

Table 1. Survey effort in hours and minutes and by date for nest searches on each 10-ha study plot (R=reference, T=treatment), Point Thomson, Alaska, 2001.

Plot	1st Survey		2nd Survey	
	Date	Duration (hours:min)	Date	Duration (hours:min)
R1	23-Jun	1:39	4-Jul	1:10
R2	23-Jun	2:08	4-Jul	2:08
R3	23-Jun	1:37	4-Jul	1:44
R4	13-Jun	1:39	26-Jun	1:12
R5	13-Jun	1:30	26-Jun	1:20
R6	19-Jun	1:55	1-Jul	2:08
R7	18-Jun	2:20	1-Jul	2:38
R8	15-Jun	2:52	25-Jun	1:43
R9	19-Jun	2:32	5-Jul	2:01
R10	15-Jun	2:45	25-Jul	1:33
R11	19-Jun	4:18	5-Jul	2:20
R12	15-Jun	1:43	25-Jun	1:41
R13	13-Jun	3:09	26-Jun	1:57
R14	18-Jun	2:18	1-Jul	3:00
T1	22-Jun	1:59	2-Jul	1:57
T2	21-Jun	1:55	2-Jul	1:21
T3	21-Jun	1:47	2-Jul	1:20
T4	21-Jun	1:54	3-Jul	1:24
T5	22-Jun	1:28	3-Jul	1:35
T6	14-Jun	1:54	29-Jun	2:27
T7	14-Jun	2:02	29-Jun	1:59
T8	12-Jun	3:12	24-Jun	1:30
T9	17-Jun	3:16	30-Jun	1:05
T10	20-Jun	1:42	29-Jun	2:09
T11	20-Jun	2:47	30-Jun	2:14
T12	12-Jun	2:39	24-Jun	1:30
T13	12-Jun	2:10	24-Jun	2:15
T14	17-Jun	2:50	30-Jun	2:20
Total		64:00		51:41

Table 2. Total number of nests and nesting species in each reference and treatment study plot, Point Thomson, Alaska, 2001.

Plot No.	Number of Nests		Number of Species	
	Reference	Treatment	Reference	Treatment
1	5	6	5	4
2	4	4	3	3
3	4	3	2	3
4	1	2	1	1
5	3	1	2	1
6	4	7	4	4
7	8	5	4	4
8	3	4	3	3
9	5	11	3	4
10	7	6	3	1
11	8	7	4	3
12	2	6	2	3
13	8	6	5	3
14	13	3	5	2
Total	75	71	13	8

Table 3. Number of nests found and nest density for each species and for species groups on reference and treatment study plots, Point Thomson, Alaska, 2001.

Species	Number of Nests and Nest Density (nests/km ²)			
	Reference Plots		Treatment Plots	
Lapland Longspur (<i>Calcarius lapponicus</i>)	29	(20.7)	34	(24.3)
Semipalmated Sandpiper (<i>Calidris pusilla</i>)	17	(12.1)	11	(7.9)
Pectoral Sandpiper (<i>Calidris melanotos</i>)	14	(10.0)	13	(9.3)
Dunlin (<i>Calidris alpina</i>)	1	(0.7)	5	(3.6)
Buff-breasted Sandpiper (<i>Tryngites subruficola</i>)	2	(1.4)	3	(2.1)
Red-necked Phalarope (<i>Phalaropus lobatus</i>)	2	(1.4)	0	(0.0)
Red Phalarope (<i>Phalaropus fulicaria</i>)	2	(1.4)	0	(0.0)
American Golden Plover (<i>Pluvialis dominica</i>)	2	(1.4)	0	(0.0)
Long-billed Dowitcher (<i>Limnodromus scolopaceus</i>)	1	(0.7)	1	(0.7)
Stilt Sandpiper (<i>Calidris himantopus</i>)	0	(0.0)	1	(0.7)
Canada Goose (<i>Branta canadensis</i>)	1	(0.7)	0	(0.0)
King Eider (<i>Somateria spectabilis</i>)	2	(1.4)	2	(1.4)
Eider sp. (<i>Somateria sp.</i>)	0	(0.0)	1	(0.7)
Long-tailed Duck (<i>Clangula hyemalis</i>)	1	(0.7)	0	(0.0)
Rock Ptarmigan (<i>Lagopus mutus</i>)	1	(0.7)	0	(0.0)
Passerines	29	(20.7)	34	(24.3)
Shorebirds	41	(29.1)	34	(24.3)
Waterfowl	4	(2.8)	3	(2.1)
Total	75	(53.3)	71	(50.7)

Table 4. Number of successful and failed nests for each species (excluding Lapland longspur) on reference and treatment study plots, Point Thomson, Alaska, 2001. (One semipalmated sandpiper nest could not be relocated.)

Species	Number of Nests			
	Reference Plots		Treatment Plots	
	Successful	Failed	Successful	Failed
Semipalmated Sandpiper	9	7	7	4
Pectoral Sandpiper	10	4	6	7
Dunlin	0	1	3	2
Buff-breasted Sandpiper	1	1	0	3
King Eider	0	2	0	2
Red-necked Phalarope	1	1	0	0
Red Phalarope	1	1	0	0
American Golden Plover	1	1	0	0
Long-billed Dowitcher	1	0	0	1
Stilt Sandpiper	0	0	0	1
Canada Goose	0	0	0	0
Long-tailed Duck	0	1	0	0
Rock Ptarmigan	0	1	0	0
Eider sp.	0	0	0	1
Total	24	20	16	21

Table 5. Total number of birds sighted for each reference and treatment study plot and overall bird density (birds/km²) during the first and second census periods, Point Thomson, Alaska, 2001.

Plot	Sightings (1st census period)		Sightings (2nd census period)	
	Reference	Treatment	Reference	Treatment
1	12	8	14	11
2	5	18	10	5
3	8	9	7	4
4	16	8	6	9
5	11	9	6	9
6	11	18	10	22
7	20	21	22	15
8	28	25	11	17
9	19	23	10	18
10	24	14	9	14
11	22	18	12	22
12	13	38	9	6
13	38	8	9	15
14	27	33	21	25
Total Sightings	254	250	156	192
Density	181.4	178.6	111.4	137.1

Table 6. Total number of birds sighted and density (birds/km²) of bird species on reference and treatment study plots during two survey periods, Point Thomson, Alaska, 2001.

Species	Reference Plots				Treatment Plots			
	1st Survey		2nd Survey		1st Survey		2nd Survey	
	Sightings	Density	Sightings	Density	Sightings	Density	Sightings	Density
Lapland Longspur	90	64.3	84	60.0	94	67.1	109	77.9
Pectoral Sandpiper	59	42.1	19	13.6	47	33.6	22	15.7
Semipalmated Sandpiper	36	25.7	23	16.4	38	27.1	20	14.3
Dunlin	5	3.6	0	0.0	15	10.7	13	9.3
Pomarine Jaeger	12	8.6	0	0.0	7	5.0	0	0.0
Parasitic Jaeger	1	0.7	6	4.3	8	5.7	9	6.4
Long-tailed Duck	2	1.4	0	0.0	7	5.0	4	2.9
White-rumped Sandpiper	0	0.0	0	0.0	6	4.3	0	0.0
King Eider	1	0.7	1	0.7	5	3.6	2	1.4
Buff-breasted Sandpiper	2	1.4	2	1.4	4	2.9	2	1.4
American Golden Plover	9	6.4	5	3.6	3	2.1	0	0.0
Long-billed Dowitcher	6	4.3	3	2.1	3	2.1	0	0.0
Red-necked Phalarope	1	0.7	1	0.7	3	2.1	0	0.0
Red Phalarope	8	5.7	3	2.1	0	0.0	0	0.0
Stilt Sandpiper	3	2.1	0	0.0	3	2.1	1	0.7
Long-tailed Jaeger	1	0.7	1	0.7	1	0.7	2	1.4
Rock Ptarmigan	10	7.1	4	2.9	1	0.7	3	2.1
Ruddy Turnstone	0	0.0	0	0.0	1	0.7	0	0.0
Canada Goose	2	1.4	1	0.7	1	0.7	2	1.4
Short-eared Owl	4	2.9	1	0.7	1	0.7	0	0.0
Northern Harrier	1	0.7	0	0.0	0	0.0	2	1.4
Willow Ptarmigan	1	0.7	2	1.4	1	0.7	0	0.0
Common Eider	0	0.0	0	0.0	2	1.4	0	0.0
Horned Lark	0	0.0	0	0.0	0	0.0	1	0.7
Total	254	181.4	156	111.4	251	179.3	192	137.1

Table 7. Total numbers of behaviors recorded for all species on all study plots combined during first and second census periods, Point Thomson, Alaska, 2001. Behavior codes are: AL=Alarming, CP=Copulation, DI=Display, FD=Feeding, FLU=Flush, FLY=Fly, FY=Feed Young, HU=Hunting, INC=Incubate, LD=Land, PR=Preen, RE=Rest, ST=Stand, SW=Swim, WA=Walk.

