	11	123	15 Jul-	6 Sep	5	0	0
<i>T. verticalis</i>			14 Jul	±28	29 Mar 86		20 Oct	±21	19 Oct 69		
Eastern Kingbird	42	14	12 May-	9 Jun	2	28	19 Jul-	3 Sep	2	0	0
<i>T. tyrannus</i>			9 Jul	±17	22 May 92 <sup>b</sup>		28 Sep	±16	3 Sep 89		
Scissor-tailed Flycatcher <sup>a</sup>	3	2	18 May-	23 May	1	1	30 Sep	30 Sep	1	0	0
<i>T. forficatus</i>			27 May	±6	30 May 99 <sup>b</sup>			—	30 Sep 85		
Brown Shrike <sup>a</sup>	1	0	—	—	0	1	20 Sep	20 Sep	1	0	0
<i>Lanius cristatus</i>								—	22 Sep 84 <sup>b</sup>		
Loggerhead Shrike	14	6	3 Apr-	28 Apr	1	8	26 Jul-	24 Aug	1	0	1
<i>L. ludovicianus</i>			24 May	±17	6 May 90 <sup>b</sup>		11 Sep	±15	10 Sep 98 <sup>b</sup>		
Northern Shrike	2	0	—	—	0	2	18 Oct-	24 Oct	1	0	0
<i>L. excubitor</i>							29 Oct	+8	21 Oct 93 <sup>b</sup>		
White-eyed Vireo <sup>a</sup>	2	1	4 Jun	4 Jun	1	1	28 Oct	28 Oct	1	0	0
<i>Vireo griseus</i>					5 Jun 69 <sup>b</sup>			—	28 Oct 92		
Bell's Vireo <sup>d</sup>	2	0	—	—	0	2	15 Sep-	17 Sep	1	0	0
<i>V. bellii</i>							18 Sep	±2	19 Sep 93 <sup>b</sup>		

(continued)

**Table 1** (Continued)

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Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Total	Residents
Yellow-throated Vireo <sup>a</sup>	1	1	12 Jun	12 Jun	1	0	—	—	0	0	0
<i>V. flavifrons</i>				—	13 Jun 69 <sup>b</sup>						
Plumbeous Vireo	1	0	—	—	0	1	15 Sep	15 Sep	1	0	0
<i>V. plumbeus</i>								—	15 Sep 92		
Cassin's Vireo	180	57	19 Mar–	22 Apr	5	123	4 Aug–	8 Sep	7	0	0
<i>V. cassinii</i>			5 Jul	$\pm 22$	21 Apr 87		22 Oct	$\pm 18$	22 Aug 70		
Blue-headed Vireo <sup>a</sup>	31	0	—	—	0	31	9 Sep–	30 Sep	2	0	0
<i>V. solitarius</i>							2 Nov	$\pm 15$	27 Sep 96 <sup>b</sup>		
Total Solitary Vireo	213	57	19 Mar–	22 Apr	5	156	4 Aug–	13 Sep	7	0	0
<i>V. solitarius/cassinii/plumbeus</i>			5 Jul	$\pm 22$	21 Apr 87		2 Nov	$\pm 19$	22 Aug 70		
Hutton's Vireo	55	14 <sup>f</sup>	23 Feb–	19 Apr	2	41	18 Jul–	23 Sep	2	0 <sup>f</sup>	0
<i>V. huttoni</i>			20 May	$\pm 23$	16 Apr 83		8 Nov	$\pm 28$	8 Nov 81		
Warbling Vireo	804	184	11 Mar–	10 May	15	620	21 Jul–	13 Sep	25	0	0
<i>V. gilvus</i>			10 Jul	$\pm 18$	9 May 90		20 Nov	$\pm 14$	11 Sep 77		
Philadelphia Vireo <sup>a</sup>	13	2	6 Jun–	9 Jun	1	11	11 Sep–	29 Sep	1	0	0
<i>V. philadelphicus</i>			12 Jun	$\pm 4$	6 Jun 89 <sup>b</sup>		9 Nov	$\pm 19$	19 Sep 95 <sup>b</sup>		
Red-eyed Vireo	89	55	5 May–	9 Jun	3	34	18 Jul–	12 Sep	2	0	0
<i>V. olivaceus</i>			2 Jul	$\pm 10$	14 Jun 98		6 Oct	$\pm 17$	12 Sep 95 <sup>b</sup>		
Yellow-green Vireo <sup>a</sup>	6	0	—	—	0	6	29 Sep–	19 Oct	1	0	0
<i>V. flavoviridis</i>							30 Oct	$\pm 11$	17 Oct 94 <sup>b</sup>		
Clark's Nutcracker	4	0	—	—	0	4	28 Sep–	10 Oct	1	0	0
<i>Nucifraga columbiana</i>							27 Oct	$\pm 12$	12 Oct 86 <sup>b</sup>		
Common Raven	2	1	18 Apr	18 Apr	1	1	4 Oct	4 Oct	1	0	0
<i>Corvus corax</i>				—	18 Apr 72			—	1 Oct 95		
Horned Lark	153	10	1 Mar–	21 Apr	2	143	13 Sep–	23 Oct	16	0	0
<i>Eremophila alpestris</i>			21 Jun	$\pm 45$	6 Mar 78 <sup>b</sup>		19 Dec	$\pm 16$	16 Oct 81		
Purple Martin	43	6	28 May–	10 Jun	1	37	11 Aug–	5 Sep	4	0	0
<i>Progne subis</i>			17 Jun	$\pm 8$	10 Jun 77 <sup>b</sup>		4 Oct	$\pm 11$	3 Sep 96 <sup>b</sup>		
Tree Swallow	164	94 <sup>f</sup>	8 Feb–	4 Apr	11	70	20 Jul–	6 Oct	7	0 <sup>f</sup>	0
<i>Tachycineta bicolor</i>			8 Jul	$\pm 32$	27 Mar 82 <sup>b</sup>		8 Dec	$\pm 30$	26 Oct 98		

