

MARIN COUNTY (SOUTHERN) CHRISTMAS BIRD COUNT - MUIR BEACH

1978	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	SPECIES									
8	2	1	14	15	5	6	6	3	7	7	6	7	6	13	7	5	13	4	10	14	5	5	8	6	13	10	10	5	8	10	Red-tailed Hawk Rough-legged Hawk									
9	3		5	7	4	3	5	3	5	6	5	4	6	3	4	5	2	2	7	4		5	2	5	3	3	4	4	2	2	American Kestrel Merlin Peregrine Falcon									
										1				1			1		2	2	1				1	1					Virginia Rail Sora Common Moorhen American Coot Killdeer									
10			11	10	14	7	11	31	7	4	31	13	5	7	11	6	19	9	10	15	11	3		1			1	1	2											
1	2	1	4	3	3		3	1	1			2	2	5	4	5	6	2	1	2	9	4	3	4	8	2	10	2	10	10	Black Oystercatcher Spotted Sandpiper Wandering Tattler Greater Yellowlegs Willet Long-billed Curlew Marbled Godwit Ruddy Turnstone Black Turnstone Surfbird Sanderling Least Sandpiper Wilson's Snipe Red Phalarope									
1	4	4	2	1	1		1		2			1								1																				
4		1	2	8		1		1	5	3						3		4	1		1						1													
7			1		1		1	7		5				1	3	1									1															
8	35	11	6				7	9	14	7		18	19	12		18	20	12	4	1	3	12			15		5	20	3	41										
	3																		1										2		7									
			CW	3			8	17	25	9	36	1	26	4	105	11		4		1					3															
								2																																
			CW			3	8		2	6	3		1	13	7		5	5	4	12							32													
				1				2																																
		1											1						1	1																				
	50							3	1		3		2	5	6	2		1	3	1		1		3	20	12	5	12	12											
1			10	1	5	1	1	3	1	1	4	1	3	1	4	3	30	4	2	20	8		7	1	1	2	2	4												
40	1500	12	32	100	23	11	26	77	53	21	11	2	19	89	35	70	58	40	74	34	96	79	126	40	568	48	48	61	40	11										
	100		2	250								2	4			3		1		2	4	21	36	5	114	30	30	60	7	2										
	30	2	1								2	3	10	4	1			1					13	3	4		1		1	1										
13	200	6	35	300	8	38	10	72	5	25	27	8	70	3	40	40	23	34	7	20	98	216	106	32	383	36	28	66	26	11										
			80	1250	500	30	38	130	200	50	55		20	23	15	30	30		15	14	79																			
	2																																							
22	1	3					1		2	1	2	1				1		5			2	1	2		4	1		3	1	2										
		1																				1																		
		6		8					1	3														1				7		2	3									
		2									5																													
				2																							1													
				1																																				