Species	Census Period	Behaviors														
		AL	CP	DI	FD	FLU	FLY	FY	HU	INC	LD	PR	RE	ST	SW	WA
Lapland Longspur	1	1		57	43	2	8			36				8		
	2			42	51	3	16	9		25	1	1	10			
Pectoral Sandpiper	1	1		28	32	4	3			10			1	14		1
	2			1	12		2			21	1		3			
Semipalmated Sandpiper	1			2	36	2	1			15	1		1			
	2	2		1	9					24			3			1
Dunlin	1		1	5	5					4			1			
	2				3	1				4	1		2			
Pomarine Jaeger	1								14				2	1		
	2															
Parasitic Jaeger	1								5							
	2								10							
Long-tailed Jaeger	1								2							
	2								3							
Rock Ptarmigan	1			3	1	2				1				3		
	2									1				4		1
American Golden Plover	1			2	3					1			2			
	2				3		1			1						
Red Phalarope	1				3					2					1	
	2	1								2						
Red-necked Phalarope	1						1			1						
	2									1						
Long-billed Dowitcher	1			2	4					1				1		
	2				1		1			1						
Buff-breasted Sandpiper	1			1	2					2				1		
	2				1					3						
Stilt Sandpiper	1			2	2					1				1		
	2						1									
White-rumped Sandpiper	1			1	1											
	2															
Ruddy Turnstone	1													1		
	2															
King Eider	1									1			1		1	
	2									3						
Common Eider	1													2		
	2															
Long-tailed Duck	1				1						1					2
	2															2
Canada Goose	1				1								1			
	2									1						1
Short-eared Owl	1								4					1		
	2								1							
Northern Harrier	1								1							
	2								1							
Willow Ptarmigan	1			2												
	2													1		
Horned Lark	1															
	2				1											
Total		5	1	149	215	14	34	9	41	162	5	1	5	60	6	4

Table 8. Percent coverage of vegetation and land cover categories on reference plots, treatment plots, and on all study plots combined, Point Thomson, Alaska, 2001. Brief descriptions of each vegetation and land cover category are in Table 9.

Vegetation and Land Cover Category	Percent Coverage		
	Reference Plots	Treatment Plots	All Plots Combined
Ia	3.07	4.03	3.55
IIb	0.14	0.03	0.08
IIIa	1.27	3.95	2.61
III d	32.84	32.09	32.46
III e	2.17	0.50	1.33
IVa	25.83	29.73	27.78
Va	25.23	24.85	25.04
Vc	1.49	1.68	1.58
Ve	5.98	0.44	3.21
IXb	0.00	0.01	0.01
IXi	0.00	0.81	0.41
XIa	1.92	1.84	1.88
Total	100	100	100

Table 9. Description of vegetation and land cover categories in the Point Thomson area from Noel and Funk (1999).

Vegetation and Land Cover Category	Category Description
Ia	Water
IIb	Aquatic Graminoid Tundra
IIId	Water/Tundra Complex
IIIa	Wet Sedge Tundra
IIIb	Wet Graminoid Tundra
IIIc	Wet Sedge Tundra/Water Complex
IIId	Wet Sedge/Moist Sedge, Dwarf Shrub Tundra Complex
IIIe	Wet Sedge/Moist Sedge/Barren Complex (wet frost-scar tundra)
IVa	Moist Sedge, Dwarf Shrub/Wet Graminoid Tundra Complex
IXb	Dry Barren/Dwarf Shrub, Forb Grass Complex
IXf	Dry Barren/Dwarf Shrub, Grass Complex
IXh	Wet Barren/Wet Sedge Tundra Complex
IXi	Dry Barren/Forb, Graminoid Complex
Va	Moist Sedge, Dwarf Shrub Tundra
Vc	Dry Dwarf Shrub, Crustose Lichen Tundra
Vd	Dry Dwarf Shrub, Fructose Lichen Tundra
Ve	Moist Graminoid, Dwarf Shrub Tundra/Barren Complex
Xa	River Gravels/Beaches
Xc	Barren Gravel Outcrops
Xe	Gravel Roads and Pads
XIa	Wet Mud
XIc	Bare Peat

Table 10. The number of nests of each species found on vegetation and land cover categories on all study plots combined, Point Thomson, Alaska, 2001.

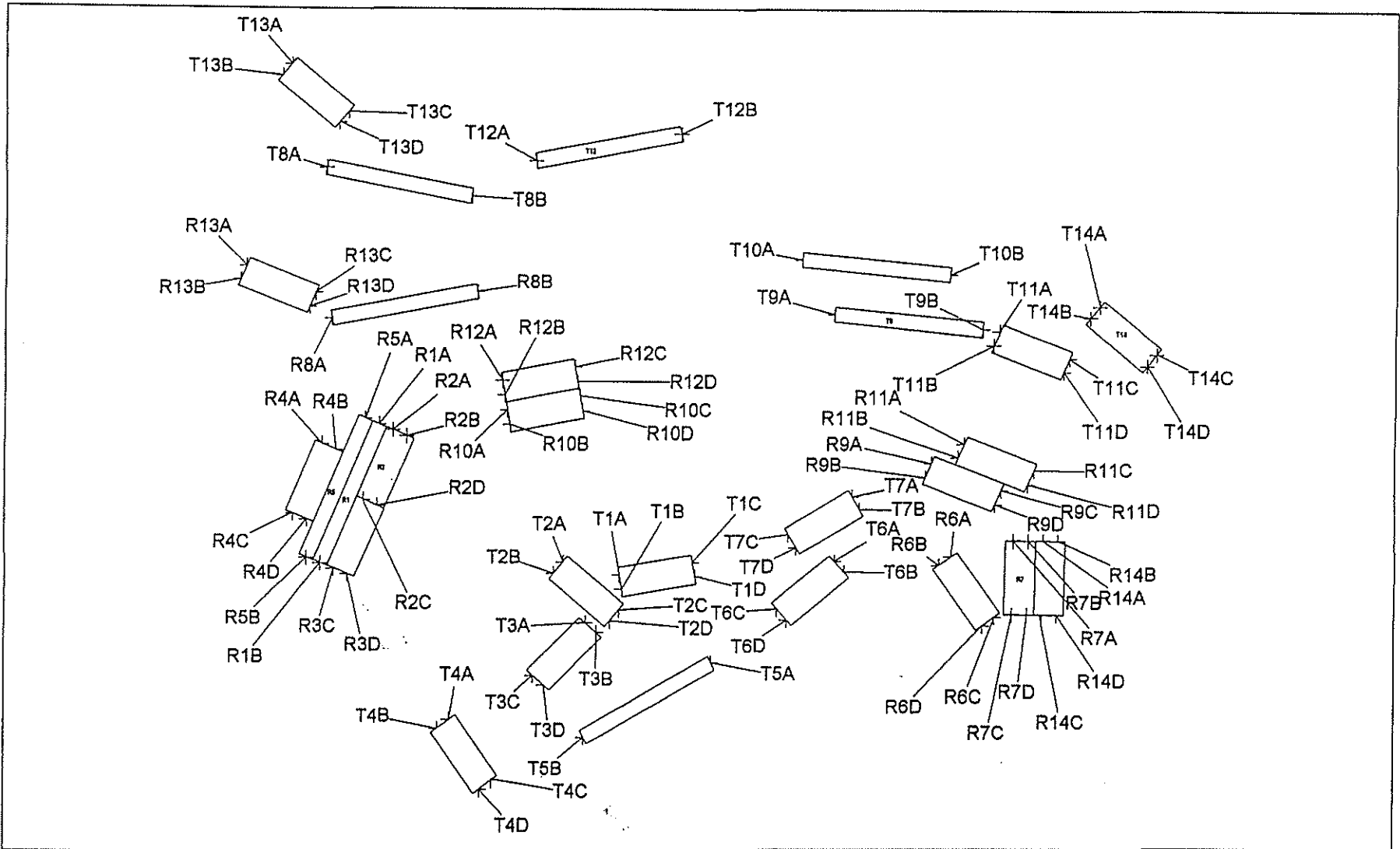
Species	Vegetation and Land Cover Category						
	Ia	IIIa	IIIc	IIIe	IVa	Va	Ve
Lapland Longspur			13	2	20	21	7
Pectoral Sandpiper			4	1	13	8	1
Semipalmated Sandpiper		1	2	1	12	12	
Dunlin			2		2	2	
Buff-breasted Sandpiper			1	1	2	1	
King Eider			2		2		
Red-necked Phalarope			1		1		
Red Phalarope			1	1			
American Golden Plover					1	1	
Long-billed Dowitcher			2				
Stilt Sandpiper			1				
Canada Goose	1						
Long-tailed Duck						1	
Rock Ptarmigan					1		
Eider Species					1		
Total	1	1	29	6	55	46	8
Percent of total	0.7	0.7	19.9	4.1	37.7	31.5	5.5