Violet-green Swallow	1054	69 <sup>d,f</sup>	3 Feb- 11 Jul	13 Apr ±35	10 25 May 99	985	20 Jul- 18 Dec	7 Oct ±13	100 4 Oct 81	0 <sup>f</sup>	0
<i>T. thalassina</i>											
Northern Rough-winged Swallow	282	27 <sup>f</sup>	9 Mar- 19 Jun	21 May ±25	4 12 Jun 74	255	19 Jul- 4 Oct	31 Aug ±14	15 8 Sep 72	0	0
<i>Stelgidopteryx serripennis</i>											
Bank Swallow	48	14	3 May- 15 Jun	20 May ±12	2 17 May 84 <sup>b</sup>	34	17 Aug- 27 Oct	23 Sep ±26	12 19 Oct 98	0	0
<i>Riparia riparia</i>											
Cliff Swallow	163	23	14 Apr- 22 Jun	20 May ±20	3 9 May 76 <sup>b</sup>	140	17 Jul- 8 Nov	17 Sep ±24	10 14 Aug 97	0	0
<i>Petrochelidon pyrrhonota</i>											
Barn Swallow	809	232	5 Apr- 8 Jul	18 May ±19	20 25 May 99	577	21 Jul- 12 Nov	20 Sep ±18	49 28 Sep 98	0	0
<i>Hirundo rustica</i>											
Red-breasted Nuthatch	1103	34	12 Apr- 8 Jul	22 May ±21	3 7 May 78	1069	16 Jul- 6 Dec	26 Sep ±20	75 15 Sep 69	0	0
<i>Sitta canadensis</i>											
White-breasted Nuthatch	2	1	15 May	15 May	1	1	10 Oct	10 Oct	1	0	0
<i>S. carolinensis</i>				—	15 May 79			—	10 Oct 69 <sup>b</sup>		
Pygmy Nuthatch	1	0	—	—	0	1	6 Aug	6 Aug	1	0	0
<i>S. pygmaea</i>								—	6 Aug 69		
Brown Creeper	143	2	14 Apr- 13 Jun	14 May ±42	1 18 Apr 78 <sup>b</sup>	141	27 Sep- 24 Nov	26 Oct ±9	8 19 Oct 86 <sup>b</sup>	0	0
<i>Certhia americana</i>											
Rock Wren <sup>d</sup>	263	29	4 Mar- 26 Jun	25 Apr ±29	9 13 Jun 71	233	19 Aug- 26 Nov	2 Oct ±19	12 11 Nov 72 <sup>b</sup>	1	74
<i>Salpinctes obsoletus</i>											
Bewick's Wren	3	0	—	—	0	3	2 Oct- 2 Nov	16 Oct ±16	1 19 Dec 81 <sup>b</sup>	0	1
<i>Thryomanes bewickii</i>											
House Wren	184	41	11 Mar- 13 Jul	2 May ±35	2 25 Mar 92	143	15 Jul- 30 Oct	13 Sep ±22	3 28 Sep 94 <sup>b</sup>	0	3
<i>Troglodytes aedon</i>											
Winter Wren	185	23	7 Mar- 20 Jun	14 Apr ±27	2 16 Apr 99	157	25 Jul- 1 Dec	26 Sep ±22	3 21 Oct 72	5	2
<i>T. troglodytes</i>											
Marsh Wren	33	3	1 Apr- 8 Jun	16 May ±39	1 8 Jun 92 <sup>b</sup>	30	15 Aug- 4 Nov	28 Sep ±19	2 3 Oct 96 <sup>b</sup>	0	0
<i>Cistothorus palustris</i>											
Golden-crowned Kinglet	1192	101	27 Feb- 27 Jun	31 Mar ±19	18 16 Mar 74	1091	17 Sep- 14 Dec	16 Oct ±13	40 6 Oct 93 <sup>b</sup>	0	0
<i>Regulus satrapa</i>											
Ruby-crowned Kinglet	4422	1472	7 Mar- 30 Jun	13 Apr ±16	225 16 Apr 83	2939	26 Jul- 19 Dec	11 Oct ±14	200 30 Oct 91 <sup>b</sup>	11	7
<i>R. calendula</i>											
Lanceolated Warbler <sup>a,d</sup>	1	0	—	—	0	1	11 Sep	11 Sep	1	0	0
<i>Locustella lanceolata</i>								—	12 Sep 95 <sup>b</sup>		

(continued)