MARIN COUNTY (SOUTHERN) CHRISTMAS BIRD COUNT - MUIR BEACH

1978	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	SPECIES			
2		8		1				1	13	5			4	16	2	27	3	22	25	6	10	4	1	1	3	9	6		4	5	Townsend's Warbler			
														1		4															Hermit Warbler			
																	1															Black-and-white Warbler		
				1	1					3		1							1			1	2								Common Yellowthroat			
																																Wilson's Warbler		
9	15		8	3	2		4		3	6	6	5	5	13	5	11	2	5	14	4	11	8	8	12	7	8	30	10	18	26	Spotted Towhee			
15	25		15	10	13		12	13	31	19	13	21	19	26	4	22	26	17	25	12	29	22	14	22	10	31	28	7	21	9	California Towhee			
																	1															Rufous-crowned Sparrow		
																																Savannah Sparrow		
11	4		3	10	13	3	11	1	1	12	12	4	22	14	11	10	4	8	20	7	30	6	7	8	3	4	30	6	20	4	Fox Sparrow			
16	98		27	25	52	16	15	13	20	49	16	23	29	31	30	29	30	36	35	27	75	26	24	48	40	35	66	38	47	38	Song Sparrow			
									1																							Lincoln's Sparrow		
																																Swamp Sparrow		
																																White-throated Sparrow		
40	36		168	50	128	168	293	127	229	119	148	80	309	176	149	48	191	153	131	114	222	139	61	154	50	76	70	77	110	125	White-crowned Sparrow			
73	75		35	100	96	26	200	110	97	222	282	132	169	119	180	90	88	185	73	44	119	126	35	80	50	46	45	54	59	39	Golden-crowned Sparrow			
			CW	6	9			1	15	29	10	6	15	25	21	25	16	8	15	5	33	31	15	8	8	25	25	5	42	22	Dark-eyed (Oregon) Junco			
19			15	50	30	3	20	91	101	38	6	50	5	95	105	140	141	35	50	60	184	70	75	16	2	2	1	8	2	Red-winged Blackbird				
			36		2	3			75		100	1			2		4					1	9		6	5		20	11	1	Western Meadowlark			
								CW																								Yellow-headed Blackbird		
8			3		16	14	30	215	21	75	38	34	51	62	90	50	27	80	35	60	32	32	24	12	10		9	8			Brewer's Blackbird			
										2							1		1	2					2			2	4	8	1	Purple Finch		
12			12	25	16	3	17	5	23	26	6	20	16	17	7	24	21	12	17	25	34	20	10	10	15	26	16	32	29	18	House Finch			
																																	Red Crossbill	
			73	5	44	130	30	15	240	100	100	120	264		130	2	69		112	90	81	1	55	80	136	100	12	75	102	116	Pine Siskin			
																																	Lesser Goldfinch	
																																	American Goldfinch	
																																	House Sparrow	
664	2856	264	5745	3015	878	775	1188	1837	1674	1421	1342	857	1648	1413	1412	1216	1600	1461	1826	1570	2134	1518	1160	1590	2007	1079	1806	1203	2027	1037	Individuals			
46	48	23	68	79	61	55	60	75	78	79	74	80	77	73	67	72	82	84	92	87	82	73	69	81	74	78	82	74	80	73	Species			
				1						1																							Additional Forms	
																																	Hybrids	
46	64	70	83	102	106	111	115	121	122	126	130	132	135	136	138	140	145	149	150	153	153	153	153	154	156	161	164	164	164	166	Cumulative Species			
2	4	4	4	5	4	6	8	5	4	4	5	3	5	7	7	5	5	6	8	6	8	6		2	4	3	6	5	6	4	Observers in the field			
																																	Observers at feeders	
1	1	1	1	1	1	1	2	1	2	2	1	1	2	2	2	1	2	1	3	3	3	3		1	4	2	3	3	2	2	Minimum number of parties			
																																	Maximum number of parties	
4	10	8	8	7	4	4	7	8	10	10	9	9	10	9.75	9.5	9	9	9	13.5	17.5	25.5	13.8		7	6	7	24	20	14.8	7	Party hours on foot			
2			1	2	1	1		1		1	0.5	0.5	0.5	0.75	0.5	0.5	0.5	0.5	0.5	0.5	1	0.75	1		2	2	3	3	3	1.25	0.5	Party hours by car		
																																	Party hours by bicycle	
6	10	8	9	9	5	5	7	9	10	11	9.5	9.5	10.5	10.5	10	9.5	9.5	9.5	14	20	26.3	14.8		9	9	10	27	23	16	7.5	Total Party Hours			
3	4	3	7	2	2	1	5	4	5	6	4	3	7	6	6	6	5	4	6	29.5	7.5	6		15	15	28	9	15	7	3.5	Party miles on foot			
5	2		2	22	6	4	7	8	12	24	10	10.5	10	11	10.8	16	11	6	11		20	34		10	5	8	20	10	18	1	Party miles by car			
																																	Party miles by bicycle	
8	6	3	9	24	8	5	12	12	17	30	14	13.5	17	17	16.8	22	16	10	17	32.5	27.5	40		25	25	36	29	25	25	4.5	Total Party Miles			
																																	Feeder Hours	
			1	1													1		0.5	4.5	3	1		3	4	2.5	4	3	3.25	2	Nocturnal Hours			
																	2		1	26	15	5		5	10	6	10	12	12	8	Nocturnal Miles			
																																	Starting Time	
																																	Ending Time	