Table 11. Nest densities of all species combined on three basic habitat types at locations on the Arctic Coastal Plain, Alaska. Nest densities at Badami are from TERA (1995), and those at the Canning River Delta are from Martin and Moitoret (1981).

Location	Nest Density (Nests/km ²)		
	Wet	Wet/Moist	Moist/Dry
Pt. Thomson, 2001	35.7	70.2	64.3
Badami, 1995	60.0	84.0	76.4
Canning River Delta, 1980	92.5	136.5	78.1
Canning River Delta, 1979	59.2		51.0

APPENDICES

Figure A1. Location of coordinates for centerlines of treatment and reference study plots, Point Thomson, Alaska, 2001.....	A1
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Appendix Figure A1. Location of coordinates for centerlines of treatment and reference study plots at Point Thomson, Alaska, 2001. See Table A1 for coordinates.

Appendix Table A1. GPS coordinates (WGS84) for end points of transect centerlines for treatment and reference study plots, Point Thomson, Alaska, 2001. Refer to Appendix Figure A1 for locations of centerline endpoints.

Transect Centerline Endpoint	Latitude	Longitude	Transect Centerline Endpoint	Latitude	Longitude
T1_A	70.143937	-146.274005	R1_B	70.144708	-146.327577
T1_B	70.143054	-146.273537	R2_A	70.152681	-146.314673
T1_C	70.144710	-146.260890	R2_B	70.152337	-146.312191
T1_D	70.143840	-146.260405	R2_C	70.148528	-146.319889
T2_A	70.144740	-146.284126	R2_D	70.148194	-146.317407
T2_B	70.144046	-146.285813	R3_C	70.144375	-146.325107
T2_C	70.141833	-146.274014	R3_D	70.144041	-146.322625
T2_D	70.141147	-146.275678	R4_A	70.151860	-146.327347
T3_A	70.141061	-146.280037	R4_B	70.151526	-146.324864
T3_B	70.140464	-146.278067	R4_C	70.147700	-146.332524
T3_C	70.137874	-146.289401	R4_D	70.147366	-146.330042
T3_D	70.137270	-146.287413	R5_A	70.153352	-146.319663
T4_A	70.135227	-146.304324	R5_B	70.145041	-146.330057
T4_B	70.134696	-146.306500	R6_A	70.145045	-146.214648
T4_C	70.131542	-146.296698	R6_B	70.144523	-146.216757
T4_D	70.131005	-146.298840	R6_C	70.141391	-146.206903
T5_A	70.138633	-146.257339	R6_D	70.140867	-146.209039
T5_B	70.134151	-146.280291	R7_A	70.146036	-146.203602
T6_A	70.144758	-146.235432	R7_B	70.146025	-146.200960
T6_B	70.144085	-146.233647	R7_C	70.141538	-146.203754
T6_C	70.141873	-146.245595	R7_D	70.141524	-146.201126
T6_D	70.141208	-146.243832	R8_A	70.159266	-146.325751
T7_A	70.148689	-146.232209	R8_B	70.160937	-146.299760
T7_B	70.147920	-146.230846	R9_A	70.150664	-146.218125
T7_C	70.146374	-146.243552	R9_B	70.149838	-146.219157
T7_D	70.145610	-146.242187	R9_C	70.149068	-146.205772
T8_A	70.168843	-146.326716	R9_D	70.148239	-146.206804
T8_B	70.166688	-146.301010	R10_A	70.153829	-146.294189
T9_A	70.159587	-146.235199	R10_B	70.152951	-146.293724
T9_B	70.158700	-146.208782	R10_C	70.154646	-146.281207
T10_A	70.162926	-146.241445	R10_D	70.153767	-146.280723
T10_B	70.162064	-146.215078	R11_A	70.151843	-146.212336
T11_A	70.158590	-146.206182	R11_B	70.151018	-146.213378
T11_B	70.157764	-146.207215	R11_C	70.150240	-146.199982
T11_C	70.156984	-146.193805	R11_D	70.149415	-146.201015
T11_D	70.156161	-146.194838	R12_A	70.155597	-146.295143
T12_A	70.168816	-146.289381	R12_B	70.154719	-146.294678
T12_B	70.170477	-146.263353	R12_C	70.156414	-146.282159
T13_A	70.174689	-146.333243	R12_D	70.155535	-146.281675
T13_B	70.173999	-146.334952	R13_A	70.162464	-146.341201
T13_C	70.171790	-146.323085	R13_B	70.161635	-146.342231
T13_D	70.171106	-146.324755	R13_C	70.160862	-146.328792
T14_A	70.160136	-146.188514	R13_D	70.160034	-146.329818
T14_B	70.159435	-146.190177	R14_A	70.146013	-146.198296
T14_C	70.157240	-146.178372	R14_B	70.145998	-146.195661
T14_D	70.156543	-146.180021	R14_C	70.141508	-146.198478
R1_A	70.153015	-146.317160	R14_D	70.141493	-146.195836

Appendix Table B1. Bird species observed in the Pt. Thomson study area, 1 June through 5 July, 2001.