Sage Thrasher	70	11	19 Apr– 23 Jun	24 May ±20	1 10 May 94 <sup>b</sup>	58	12 Aug– 13 Nov	4 Oct ±19	3 3 Oct 84	1	0
<i>Oreoscoptes montanus</i>											
Brown Thrasher	23	9	1 May– 2 Jul	3 Jun ±19	1 3 Jun 98 <sup>b</sup>	14	22 Sep– 10 Nov	17 Oct ±14	2 9 Oct 74	0	1
<i>Toxostoma rufum</i>											
Bendire's Thrasher	6	4	17 Apr– 14 Jul	4 Jun ±40	1 6 Jul 92 <sup>b</sup>	2	21 Aug– 2 Sep	27 Aug ±8	1 22 Aug 76 <sup>b</sup>	0	0
<i>T. bendirei</i>											
European Starling <sup>d</sup>	59,577	178	1 Mar– 14 Jul	11 Apr ±43	140 8 Mar 76	56,134	15 Jul– 19 Dec	7 Nov ±19	3000 14 Dec 96	3265	3150
<i>Sturnus vulgaris</i>											
Yellow Wagtail <sup>a</sup>	2	0	—	—	0	2	12 Sep– 21 Sep	17 Sep ±6	1 12 Sep 99 <sup>b</sup>	0	0
<i>Motacilla flava</i>											
White Wagtail <sup>a</sup>	1	0	—	—	0	1	10 Oct	10 Oct	1	0	0
<i>M. alba</i>											
Olive-backed Pipit <sup>a,d</sup>	1	0	—	—	0	1	26 Sep	26 Sep	1	0	0
<i>Anthus hodgsoni</i>											
Red-throated Pipit <sup>e</sup>	31	0	—	—	0	31	20 Sep– 3 Nov	8 Oct ±12	3 5 Oct 91	0	0
<i>A. cervinus</i>											
American Pipit	4125	23 <sup>f</sup>	5 Mar– 3 Jul	28 Apr ±20	2 25 Apr 89 <sup>b</sup>	4098	6 Sep– 19 Dec	20 Oct ±16	110 27 Oct 88	4	0
<i>A. rubescens</i>											
Sprague's Pipit <sup>a</sup>	3	0	—	—	0	3	1 Oct– 16 Oct	9 Oct ±8	1 16 Oct 87 <sup>b</sup>	0	0
<i>A. spragueii</i>											
Bohemian Waxwing	1	0	—	—	0	1	28 Nov	28 Nov	1	0	0
<i>Bombycilla garrulus</i>											
Cedar Waxwing	1245	112	4 May– 20 Jun	28 May ±9	10 30 May 82	1120	16 Jul– 19 Dec	10 Oct ±23	75 24 Oct 88	13	0
<i>B. cedrorum</i>											
Phainopepla	5	0	—	—	0	5	1 Sep– 26 Sep	14 Sep ±10	1 22 Sep 97 <sup>b</sup>	0	0
<i>Phainopepla nitens</i>											
Blue-winged Warbler <sup>a</sup>	1	1	24 May	24 May	1	0	—	—	0	0	0
<i>Vermivora pinus</i>											
Golden-winged Warbler <sup>a</sup>	6	3	3 Jun– 5 Jul	19 Jun ±16	1 3 Jun 91 <sup>b</sup>	3	2 Sep– 29 Sep	15 Sep ±14	1 30 Sep 98 <sup>b</sup>	0	0
<i>V. chrysoptera</i>											
Brewster's Warbler <sup>a</sup>	1	1	6 Jun	6 Jun	1	0	—	—	0	0	0
<i>V. pinus × chrysoptera</i>											
Tennessee Warbler	346	151	22 Apr– 17 Jul	1 Jun ±23	10 26 May 82	195	18 Aug– 16 Dec	1 Oct ±23	7 12 Sep 77	0	0
<i>V. peregrina</i>											

(continued)

**Table 1** (Continued)

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Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean ± S.D.	High Count and Date	Seasonal Total	Date Range	Mean ± S.D.	High Count and Date	Total	Residents
Orange-crowned Warbler <i>V. celata</i>	1915	1228 <sup>f</sup>	19 Feb– 7 Jul	28 Apr ±18	175 30 Apr 71	687 <sup>f</sup>	16 Jul– 23 Dec	21 Sep ±23	18 2 Oct 84	0 <sup>f</sup>	3
Nashville Warbler <i>V. ruficapilla</i>	361	63	9 Apr– 23 Jun	10 May ±18	3 28 Apr 68	298	31 Jul– 11 Dec	6 Oct ±25	4 2 Oct 96 <sup>b</sup>	0	0
Virginia's Warbler <i>V. virginiae</i>	40	6	13 May– 17 Jun	26 May ±13	2 13 May 75	34	16 Aug– 2 Nov	21 Sep ±16	3 1 Oct 68	0	0
Lucy's Warbler <i>V. luciae</i>	7	0	—	—	0	7	5 Sep– 20 Nov	23 Oct ±28	1 27 Nov 99 <sup>b</sup>	0	0
Northern Parula <sup>e</sup> <i>Parula americana</i>	41	34	29 Apr– 6 Jul	3 Jun ±16	3 12 Jun 85 <sup>b</sup>	7	9 Sep– 6 Oct	22 Sep ±12	1 10 Sep 88 <sup>b</sup>	0	0
Yellow Warbler <i>Dendroica petechia</i>	2586	454	14 Apr– 27 Jun	21 May ±12	60 17 May 85	2132	16 Jul– 13 Nov	12 Sep ±14	46 10 Sep 95	0	0
Chestnut-sided Warbler <sup>e</sup> <i>D. pensylvanica</i>	224	42	1 May– 7 Jul	8 Jun ±12	3 24 May 92 <sup>b</sup>	182	2 Sep– 3 Nov	22 Sep ±11	7 24 Sep 76	0	0
Magnolia Warbler <sup>e</sup> <i>D. magnolia</i>	279	115	12 May– 4 Jun	9 Jun ±9	8 12 Jun 75 <sup>b</sup>	164	22 Aug– 9 Nov	26 Sep ±16	4 7 Sep 86	0	0
Cape May Warbler <sup>e</sup> <i>D. tigrina</i>	60	29	26 May– 30 Jun	12 Jun ±9	3 19 Jun 77 <sup>b</sup>	31	9 Sep– 31 Oct	29 Sep ±14	2 22 Sep 79 <sup>b</sup>	0	0
Black-throated Blue Warbler <sup>e</sup> <i>D. caerulescens</i>	105	0	—	—	0	105	4 Sep– 9 Nov	10 Oct ±12	3 14 Oct 87 <sup>b</sup>	0	0
Yellow-rumped Warbler <i>D. coronata</i>	8071	1925 <sup>f</sup>	1 Mar– 13 Jul	17 Apr ±19	295 30 Apr 71	5709 <sup>f</sup>	15 Jul– 19 Dec	19 Oct ±18	185 30 Sep 98	437	77
Audubon's Warbler <i>D. c. auduboni</i> subspecies group	4547	1592	1 Mar– 13 Jul	16 Apr ±17	250 30 Apr 71	2810 <sup>f</sup>	15 Jul– 19 Dec	14 Oct ±18	175 30 Sep 98	145	26
Audubon's × Myrtle intergrade	86	11	25 Mar– 8 May	11 Apr ±16	4 26 Mar 69	72	7 Sep– 3 Dec	17 Oct ±18	3 24 Oct 88	3	1
Myrtle Warbler <i>D. c. coronata</i> subspecies group	3106	267 <sup>f</sup>	1 Mar– 18 Jul	30 Apr ±23	45 30 Apr 71	2688	7 Sep– 19 Dec	23 Oct ±16	130 24 Oct 88	151	44
Black-throated Gray Warbler <i>D. nigrescens</i>	487	56	22 Mar– 3 Jun	21 May ±17	6 21 Apr 82	431	26 Jul– 30 Nov	20 Sep ±19	12 18 Sep 94 <sup>b</sup>	0	1

Golden-cheeked Warbler <sup>a</sup>	1	0	—	—	0	1	9 Sep	9 Sep	1	0	0
<i>D. chrysoparia</i>								—	9 Sep 71		
Black-throated Green Warbler <sup>c</sup>	40	19	9 May–	3 Jun	3	21	3 Sep–	12 Oct	1	0	0
<i>D. virens</i>			18 Jun	±13	24 May 83		23 Nov	±24	17 Nov 97 <sup>b</sup>		
Townsend's Warbler	2078	878	28 Mar–	11 May	75	1198	3 Aug–	17 Sep	30	2	1
<i>D. townsendi</i>			13 Jun	±11	8 May 69		22 Dec	±21	3 Sep 96		
Townsend's × Hermit Warbler	3	1	17 Apr	17 Apr	1	2	24 Sep–	26 Sep	1	0	0
<i>D. townsendi</i> × <i>occidentalis</i>				—	17 Apr 74		28 Sep	±3	29 Sep 90 <sup>b</sup>		
Hermit Warbler	335	72	15 Apr–	8 May	5	263 <sup>f</sup>	21 Jul–	31 Aug	8	0	0
<i>D. occidentalis</i>			27 May	±9	10 May 90		20 Nov	±19	9 Aug 73 <sup>b</sup>		
Blackburnian Warbler <sup>c</sup>	91	6	31 May–	13 Jun	1	85	31 Aug–	29 Sep	3	0	0
<i>D. fusca</i>			9 Jul	±14	12 Jun 89 <sup>b</sup>		30 Oct	±16	25 Sep 76		
Yellow-throated Warbler <sup>a</sup>	5	3	2 May–	4 Jun	1	2	16 Sep–	4 Oct	1	0	0
<i>D. dominica</i>			8 Jul	±34	7 May 80 <sup>b</sup>		21 Oct	±25	21 Oct 86 <sup>b</sup>		
Pine Warbler <sup>a,d</sup>	3	0	—	—	0	3	16 Oct–	28 Oct	1	0	0
<i>D. pinus</i>							18 Nov	±18	19 Nov 87 <sup>b</sup>		
Prairie Warbler <sup>c</sup>	58	0	—	—	0	58	13 Aug–	20 Sep	3	0	0
<i>D. discolor</i>							22 Nov	±23	15 Sep 91 <sup>b</sup>		
Palm Warbler	1481	37	14 Apr–	2 Jun	4	1444	31 Aug–	17 Oct	47	0	7
<i>D. palmarum</i>			3 Jul	±21	1 Jul 80		11 Dec	±16	9 Oct 93		
Bay-breasted Warbler <sup>c</sup>	64	31	23 May–	10 Jun	2	33 <sup>f</sup>	22 Jul–	27 Sep	3	0	0
<i>D. castanea</i>			29 Jun	±10	21 Jun 82 <sup>b</sup>		25 Oct	±16	15 Sep 93		
Blackpoll Warbler	698	57	6 May–	11 Jun	2	641 <sup>f</sup>	22 Jul–	22 Sep	23	0	0
<i>D. striata</i>			12 Jul	±17	10 Jul 93 <sup>b</sup>		16 Nov	±12	27 Sep 74		
Cerulean Warbler <sup>a</sup>	1	0	—	—	0	1	23 Oct	23 Oct	1	0	0
<i>D. cerulea</i>								—	24 Oct 81 <sup>b</sup>		
Black-and-white Warbler	126	63	18 Apr–	1 Jun	5	63	11 Aug–	18 Sep	2	0	0
<i>Mniotilta varia</i>			9 Jul	±17	6 Jun 75		11 Nov	±16	18 Sep 94 <sup>b</sup>		
American Redstart	527	89	5 May–	11 Jun	3	438	4 Aug–	19 Sep	15	0	0
<i>Setophaga ruticilla</i>			7 Jul	±11	6 Jun 92 <sup>b</sup>		8 Nov	±14	15 Sep 75		
Prothonotary Warbler <sup>a</sup>	2	0	—	—	0	2	12 Sep–	3 Oct	1	0	0
<i>Protonotaria citrea</i>							23 Oct	±29	23 Oct 89 <sup>b</sup>		
Worm-eating Warbler <sup>a</sup>	11	8	7 May–	3 Jun	1	3	21 Sep–	6 Oct	1	0	0
<i>Helminthos vermivorus</i>			20 Jun	±13	7 Jun 92 <sup>b</sup>		16 Oct	±13	24 Sep 94 <sup>b</sup>		