Species	Scientific Name	Species Code
Red-throated Loon	<i>Gavia stellata</i>	RTLO
Pacific Loon	<i>Gavia pacifica</i>	PALO
Yellow-billed Loon	<i>Gavia adamsii</i>	YBLO
Tundra Swan	<i>Cygnus columbianus</i>	TUSW
Greater White-fronted Goose	<i>Anser albifrons</i>	GWFG
Snow Goose	<i>Chen caerulescens</i>	SNGO
Canada Goose	<i>Branta canadensis</i>	CAGO
Brant	<i>Branta bernicla</i>	BRAN
Mallard	<i>Anas platyrhynchos</i>	MALL
Northern Pintail	<i>Anas acuta</i>	NOPI
Scaup species	<i>Aythya sp.</i>	SCAUP
Common Eider	<i>Somateria mollissima</i>	COEI
King Eider	<i>Somateria spectabilis</i>	KIEI
Surf Scoter	<i>Melanitta perspicillata</i>	SUSC
Long-tailed Duck	<i>Clangula hyemalis</i>	LTDU
Red-breasted Merganser	<i>Mergus serrator</i>	RBME
Golden Eagle	<i>Aquila chrysaetos</i>	GOEA
Northern Harrier	<i>Circus cyaneus</i>	NOHA
Rock Ptarmigan	<i>Lagopus mutus</i>	ROPT
Willow Ptarmigan	<i>Lagopus lagopus</i>	WIPT
American Golden-Plover	<i>Pluvialis dominica</i>	ROPT
Semipalmated Plover	<i>Charadrius semipalmatus</i>	SEPL
Whimbrel	<i>Numenius phaeopus</i>	WHIM
Ruddy Turnstone	<i>Arenaria interpres</i>	RUTU
Dunlin	<i>Calidris alpina</i>	DUNL
Semipalmated Sandpiper	<i>Calidris pusilla</i>	SESA
White-rumped Sandpiper	<i>Calidris fuscicollis</i>	WRSA
Baird's Sandpiper	<i>Calidris bairdii</i>	BASA
Pectoral Sandpiper	<i>Calidris melanotos</i>	PESA
Buff-breasted Sandpiper	<i>Trygites subruficollis</i>	BBSA
Stilt Sandpiper	<i>Calidris himantopus</i>	STSA
Long-billed Dowitcher	<i>Limnodromus scolopaceus</i>	LBDO
Red-necked Phalarope	<i>Phalaropus lobatus</i>	RNPH
Red Phalarope	<i>Phalaropus fulicaria</i>	REPH
Pomarine Jaeger	<i>Stercorarius pomarinus</i>	POJA
Parasitic Jaeger	<i>Stercorarius parasiticus</i>	PAJA
Long-tailed Jaeger	<i>Stercorarius longicaudus</i>	LTJA
Glaucous Gull	<i>Larus hyperboreus</i>	GLGU
Arctic Tern	<i>Sterna paradisaea</i>	ARTE
Short-eared Owl	<i>Asio flammeus</i>	SEOW
Snowy Owl	<i>Nyctea scandiaca</i>	SNOW
Common Raven	<i>Corvus corax</i>	CORA
Horned Lark	<i>Eremophila alpestris</i>	HOLA
American Robin	<i>Turdus migratorius</i>	AMRO
Yellow Wagtail	<i>Motacilla flava</i>	YWAG
Lapland longspur	<i>Calcarius lapponicus</i>	LALO
Snow Bunting	<i>Plectrophenax nivalis</i>	SNBU

Appendix Table C1. Data base for tundra nesting bird survey at Point Thomson, Alaska, 12 June through 5 July 2001.

Species Code	Nest Number	Plot	Grid	Date	Nest Contents	Status	Comments (12 June-5 July)	Veg. and Land Cover
LALO	2	T12	37	12-Jun	6E	F	No eggs or chicks on 6/24	Va
LALO	3	T13	37	12-Jun	4E	F	No eggs or chicks on 6/24	Va
LALO	5	T13	6	12-Jun	5E	F	Center of polygon, 3 eggs and 3 chicks on 6/24	Ve
LALO	6	T12	39	12-Jun	5E	F	No eggs or chicks on 6/24	Va
LALO	7	R13	6	13-Jun	1E	F	Still incorporating nesting material into nest on 6/13, no eggs or chicks on 6/26	Va
LALO	8	R13	14	13-Jun	5E	F	4 chicks and 1 egg on 6/26	Ve
LALO	10	T7	15	14-Jun	5E	F	Top of polygon, crustose lichen, no eggs or feather sheath on 6/29.	IVa
LALO	12	R8	40	15-Jun	0E	F	Lining ripped out, no fox scent or droppings	Va
SESA	14	R10	26	15-Jun	4E	S	Indistinct FTP, dwarf shrub, lichen patches nearby, 4 eggs on 6/25	Va
SESA	16	T9	21	17-Jun	4E	F	Top of polygon, 4 eggs on 6/30	Va
LALO	17	T9	38	17-Jun	5E	U	5 chicks on 6/30	Va
PESA	18	R14	5	18-Jun	4E	S	Crustose lichen, 4 eggs on 7/1	IVa
SESA	19	R14	19	18-Jun	4E	F	Crustose lichen, no eggs on 7/1	Va
SESA	20	R14	27	18-Jun	4E	S	4 eggs on 7/1	IVa
LALO	21	R7	12	18-Jun	6E	U		IVa
SESA	22	R6	25	19-Jun	4E	F	Dry crustose lichens, 4 eggs on 7/1	Va
REPH	23	R9	19	19-Jun	3E	F	Near pond, nest not found on 7/5 (snow)	IIIe
LALO	24	R9	3	19-Jun	5E	U	Feather sheath on 7/5, no fox scent, no adults with food or alarming	Ve
LALO	25	R11	26	19-Jun	5E	F	No eggs on 7/5, fox scent present	IVa
KIEI	26	R11	16	16-Jun	U	F	At edge of pond, female not flushed, no eggs on 7/5, small amount of down present	IVa
PESA	27	T11	3	20-Jun	4E	F	No eggs on 6/30, no fox scent or adults	IVa
PESA	28	T11	22	20-Jun	4E	F	4 eggs, adult inc. on 6/30.	IVa
LALO	29	T10	33	20-Jun	6E	U	1 chick ready to fledge on 6/29.	Va
LBDO	31	T3	4	21-Jun	4E	F	Vegetation clump surrounded by water, no eggs on 7/2.	IIIId
LALO	32	T3	22	21-Jun	5E	U	Strangmoor ridge through polygon, 4 chicks on 7/2	IVa
LALO	33	T2	27	21-Jun	5E	U	No eggs or sheaths on 7/2, no fox scent	IVa
BBSA	34	T5	23	22-Jun	4E	F	No eggs, bits, or fox scent on 7/3.	IIIId
LALO	35	T1	11	22-Jun	6E	F	Clump of vegetation, fox scent on 7/2	IIIe
RNPH	36	R1	28	23-Jun	4E	S	Vegetation clump, 4 eggs on 7/4	IIIId
KIEI	37	R5	39	23-Jun	4E	F	Clump, female still incubating on 6/26	IIIId
LALO	38	T13	22	24-Jun	4E	F		Va
LALO	39	T8	14	24-Jun	2E	U	Top of ridge	Ve
SESA	40	T12	36	24-Jun	4E	S		Va
PESA	41	R10	18	25-Jun	4E	S		Va
PESA	42	R13	16	26-Jun	4E	F		Va
LALO	43	R13	31	26-Jun	6E	U		Ve
RNPH	44	R13	21	26-Jun	4E	F	Clump	IVa
LALO	45	R4	25	26-Jun	5E	U	Dwarf shrubs.	IIIId
LALO	46	T6	40	29-Jun	5E	F		IIIId
PESA	47	T6	35	29-Jun	4E	F	Top of polygon	IVa
DUNL	48	T6	10	29-Jun	3E	F	Top of polygon	Va
BBSA	49	T7	26	29-Jun	4E	F		IVa
LALO	50	T14	12	30-Jun	0E	F	Predated when found, no fox scent.	IVa
SESA	51	T14	4	30-Jun	4E	S	Depression, wet site w/ HCP and FTP nearby, sparse willow and dwarf shrub	IIIa
LALO	52	T11	38	30-Jun	5E	F	Dwarf shrub and graminoids w/ lichens inside FB.	IVa
LALO	53	T9	16	30-Jun	5E	F	Dry crustose lichen near	IIIe