(continued)



Scarlet Tanager <sup>d</sup>	6	1	18 Jun	18 Jun	1	5	29 Sep–	27 Oct	1	0	0
<i>P. olivacea</i>				—	22 Jun 80 <sup>b</sup>		26 Nov	±21	24 Oct 91 <sup>b</sup>		
Western Tanager	713	214	15 Apr–	18 May	30	499	18 Jul–	10 Sep	12	0	0
<i>P. ludoviciana</i>			8 Jul	±13	8 May 69		25 Nov	±17	8 Sep 72		
Green-tailed Towhee	31	8	3 May–	23 May	1	23	24 Aug–	19 Sep	1	0	0
<i>Pipilo chlorurus</i>			26 Jun	±19	13 May 92 <sup>b</sup>		11 Nov	±20	8 Nov 99 <sup>b</sup>		
Spotted Towhee	582	37 <sup>f</sup>	23 Feb–	15 Apr	4	545	29 Aug–	6 Oct	125	0 <sup>f</sup>	0
<i>P. maculatus</i>			13 Jun	±23	4 Apr 73		20 Dec	±12	4 Oct 72 <sup>b</sup>		
Cassin's Sparrow <sup>a</sup>	11	4	2 Jun–	18 Jun	1	7	13 Sep–	26 Sep	2	0	0
<i>Aimophila cassinii</i>			11 Jul	±17	6 Jul 82 <sup>b</sup>		15 Oct	±11	30 Sep 85 <sup>b</sup>		
Rufous-crowned Sparrow	1	0	—	—	0	1	29 Nov	29 Nov	1	0	1
<i>A. ruficeps</i>									31 Dec 99 <sup>b</sup>		
American Tree Sparrow	76	17	28 Mar–	20 May	2	58	28 Sep–	25 Oct	3	1	0
<i>Spizella arborea</i>			28 Jun	±27	24 May 77		28 Nov	±16	21 Oct 83 <sup>b</sup>		
Chipping Sparrow	1920	298	16 Mar–	10 May	55	1621	15 Jul–	18 Sep	50	1	0
<i>S. passerina</i>			13 Jul	±20	30 Apr 71		30 Nov	±21	2 Oct 72		
Chipping × Clay-col. Sparrow <sup>d</sup>	1	0	—	—	0	1	13 Sep	13 Sep	1	0	0
<i>S. passerina</i> × <i>pallida</i>									16 Sep 91 <sup>b</sup>		
Chipping × Brewer's Sparrow <sup>d</sup>	1	0	—	—	0	1	26 Oct	26 Oct	1	0	0
<i>S. passerina</i> × <i>breweri</i>									28 Oct 88 <sup>b</sup>		
Clay-colored Sparrow <sup>e</sup>	547	43	29 Apr–	30 May	3	504	15 Aug–	30 Sep	10	0	1
<i>S. pallida</i>			22 Jun	±13	31 May 75		8 Dec	±19	28 Sep 89		
Brewer's Sparrow	186	38	21 Apr–	26 May	2	148	22 Jul–	18 Sep	8	0	0
<i>S. breweri</i>			10 Jul	±17	21 May 78		15 Nov	±21	29 Sep 74 <sup>b</sup>		
Field Sparrow <sup>a</sup>	1	1	17 Jun	17 Jun	1	0	—	—	0	0	0
<i>S. pusilla</i>					9 Jul 69 <sup>b</sup>						
Black-chinned Sparrow	3	1	7 May	7 May	1	2	30 Aug–	6 Sep	1	0	0
<i>S. atrogularis</i>					7 May 94		13 Sep	±10	13 Sep 93 <sup>b</sup>		
Vesper Sparrow	330	25	4 Apr–	23 May	1	305	21 Jul–	28 Sep	7	0	0
<i>Poocetes gramineus</i>			23 Jun	±19	16 Jun 95 <sup>b</sup>		18 Nov	±16	6 Oct 72		
Lark Sparrow	315	30	9 Mar–	23 Apr	2	284	29 Jul–	15 Sep	8	1	0
<i>Chondestes grammacus</i>			28 Jun	±26	9 Apr 82 <sup>b</sup>		13 Dec	±21	1 Oct 74		
Black-throated Sparrow	32	8	17 Apr–	20 May	2	24	18 Aug–	14 Sep	2	0	0
<i>Amphispiza bilineata</i>			18 Jun	±19	22 May 77		10 Oct	±14	8 Sep 84		

(continued)

**Table 1** (Continued)

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Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Total	Residents
Sage Sparrow <i>A. belli</i>	8	5	24 Mar– 22 Apr	9 Apr $\pm 11$	1 22 Apr 82 <sup>b</sup>	3	18 Aug– 25 Oct	24 Sep $\pm 34$	1 1 Oct 81 <sup>b</sup>	0	0
Lark Bunting <i>Calamospiza melanocorys</i>	72	1	24 May	24 May	1 24 May 77	71	5 Aug– 20 Oct	13 Sep $\pm 14$	3 18 Sep 93 <sup>b</sup>	0	0
Savannah Sparrow <i>Passerculus sandwichensis</i>	7993	215 <sup>f</sup>	22 Feb– 19 Jun	22 Apr $\pm 25$	15 4 Apr 73	7778 <sup>f</sup>	16 Jul– 23 Dec	29 Sep $\pm 14$	1500 29 Sep 68	0 <sup>f</sup>	1
Grasshopper Sparrow <i>Ammodramus savannarum</i>	145	26	25 Mar– 2 Jul	27 May $\pm 22$	1 7 May 92 <sup>b</sup>	119	20 Jul– 29 Nov	6 Oct $\pm 23$	4 27 Sep 96 <sup>b</sup>	0	0
Baird's Sparrow <sup>a</sup> <i>A. bairdii</i>	2	0	—	—	0	2	7 Sep– 28 Sep	18 Sep $\pm 15$	1 7 Sep 91 <sup>b</sup>	0	0
Le Conte's Sparrow <sup>a,d</sup> <i>A. leconteii</i>	8	0	—	—	0	8	11 Sep– 27 Oct	1 Oct $\pm 16$	1 27 Oct 95 <sup>b</sup>	0	0
Nelson's Sharp-tailed Sparrow <i>A. nelsoni</i>	2	0	—	—	0	2	4 Oct– 27 Oct	16 Oct $\pm 16$	1 4 Oct 98 <sup>b</sup>	0	0
Fox Sparrow <i>Passerella iliaca</i>	2483	110	3 Mar– 26 May	18 Apr $\pm 16$	6 2 Mar 99 <sup>b</sup>	2354	2 Sep– 17 Dec	5 Oct $\pm 17$	225 18 Sep 93	19	58
Song Sparrow <i>Melospiza melodia</i>	79	21 <sup>f</sup>	29 Feb– 26 Jun	18 Apr $\pm 28$	2 1 Apr 90	58	7 Sep– 13 Dec	10 Oct $\pm 20$	5 2 Oct 84	0 <sup>f</sup>	4
Lincoln's Sparrow <i>M. lincolni</i>	2304	531 <sup>f</sup>	23 Feb– 16 Jun	19 Apr $\pm 15$	40 21 Apr 87	1773	2 Sep– 4 Dec	29 Sep $\pm 12$	450 3 Oct 72	0 <sup>f</sup>	0
Swamp Sparrow <i>M. georgiana</i>	95	6	21 Apr– 25 Jun	22 May $\pm 29$	1 2 Jun 86 <sup>b</sup>	89	20 Sep– 16 Nov	17 Oct $\pm 12$	5 15 Oct 87	0	0
White-throated Sparrow <i>Zonotrichia albicollis</i>	312	11	22 Apr– 10 Jul	27 May $\pm 26$	1 14 Jun 98 <sup>b</sup>	301	8 Sep– 17 Dec	20 Oct $\pm 15$	7 15 Oct 87	0	0
Harris' Sparrow <i>Z. querula</i>	21	2	2 May– 16 May	9 May $\pm 10$	1 2 May 73 <sup>b</sup>	19	17 Oct– 4 Dec	5 Nov $\pm 14$	2 25 Oct 77 <sup>b</sup>	0	0
White-crowned Sparrow <sup>d</sup> <i>Z. leucophrys</i>	10,642	1389	4 Mar– 1 Jul	19 Apr $\pm 13$	75 18 Apr 88	9229	15 Jul– 19 Dec	6 Oct $\pm 12$	3000 3 Oct 72	24	26