Appendix Table C1. continued

Species Code	Nest Number	Plot	Grid	Date	Nest Contents	Status	Comments (12 June-5 July)	Veg. and Land Cover
AGPL	54	R14	5	1-Jul	3E	S	Lichen and willow present,	IVa
SESA	55	R14	3	1-Jul	4E	F	Center of polygon with dry crustose lichen and dwarf shrub	IVa
SESA	56	R14	17	1-Jul	4E	S	Center of LCP, dry crustose lichen and dwarf shrub/willow	Va
BBSA	57	R14	32	1-Jul	4E	S		IVa
SESA	58	R14	22	1-Jul	4E	S	Dry crustose lichen,	IIIe
LALO	59	R7	34	1-Jul	5E	F		IVa
LALO	60	R7	6	1-Jul	4E	F		IIId
LALO	61	T1	27	2-Jul	4E	F		IIId
LALO	62	T1	26	2-Jul	3E	U		IIId
PESA	63	R2	8	4-Jul	4E	S		IVa
PESA	64	R3	26	4-Jul	4E	S		IIIe
LALO	65	R11	21	5-Jul	4E	F		Va
LALO	66	R11	11	5-Jul	4E	U		IVa
LALO	101	T12	14	12-Jun	6E	F	No eggs or chicks on 6/24	IIId
LALO	103	T8	17	12-Jun	4E	U	2e and 3 chicks on 6/24	IVa
LALO	104	T13	27	12-Jun	5E	U	1 chick and 5 eggs on 6/24	Va
DUNL	106	T6	1	14-Jun	4E	S	Still 4e on 6/29	IVa
SESA	107	T7	5	14-Jun	2E	S	4 eggs on 6/29	IIId
PESA	108	R8	14	15-Jun	4E	F	Nearby tundra with dwarf shrubs, graminoids, lichens, no eggs on 6/25	Va
PESA	109	R10	36	15-Jun	4E	F	FB in area, no eggs on 6/25	Va
LALO	110	R10	10	15-Jun	6E	U	3 chicks and 3 eggs on 6/25	Va
LALO	112	T9	33	17-Jun	6E	F	Shrubs, no eggs or chicks on 6/30, no fox scent.	Va
LALO	113	T9	19	17-Jun	5E	F	No eggs or chicks on 6/30, possibly re-nested (see LALO 219).	IIId
SESA	115	T9	14	17-Jun	2E	F	Top of polygon with shrubs, lichens, dry microhabitat, still 2 eggs on 6/30.	IIId
DUNL	116	T9	8	17-Jun	4E	S	4 eggs on 6/30, 1 pipped.	IIId
SESA	117	R14	34	18-Jun	4E	S	Dwarf shrubs, lichens, near pond edge, 4 eggs on 7/1	IVa
SESA	118	R7	18	18-Jun	4E	F	4 eggs on 7/1	IVa
DUNL	119	R6	37	19-Jun	4E	F	No eggs or fox scent on 7/1	IIId
LALO	120	R11	34	19-Jun	6E	U	Feather sheath on 7/5, no fox scent, no adults with food or alarming	IVa
LALO	121	R11	18	19-Jun	6E	F	No eggs or chicks on 7/5, no fox scent or feather sheath	IVa
SESA	122	T11	35	20-Jun	3E	U	Polygon top, shrubs, 3 eggs on 6/30, adult inc.	Ia
LALO	123	T10	19	20-Jun	6E	S	5 chicks on 6/29	IVa
LALO	124	T4	11	21-Jun	5E	U	Strangmoor hummock, no eggs or chicks on 7/3	Ve
PESA	125	T2	11	21-Jun	4E	F	Hummock. No eggs, bits, fox scent or adults on 7/2	IIId
STSA	126	T1	8	22-Jun	4E	F	No fox scent on 7/2	IVa
BBSA	127	T1	11	22-Jun	4E	F	Egg shells still present on 7/2, fox?	IIId
PESA	128	R1	9	23-Jun	4E	F	Still 4 eggs on 7/4	IIIe
LALO	129	R2	30	23-Jun	5E	S	No eggs or chicks on 7/4	IIId
LALO	130	R3	6	23-Jun	3E	F	No eggs, chicks, fox scent or adults on 7/4	IVa
PESA	131	T13	38	24-Jun	4E	F		IIId
PESA	132	T8	17	24-Jun	4E	S		Va
PESA	133	R12	18	25-Jun	4E	S		IVa
LALO	134	R5	1	26-Jun	4C1E	S		Ve
PESA	135	T7	17	29-Jun	4E	F	On Strangmoor hummock with lichen and dwarf shrubs.	IIId
SESA	136	T7	26	29-Jun	4E	F	Indistinct FTP, on Strangmoor hummock with lichens.	IVa
LALO	137	T10	39	29-Jun	6C	F	Lichens and dwarf shrubs	IVa
LALO	138	T11	11	30-Jun	3E	S	Graminoids and dwarf shrubs, near LCP and FTP	Va
PESA	139	T9	18	30-Jun	3E	F	Dwarf shrubs and lichen, eggs lacking pigment-almost white.	IVa

Appendix Table C1. continued

Species Code	Nest Number	Plot	Grid	Date	Nest Contents	Status	Comments (12 June-5 July)	Veg. and Land Cover
PESA	140	T9	7	30-Jun	4E	F		IIId
SESA	141	R7	20	1-Jul	4E	S	Edge of mudflat, lichens	IIId
SESA	142	R7	34	1-Jul	4E	U	Dwarf shrubs and lichen	IVa
BBSA	143	R7	14	1-Jul	4E	S	In dry spot at edge of FTP, lichens, graminoids, shrubs, and FB.	IVa
PESA	144	R6	10	1-Jul	4E	F		Va
LBDO	145	R1	25	4-Jul	4E	S		IVa
PESA	146	R3	28	4-Jul	4E	S	Indistinct LCP	IIId
DUNL	202	T8	29	12-Jun	2E	S	FB within 4m of nest, 4e on 6/24	IIId
DUNL	204	T12	37	12-Jun	4E	S	No eggs on 6/24	IVa
LALO	205	R5	14	13-Jun	6E	F	5 chicks on 6/26	Va
SESA	206	T6	15	14-Jun	4E	U	Shrubs, still 4e on 6/29	IIId
PESA	207	T6	21	14-Jun	4E	S	Flat area on top, lichen areas nearby, still 4e on 6/29.	IVa
SESA	209	R8	11	15-Jun	4E	S	Lichens nearby, no willows, no eggs on 6/25, fox dung on edge of cup	IVa
SESA	210	R12	1	15-Jun	4E	F	Indistinct FTP, willow and lichen nearby, 4 eggs on 6/25	Va
LALO	211	R10	37	15-Jun	5E	S	Lichens, willows nearby, 5 chicks on 6/25	Va
LALO	212	R10	18	15-Jun	5E	F	FB near, dwarf shrub. On 6/25 3 eggs, 1 shell, 1 egg with hole in it but no chick inside, nest appears abandoned, no adults nearby.	Va
SESA	214	T6	28	29-Jun	3E	F	Top of polygon, 1 egg outside of nest about 1 ft away, shrubs, willows near nest.	Va
LALO	215	T10	29	29-Jun	5E	S	Shrubs, deep trough	Va
LALO	216	T10	7	29-Jun	2E	U	Some shrubs, possible re-nest (?) - no failed nest nearby.	Va
SESA	217	T14	14	30-Jun	4E	F	Indistinct FTP with HCP near, willows and other shrubs, lichens on nearby HCP, LCP and Strangmoor also in immediate area.	Va
PESA	218	T9	25	30-Jun	4E	F	Willows at nest	IVa
LALO	219	T9	21	30-Jun	4E	S	Willows on ridge, possible resent of LALO 113 in grid 19.	Va
LALO	220	R14	14	1-Jul	3E	U	Willows and other dwarf shrubs on ridge, wet polygon basins and troughs	Va
CAGO	221	R7	29	1-Jul	U	U		IVa
KIEI	222	T3	39	2-Jul	6E	F	Depression between two ridges, no lakes nearby	IVa
EISP	223	T2	36	2-Jul	0E	F	Between ridges, no fox scent, down torn out of nest and scattered nearby, sparse willows on ridge.	IVa
KIEI	224	T1	16	2-Jul	5E	F	Between two small clumps of vegetation	IIId
LALO	225	T4	17	3-Jul	4E	U	Dwarf willows, Dryas on ridge, wet troughs with standing water.	IIId
LALO	226	R1	28	4-Jul	0E	F	Willows on rim, predated	IIId
LALO	227	R3	18	4-Jul	4C	U	Indistinct LCP	IVa
PESA	228	R9	9	5-Jul	4E	S	Indistinct LCP/FTP/Strangmoor, sparse willows nearby	Va
PESA	229	R11	30	5-Jul	3E	F	Indistinct FTP, willow and dwarf shrub present, lichens on ridge top	IVa
LTDU	230	R13	31	11-Aug		F	Predated when found, no fox scent.	Va
LALO	301	R14	3	18-Jun	6E	F	Dwarf shrubs, no eggs on 7/1	IVa
LALO	302	R14	32	18-Jun	5E	F	No eggs or chicks on 7/1	IVa
SESA	303	R14	35	18-Jun	4E	S	Top poly, 4 eggs on 7/1	IVa
AGPL	304	R6	16	19-Jun	4E	F	Dry lichens, no eggs or fox scent on 7/1	Va
LALO	305	R9	36	19-Jun	4E	S	1 chick ready to fledge on 7/5	Ve
LALO	306	R9	9	19-Jun	5E	U	Feather sheath on 7/5, no fox scent, no adults with food or alarming	Va
SESA	307	R11	17	19-Jun	4E	F	Fox dropping in nest cup on 7/5, some egg bits and small pieces of shell present	IVa
PESA	308	T11	12	20-Jun	4E	F	No eggs or fox scent on 6/30.	IVa
LALO	309	T11	17	20-Jun	6E	F	No eggs or sheathes on 6/30	IVa
LALO	310	T10	4	20-Jun	6E	F	No eggs, droppings, or fox scent on 6/29	Va
PESA	311	T2	22	21-Jun	4E	S	Adult inc. on 7/2	IVa