White-cr. × Golden-cr. Sparrow	2	0	—	—	0	2	2 Oct	8 Oct	1	0	0
<i>Z. leucophrys</i> × <i>atricapilla</i>							13 Oct	±8	16 Oct 87 <sup>b</sup>		
Golden-crowned Sparrow	10,599	495	7 Mar-	27 Apr	65	10,081	11 Sep-	7 Oct	3500	23	100
<i>Z. atricapilla</i>			12 Jun	±12	1 May 71		19 Dec	±12	2 Oct 72		
Dark-eyed Junco <sup>d</sup>	4950	1356	2 Mar-	5 Apr	420	3554	25 Jul-	15 Oct	700	40	3
<i>Junco hyemalis</i>			8 Jul	±16	4 Apr 73		19 Dec	±16	3 Oct 72 <sup>b</sup>		
Oregon Junco <sup>d</sup>	4825	1319 <sup>e</sup>	2 Mar-	5 Apr	420	3466	25 Jul-	15 Oct	700	40	3
<i>J. h. oregonus</i> subspecies group			8 Jul	±16	4 Apr 73		19 Dec	±15	3 Oct 72 <sup>b</sup>		
Slate-colored Junco	125	37	1 Mar-	1 May	2	88	24 Sep-	24 Oct	3	0	0
<i>J. h. hyemalis</i> subspecies group			14 Jun	±26	2 May 90 <sup>b</sup>		18 Dec	±18	15 Oct 87 <sup>b</sup>		
Lapland Longspur	552	5	4 May-	31 May	1	547	20 Jul-	16 Oct	16	0	0
<i>Calcarius lapponicus</i>			24 Jun	±22	5 May 87 <sup>b</sup>		9 Dec	±17	28 Oct 91		
Chestnut-collared Longspur <sup>e</sup>	61	3	18 May-	20 Jun	1	58	20 Sep-	18 Oct	7	0	0
<i>C. ornatus</i>			16 Jul	±30	18 May 80 <sup>b</sup>		3 Dec	±14	14 Oct 87		
Snow Bunting <sup>a</sup>	25	0	—	—	0	25	22 Oct-	31 Oct	4	0	0
<i>Plectrophenax nivalis</i>							18 Nov	±8	28 Oct 91		
Rose-breasted Grosbeak <sup>e</sup>	274	169	13 May-	8 Jun	6	105	17 Jul-	20 Sep	3	0	0
<i>Pheucticus ludovicianus</i>			14 Jul	±12	9 Jun 77 <sup>b</sup>		13 Nov	±22	19 Sep 93 <sup>b</sup>		
Rose-br. × Black-hd. Grosbeak	4	1	8 Jun	8 Jun	1	3	18 Sep-	2 Oct	1	0	0
<i>P. ludovicianus</i> × <i>melanocephalus</i>				—	8 Jun 70		21 Oct	±17	21 Oct 88		
Black-headed Grosbeak	315	137	2 Apr-	12 May	10	178	16 Jul-	4 Sep	4	0	0
<i>P. melanocephalus</i>			14 Jul	±18	9 May 69 <sup>b</sup>		20 Nov	±20	9 Sep 80		
Blue Grosbeak	72	11	9 May-	27 May	1	61	14 Aug-	7 Sep	2	0	0
<i>Passerina caerulea</i>			18 Jun	±14	10 Jun 94 <sup>b</sup>		6 Oct	±13	21 Sep 99 <sup>b</sup>		
Lazuli Bunting	369	78	6 Apr-	16 May	5	291	22 Jul-	8 Sep	20	0	0
<i>P. amoena</i>			12 Jul	±19	9 May 90		8 Nov	±16	18 Sep 71		
Indigo Bunting <sup>e</sup>	141	93	7 May-	8 Jun	6	48	18 Jul-	13 Sep	2	0	0
<i>P. cyanea</i>			14 Jul	±15	20 Jun 82		13 Dec	±42	3 Sep 86		
Painted Bunting <sup>a</sup>	8	0	—	—	0	8	10 Sep-	25 Sep	1	0	0
<i>P. ciris</i>							21 Oct	±13	21 Oct 97 <sup>b</sup>		
Dickcissel	30	14	13 May-	4 Jun	1	16	24 Aug-	17 Sep	2	0	0
<i>Spiza americana</i>			7 Jul	±16	7 Jul 91 <sup>b</sup>		14 Oct	±17	3 Sep 88 <sup>b</sup>		
Bobolink	216	13	24 May-	10 Jun	1	203	16 Aug-	22 Sep	6	0	0
<i>Dolichonyx oryzivorus</i>			4 Jul	±14	30 Jun 95 <sup>b</sup>		15 Nov	±13	24 Sep 74 <sup>b</sup>		

(continued)



**Table 1** (Continued)

Species	Spring					Fall				Winter	
	Total	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Seasonal Total	Date Range	Mean $\pm$ S.D.	High Count and Date	Total	Residents
Red-winged Blackbird	822	49	4 Mar– 11 Jun	25 Apr $\pm 23$	6 22 Apr 97 <sup>b</sup>	769	20 Jul– 18 Dec	7 Oct $\pm 19$	65 30 Sep 68	4	0
<i>Agelaius phoeniceus</i>									40	1	0
Tricolored Blackbird	99	7	8 Mar– 14 Jul	30 Apr $\pm 51$	2 12 Jun 75 <sup>b</sup>	91	21 Sep– 21 Nov	14 Oct $\pm 13$	7 Oct 92		
<i>A. tricolor</i>									125	17	224
Western Meadowlark	2516	52	9 Mar– 5 Jul	27 Apr $\pm 30$	45 10 Mar 87 <sup>b</sup>	2447	23 Jul– 16 Dec	14 Oct $\pm 17$	4 Oct 72 <sup>b</sup>		
<i>Sturnella neglecta</i>									2	0	0
Yellow-headed Blackbird	100	25	27 Apr– 12 Jun	12 May $\pm 9$	3 13 May 75 <sup>b</sup>	75	27 Jul– 21 Oct	12 Sep $\pm 20$	11 Sep 98 <sup>b</sup>		
<i>Xanthocephalus xanthocephalus</i>									1	0	0
Rusty Blackbird <sup>e</sup>	11	3	15 Apr– 22 Apr	20 Apr $\pm 4$	1 15 Apr 85 <sup>b</sup>	8	17 Oct– 19 Nov	29 Oct $\pm 11$	31 Oct 91 <sup>b</sup>		
<i>Euphagus carolinus</i>									63	13	1
Brewer's Blackbird	1246	173	16 Mar– 30 Jun	25 Apr $\pm 18$	20 27 Apr 71	1060	17 Jul– 18 Dec	14 Oct $\pm 17$	19 Oct 96		
<i>E. cyanocephalus</i>									53	0	0
Brown-headed Cowbird	2802	554	26 Mar– 14 Jul	5 May $\pm 14$	20 7 May 78	2248	15 Jul– 1 Dec	29 Aug $\pm 21$	26 Aug 87 <sup>b</sup>		
<i>Molothrus ater</i>									5	0	0
Orchard Oriole <sup>e</sup>	53	2	11 Jun– 9 Jul	25 Jun $\pm 20$	1 11 Jun 88 <sup>b</sup>	51	14 Aug– 25 Oct	18 Sep $\pm 15$	11 Sep 99		
<i>Icterus spurius</i>									3	0	0
Hooded Oriole	18	1	16 Apr	16 Apr	1 18 Apr 90 <sup>b</sup>	17	20 Jul– 19 Nov	3 Sep $\pm 29$	21 Aug 87 <sup>b</sup>		
<i>I. cucullatus</i>									15	0	0
Bullock's Oriole	682	133	19 Mar– 20 Jun	28 Apr $\pm 17$	7 21 Apr 87	549	3 Jul– 27 Nov	19 Aug $\pm 20$	9 Aug 73		
<i>I. bullocki</i>									1	0	0
Bullock's $\times$ Baltimore Oriole	4	1	4 Jun	4 Jun	— 4 Jun 70	3	20 Sep– 28 Sep	23 Sep $\pm 4$	29 Sep 79 <sup>b</sup>		
<i>I. bullocki</i> $\times$ <i>galbula</i>									2	0	0
Baltimore Oriole	42	10	26 May– 11 Jun	3 Jun $\pm 6$	2 26 May 70	32	5 Sep– 30 Nov	2 Oct $\pm 20$	7 Sep 89 <sup>b</sup>		
<i>I. galbula</i>									1	0	0
Scott's Oriole <sup>d</sup>	3	0	—	—	0	3	12 Sep– 10 Nov	17 Oct $\pm 31$	10 Nov 93 <sup>b</sup>		
<i>I. parisorum</i>											

Purple Finch	899	111	9 Mar– 31 May	20 Apr ±17	7 12 Apr 88	782	18 Aug– 14 Dec	13 Oct ±14	250 4 Oct 72	6	1
<i>Carpodacus purpureus</i>											
Cassin's Finch	9	3	12 Apr– 14 Jun	6 May ±34	1 21 Apr 87 <sup>b</sup>	6	5 Oct– 11 Dec	30 Oct ±23	2 27 Oct 96	0	0
<i>C. cassinii</i>											
House Finch	771	360	9 Mar– 1 Jul	20 Apr ±24	23 26 Apr 83	401	19 Jul– 19 Dec	21 Oct ±23	18 16 Nov 90	10	0
<i>C. mexicanus</i>											
Red Crossbill	57	1 <sup>f</sup>	18 Jun	18 Jun	1 18 Jun 98	55 <sup>f</sup>	8 Sep– 6 Nov	26 Oct ±16	12 4 Nov 87	1	0
<i>Loxia curvirostra</i>											
Pine Siskin	1984	46	7 Mar– 14 Jul	23 Apr ±36	8 17 Apr 74	1893	16 Jul– 19 Dec	14 Oct ±18	400 3 Oct 72	45	1
<i>Carduelis pinus</i>											
Lesser Goldfinch	1414	49	29 Feb– 11 Jul	27 Apr ±37	6 9 Mar 79	1357	15 Jul– 19 Dec	29 Sep ±21	70 17 Sep 99	8	0
<i>C. psaltria</i>											
Lawrence's Goldfinch	25	3	8 Apr– 26 May	4 May ±24	1 8 Apr 77	22	16 Sep– 31 Oct	8 Oct ±13	6 1 Oct 74	0	0
<i>C. lawrencei</i>											
American Goldfinch	379	30	16 Apr– 13 Jun	18 May ±15	5 15 May 75 <sup>b</sup>	349	21 Aug– 15 Nov	13 Oct ±15	50 22 Oct 96	0	0
<i>C. tristis</i>											
Evening Grosbeak	4	1	27 May	27 May	1 27 May 74	3	20 Sep– 3 Oct	30 Sep ±9	1 22 Sep 79 <sup>b</sup>	0	0
<i>Coccothraustes vespertinus</i>											
House Sparrow <sup>f</sup>	247	237	9 Mar– 1 Jul	23 Apr ±18	18 22 Apr 96	9	16 Jul– 10 Dec	14 Sep ±43	15 19 Oct 97 <sup>b</sup>	1	2
<i>Passer domesticus</i>											
Total	6,570,133	2,446,727				4,068,051				55,809	18,525

<sup>a</sup>Species formerly or currently reviewed by the CBRC. Except as noted<sup>e</sup> here or in the annotations following this table, all records within the CBRC's review period for the species have been accepted by the CBRC or are under review. It is possible that some records presently under review will not be accepted.

<sup>b</sup>Seasonal high count duplicated on more than one date; the date given is the most recent.

<sup>c</sup>Patterns of arrival appear to overlap two or more seasons. See notes for reinterpretations of seasonal data.

<sup>d</sup>See notes following the table for information on race, unusual patterns of patterns of occurrence, or individual records of interest.

<sup>e</sup>The totals may include one or more record not reviewed by the CBRC during the period in which the species was on the CBRC review list.

<sup>f</sup>Small numbers of individuals were reclassified to season using our definitions, are anomalously late or early within season, or are known immature dispersants included in the spring totals. See notes for specification of these records and, in some cases, reinterpretations of seasonal data.