Appendix Table C1. continued

Species Code	Nest Number	Plot	Grid	Date	Nest Contents	Status	Comments (12 June-5 July)	Veg. and Land Cover
REPH	312	R1	33	23-Jun	2E	S	Strangmoor clump, 2 eggs on 7/4	IIId
LALO	313	R2	16	23-Jun	6E	U	Strangmoor clump, 1 chick about to fledge on 7/4	IVa
ROPT	314	R2	15	23-Jun	7E	F	Still on nest on 7/4, not flushed	IVa
SESA	315	T13	38	24-Jun	4E	S		Va
LALO	316	T12	39	24-Jun	4E	F		Va
PESA	317	R10	15	25-Jun	4E	S		Va
SESA	318	R13	9	26-Jun	4E	F	Strangmoor clump	Va
SESA	319	R13	25	26-Jun	4E	S		Va

Species Codes are contained in Appendix Table B1.

In Plot, T and R = Treatment and Reference, respectively.

In Nest Contents, E = eggs, C = chicks, U = unknown.

In Status, F = failed, S = successful, U = unknown.

Vegetation and land cover descriptions are in Noel and Funk (1999).

Appendix Table D1. Database for bird sightings on reference and treatment study plots at Point Thomson, Alaska, 2001. Period is the 1st or 2nd census period. Species codes are in Appendix Table B1. Key to behavior abbreviations are in Table 7.

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
R1	13	1	23-Jun	LALO	1	DI	1		1		30-33	NE, 10-15	5	Cold, ice on water, 75-80% of transect with standing water.
R1	22	1	23-Jun	LBDO	1	FD			1		30-33	NE, 10-15	5	
R1	27	1	23-Jun	LALO	1	DI	1		1		30-33	NE, 10-15	5	
R1	30	1	23-Jun	PESA	1	DI	1		1		30-33	NE, 10-15	5	
R1	28	1	23-Jun	RNPH	1	INC	1		1		30-33	NE, 10-15	5	
R1	30	1	23-Jun	LALO	1	DI	1		1		30-33	NE, 10-15	5	
R1	32	1	23-Jun	LALO	2	FD	1	1	2		30-33	NE, 10-15	5	
R1	33	1	23-Jun	REPH	1	INC	1		1		30-33	NE, 10-15	5	
R1	15	1	23-Jun	REPH	1	FD			1		30-33	NE, 10-15	5	
R1	9	1	23-Jun	PESA	1	INC		1	1		30-33	NE, 10-15	5	
R1	5	1	23-Jun	LALO	1	ST	1		1		30-33	NE, 10-15	5	
R10	21	1	15-Jun	LALO	1	DI	1		1		40	NE, 5	100	No snow on plot.
R10	33	1	15-Jun	PESA	1	ST	1		1		40	NE, 5	100	
R10	32	1	15-Jun	POJA	1	HU			1		40	NE, 5	100	
R10	37	1	15-Jun	LALO	1	INC		1	1		40	NE, 5	100	
R10	2	1	15-Jun	LALO	2	FD	2		2		40	NE, 5	100	
R10	38	1	15-Jun	LALO	1	DI	1		1		40	NE, 5	100	
R10	4	1	15-Jun	STSA	1	DI			1		40	NE, 5	100	
R10	6	1	15-Jun	LALO	1	DI	1		1		40	NE, 5	100	
R10	36	1	15-Jun	PESA	1	INC		1	1		40	NE, 5	100	
R10	28	1	15-Jun	LALO	1	DI	1		1		40	NE, 5	100	
R10	26	1	15-Jun	SESA	1	INC			1		40	NE, 5	100	
R10	18	1	15-Jun	LALO	1	INC		1	1		40	NE, 5	100	
R10	26	1	15-Jun	AGPL	1	DI			1		40	NE, 5	100	
R10	5	1	15-Jun	POJA	1	HU			1		40	NE, 5	100	
R10	12	1	15-Jun	PESA	1	FD	1		1		40	NE, 5	100	
R10	12	1	15-Jun	STSA	1	FD			1		40	NE, 5	100	
R10	10	1	15-Jun	LALO	1	INC		1	1		40	NE, 5	100	
R10	7	1	15-Jun	LALO	1	DI	1		1		40	NE, 5	100	
R10	11	1	15-Jun	LALO	1	DI	1		1		40	NE, 5	100	
R10	11	1	15-Jun	DUNL	1	DI			1		40	NE, 5	100	
R10	13	1	15-Jun	PESA	1	FD	1		1		40	NE, 5	100	
R10	13	1	15-Jun	BBSA	1	DI	1		1		40	NE, 5	100	
R10	13	1	15-Jun	PESA	1	FD		1	1		40	NE, 5	100	
R11	22	1	19-Jun	ROPT	1	FD	1		1		40	N, 2	95	
R11	21	1	19-Jun	AGPL	2	DI			2		40	N, 2	95	
R11	21	1	19-Jun	ROPT	1	FLU		1	1		40	N, 2	95	
R11	22	1	19-Jun	PESA	1	ST	1		1		40	N, 2	95	
R11	22	1	19-Jun	LALO	1	ST	1		1		40	N, 2	95	
R11	26	1	19-Jun	LALO	1	INC		1	1		40	N, 2	95	
R11	26	1	19-Jun	PESA	2	AL	1	1	2		40	N, 2	95	
R11	30	1	19-Jun	PESA	2	U	1	1	2		40	N, 2	95	
R11	34	1	19-Jun	LALO	1	INC		1	1		40	N, 2	95	
R11	36	1	19-Jun	LALO	1	DI	1		1		40	N, 2	95	
R11	27	1	19-Jun	PESA	1	ST	1		1		40	N, 2	95	
R11	17	1	19-Jun	SESA	1	INC			1		40	N, 2	95	
R11	17	1	19-Jun	PESA	1	ST		1	1		40	N, 2	95	
R11	15	1	19-Jun	SESA	1	FD			1		40	N, 2	95	
R11	7	1	19-Jun	PESA	1	FD		1	1		40	N, 2	95	
R11	4	1	19-Jun	PESA	1	ST	1		1		40	N, 2	95	
R11	16	1	19-Jun	SESA	1	FD			1		40	N, 2	95	
R11	16	1	19-Jun	KIEI	1	INC		1	1		40	N, 2	95	
R11	18	1	19-Jun	LALO	1	INC		1	1		40	N, 2	95	
R12	21	1	15-Jun	PESA	1	FD	1		1		40	NE, 5	100	Small snow patches in grids 7, 8, 11, 35, 38, 36, 40.
R12	25	1	15-Jun	PESA	1	DI	1		1		40	NE, 5	100	
R12	29	1	15-Jun	LBDO	1	DI			1		40	NE, 5	100	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
R12	31	1	15-Jun	AGPL	2	U			2		40	NE, 5	100	
R12	35	1	15-Jun	CAGO	1	RE			1		40	NE, 5	100	
R12	33	1	15-Jun	SESA	2	FD			2		40	NE, 5	100	
R12	40	1	15-Jun	DUNL	1	DI			1		40	NE, 5	100	
R12	23	1	15-Jun	LTDU	2	FD	1	1	2		40	NE, 5	100	
R12	27	1	15-Jun	POJA	1	HU			1		40	NE, 5	100	
R12	1	1	15-Jun	SESA	1	INC			1		40	NE, 5	100	
R13	2	1	13-Jun	PESA	1	DI	1		1		45	E, 5-10	80	Snow in grids 17, 18; small occasional snow patches elsewhere, <1%.
R13	4	1	13-Jun	LALO	1	FLY	1		1		45	E, 5-10	80	
R13	4	1	13-Jun	PESA	1	FD	1		1		45	E, 5-10	80	
R13	6	1	13-Jun	LALO	1	INC		1	1		45	E, 5-10	80	
R13	8	1	13-Jun	LALO	1	FD	1		1		45	E, 5-10	80	
R13	8	1	13-Jun	LALO	1	FD		1	1		45	E, 5-10	80	
R13	6	1	13-Jun	LBDO	1	ST			1		45	E, 5-10	80	
R13	10	1	13-Jun	LBDO	1	FD			1		45	E, 5-10	80	
R13	12	1	13-Jun	PESA	1	FD	1		1		45	E, 5-10	80	
R13	4	1	13-Jun	BBSA	1	ST			1		45	E, 5-10	80	
R13	12	1	13-Jun	WIPT	1	DI	1		1		45	E, 5-10	80	
R13	12	1	13-Jun	ROPT	1	DI	1		1		45	E, 5-10	80	
R13	12	1	13-Jun	LALO	2	DI	2		2		45	E, 5-10	80	
R13	14	1	13-Jun	LALO	1	INC		1	1		45	E, 5-10	80	
R13	19	1	13-Jun	LALO	1	FD		1	1		45	E, 5-10	80	
R13	19	1	13-Jun	PESA	1	DI	1		1		45	E, 5-10	80	
R13	23	1	13-Jun	SESA	2	FD			2		45	E, 5-10	80	
R13	32	1	13-Jun	SESA	2	FD			2		45	E, 5-10	80	
R13	32	1	13-Jun	POJA	1	ST			1		45	E, 5-10	80	
R13	5	1	13-Jun	SESA	2	FD			2		45	E, 5-10	80	
R13	5	1	13-Jun	PESA	1	FD	1		1		45	E, 5-10	80	
R13	37	1	13-Jun	PESA	1	FD	1		1		45	E, 5-10	80	
R13	U	1	13-Jun	LALO	1	DI	1		1		45	E, 5-10	80	
R13	25	1	13-Jun	SESA	1	FD			1		45	E, 5-10	80	
R13	22	1	13-Jun	PESA	1	FD	1		1		45	E, 5-10	80	
R13	24	1	13-Jun	SESA	2	FD			2		45	E, 5-10	80	
R13	26	1	13-Jun	SESA	2	FD			2		45	E, 5-10	80	
R13	36	1	13-Jun	NOHA	1	HU		1	1		45	E, 5-10	80	
R13	30	1	13-Jun	POJA	2	HU			2		45	E, 5-10	80	
R13	38	1	13-Jun	LALO	1	FD		1	1		45	E, 5-10	80	
R13	38	1	13-Jun	LALO	1	DI	1		1		45	E, 5-10	80	
R14	6	1	18-Jun	AGPL	1	ST			1		45	W, 5-10	100	Light rain.
R14	3	1	18-Jun	LALO	1	INC		1	1		45	W, 5-10	100	
R14	5	1	18-Jun	PESA	1	INC		1	1		45	W, 5-10	100	
R14	9	1	18-Jun	PESA	2	DI	2		2		45	W, 5-10	100	
R14	32	1	18-Jun	SESA	1	INC			1		45	W, 5-10	100	
R14	19	1	18-Jun	SESA	1	INC			1		45	W, 5-10	100	
R14	19	1	18-Jun	SESA	1	FLY			1		45	W, 5-10	100	
R14	16	1	18-Jun	LALO	1	DI	1		1		45	W, 5-10	100	
R14	37	1	18-Jun	PESA	1	DI	1		1		45	W, 5-10	100	
R14	36	1	18-Jun	PAJA	1	HU			1		45	W, 5-10	100	
R14	36	1	18-Jun	ROPT	1	DI	1		1		45	W, 5-10	100	
R14	36	1	18-Jun	POJA	1	HU			1		45	W, 5-10	100	
R14	32	1	18-Jun	LALO	1	INC		1	1		45	W, 5-10	100	
R14	30	1	18-Jun	LALO	1	DI	1		1		45	W, 5-10	100	
R14	28	1	18-Jun	SESA	2	FD			2		45	W, 5-10	100	
R14	16	1	18-Jun	REPH	2	FD			2		45	W, 5-10	100	
R14	23	1	18-Jun	PESA	1	DI	1		1		45	W, 5-10	100	
R14	23	1	18-Jun	LALO	2	DI	2		2		45	W, 5-10	100	
R14	27	1	18-Jun	SESA	1	INC			1		45	W, 5-10	100	
R14	33	1	18-Jun	LALO	1	DI	1		1		45	W, 5-10	100	
R14	35	1	18-Jun	SESA	1	INC			1		45	W, 5-10	100	
R14	35	1	18-Jun	LALO	2	FD	1	1	2		45	W, 5-10	100	
R2	30	1	23-Jun	LALO	1	INC		1	1		36-40	NE, 15	5	Cold, water frozen on tundra, 75-80% of plot with standing water.

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
R2	1	1	23-Jun	PESA	1	FD		1	1		36-40	NE, 15	5	
R2	14	1	23-Jun	LALO	1	DI	1		1		36-40	NE, 15	5	
R2	16	1	23-Jun	LALO	1	INC		1	1		36-40	NE, 15	5	
R2	15	1	23-Jun	ROPT	1	INC		1	1		36-40	NE, 15	5	
R3	28	1	23-Jun	LALO	1	FD	1		1		Low 30s	NE, 10-20	50	Frozen tundra and ice; 75-80% of plot with standing water.
R3	38	1	23-Jun	PESA	1	FD		1	1		Low 30s	NE, 10-20	50	
R3	33	1	23-Jun	LALO	1	FD	1		1		Low 30s	NE, 10-20	50	
R3	6	1	23-Jun	AGPL	1	FD			1		Low 30s	NE, 10-20	50	
R3	8	1	23-Jun	SEOW	1	HU			1		Low 30s	NE, 10-20	50	
R3	3	1	23-Jun	LALO	2	FLY	2		2		Low 30s	NE, 10-20	50	
R3	6	1	23-Jun	LALO	1	INC		1	1		Low 30s	NE, 10-20	50	
R4	5	1	13-Jun	LALO	1	DI	1		1		50	NE, 5-8	80	No snow, standing water in many areas.
R4	14	1	13-Jun	LALO	1	DI	1		1		50	NE, 5-8	80	
R4	14	1	13-Jun	PESA	1	RE	1		1		50	NE, 5-8	80	
R4	18	1	13-Jun	LALO	2	FD	1	1	2		50	NE, 5-8	80	
R4	7	1	13-Jun	PESA	1	DI	1		1		50	NE, 5-8	80	
R4	5	1	13-Jun	LALO	1	DI	1		1		50	NE, 5-8	80	
R4	2	1	13-Jun	POJA	1	HU			1		50	NE, 5-8	80	
R4	31	1	13-Jun	PESA	1	ST		1	1		50	NE, 5-8	80	
R4	27	1	13-Jun	LALO	1	DI	1		1		50	NE, 5-8	80	
R4	25	1	13-Jun	LBDO	2	DI			2		50	NE, 5-8	80	
R4	25	1	13-Jun	STSA	1	DI			1		50	NE, 5-8	80	
R4	23	1	13-Jun	LALO	1	FLY	1		1		50	NE, 5-8	80	
R4	21	1	13-Jun	LALO	1	ST	1		1		50	NE, 5-8	80	
R4	21	1	13-Jun	PESA	1	DI	1		1		50	NE, 5-8	80	
R5	9	1	13-Jun	PESA	2	FD	2		2		Upper 40s	NE, 5	70	Thunder storm, very wet plot with standing water.
R5	11	1	13-Jun	REPH	2	FD	2		2		Upper 40s	NE, 5	70	
R5	14	1	13-Jun	LALO	1	INC		1	1		Upper 40s	NE, 5	70	
R5	18	1	13-Jun	PESA	1	DI	1		1		Upper 40s	NE, 5	70	
R5	24	1	13-Jun	PESA	1	DI	1		1		Upper 40s	NE, 5	70	
R5	26	1	13-Jun	PESA	2	FD	1	1	2		Upper 40s	NE, 5	70	
R5	30	1	13-Jun	POJA	1	HU			1		Upper 40s	NE, 5	70	
R5	19	1	13-Jun	LALO	1	FLU			1		Upper 40s	NE, 5	70	
R6	39	1	19-Jun	SESA	1	FD			1		33	NW, 5	100	
R6	37	1	19-Jun	DUNL	1	INC			1		33	NW, 5	100	
R6	25	1	19-Jun	LALO	1	DI	1		1		33	NW, 5	100	
R6	25	1	19-Jun	SESA	1	INC			1		33	NW, 5	100	
R6	22	1	19-Jun	LALO	1	DI	1		1		33	NW, 5	100	
R6	8	1	19-Jun	LALO	1	DI	1		1		33	NW, 5	100	
R6	16	1	19-Jun	AGPL	1	INC			1		33	NW, 5	100	
R6	16	1	19-Jun	LALO	1	DI	1		1		33	NW, 5	100	
R6	19	1	19-Jun	DUNL	1	DI			1		33	NW, 5	100	
R6	1	1	19-Jun	LALO	2	FD	1	1	2		33	NW, 5	100	
R7		1	18-Jun	SESA	1	FLU			1		40	W, 20	100	
R7		1	18-Jun	CAGO	1	FD			2		40	W, 20	100	
R7		1	18-Jun	SESA	1	FD			1		40	W, 20	100	
R7	34	1	18-Jun	PESA	1	FLU			1		40	W, 20	100	
R7	36	1	18-Jun	LALO	1	FLY	1		1		40	W, 20	100	
R7	34	1	18-Jun	SESA	2	DI			2		40	W, 20	100	
R7	34	1	18-Jun	ROPT	1	DI	1		1		40	W, 20	100	
R7	12	1	18-Jun	LALO	1	INC		1	1		40	W, 20	100	
R7	26	1	18-Jun	AGPL	1	FD	1		1		40	W, 20	100	
R7	20	1	18-Jun	LALO	1	FLY	1		1		40	W, 20	100	
R7	18	1	18-Jun	SESA	1	INC			1		40	W, 20	100	
R7	16	1	18-Jun	LALO	2	FD	1	1	2		40	W, 20	100	
R7	12	1	18-Jun	ROPT	1	ST	1		1		40	W, 20	100	
R7	15	1	18-Jun	SESA	1	FD			1		40	W, 20	100	
R7	17	1	18-Jun	ROPT	1	ST	1		1		40	W, 20	100	
R7	17	1	18-Jun	LALO	1	FD	1		1		40	W, 20	100	
R7	17	1	18-Jun	ROPT	2	FLU	1	1	2		40	W, 20	100	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
R8	2	1	15-Jun	SESA	2	FD			2		40-45	0	100	Small patch of snow in grid 39.
R8	4	1	15-Jun	PESA	2	DI	2		2		40-45	0	100	
R8	8	1	15-Jun	LALO	2	DI	2		2		40-45	0	100	
R8	14	1	15-Jun	SEOW	1	HU			1		40-45	0	100	
R8	12	1	15-Jun	LALO	1	FD		1	1		40-45	0	100	
R8	11	1	15-Jun	SESA	1	INC			1		40-45	0	100	
R8	14	1	15-Jun	PESA	1	INC		1	1		40-45	0	100	
R8	14	1	15-Jun	PESA	1	DI	1		1		40-45	0	100	
R8	26	1	15-Jun	LALO	1	DI	1		1		40-45	0	100	
R8	30	1	15-Jun	SEOW	1	ST			1		40-45	0	100	
R8	30	1	15-Jun	SEOW	1	HU			1		40-45	0	100	
R8	39	1	15-Jun	LALO	1	FD	1		1		40-45	0	100	
R8	39	1	15-Jun	PESA	2	FD	1	1	2		40-45	0	100	
R8	39	1	15-Jun	LALO	1	FD		1	1		40-45	0	100	
R8	15	1	15-Jun	LALO	2	FLY	2		2		40-45	0	100	
R8	9	1	15-Jun	POJA	2	HU			2		40-45	0	100	
R8	13	1	15-Jun	DUNL	1	ST			1		40-45	0	100	
R8	11	1	15-Jun	POJA	1	HU			1		40-45	0	100	
R8	15	1	15-Jun	PESA	2	DI	2		2		40-45	0	100	
R8	9	1	15-Jun	PESA	1	DI	1		1		40-45	0	100	
R8	1	1	15-Jun	PESA	1	ST	1		1		40-45	0	100	
R9	26	1	19-Jun	LALO	1	DI	1		1		35	W, 5-10	95	Snow in grid 28.
R9	34	1	19-Jun	LALO	1	DI	1		1		35	W, 5-10	95	
R9	36	1	19-Jun	LALO	1	INC		1	1		35	W, 5-10	95	
R9	36	1	19-Jun	LALO	1	FD	1		1		35	W, 5-10	95	
R9	36	1	19-Jun	LALO	2	FD	2		2		35	W, 5-10	95	
R9	40	1	19-Jun	LALO	1	FD	1		1		35	W, 5-10	95	
R9	29	1	19-Jun	LTJA	1	HU			1		35	W, 5-10	95	
R9	21	1	19-Jun	PESA	1	ST	1		1		35	W, 5-10	95	
R9	19	1	19-Jun	REPH	1	SW			1		35	W, 5-10	95	
R9	19	1	19-Jun	REPH	1	INC	1		1		35	W, 5-10	95	
R9	19	1	19-Jun	PESA	1	DI	1		1		35	W, 5-10	95	
R9	19	1	19-Jun	PESA	1	FLU		1	1		35	W, 5-10	95	
R9	11	1	19-Jun	LALO	1	INC		1	1		35	W, 5-10	95	
R9	9	1	19-Jun	PESA	1	FD		1	1		35	W, 5-10	95	
R9	5	1	19-Jun	PESA	1	DI	1		1		35	W, 5-10	95	
R9	1	1	19-Jun	LALO	1	FD	1		1		35	W, 5-10	95	
R9	3	1	19-Jun	LALO	1	INC		1	1		35	W, 5-10	95	
R9	8	1	19-Jun	PESA	1	ST	1		1		35	W, 5-10	95	
T1	23	1	22-Jun	LALO	1	DI	1		1		30s	NE, 5-10	30	Ice crust on ponds.
T1	30	1	22-Jun	LALO	1	DI	1		1		30s	NE, 5-10	30	
T1	33	1	22-Jun	LALO	1	DI	1		1		30s	NE, 5-10	30	
T1	21	1	22-Jun	SESA	1	FD			1		30s	NE, 5-10	30	
T1	21	1	22-Jun	STSA	1	FD			1		30s	NE, 5-10	30	
T1	8	1	22-Jun	STSA	1	INC			1		30s	NE, 5-10	30	
T1	11	1	22-Jun	BBSA	1	INC		1	1		30s	NE, 5-10	30	
T1	11	1	22-Jun	LALO	1	INC		1	1		30s	NE, 5-10	30	
T10	13	1	20-Jun	LALO	1	DI	1		1		35-40	W, 5	100	
T10	16	1	20-Jun	SESA	1	ST			1		35-40	W, 5	100	
T10	19	1	20-Jun	LALO	1	INC		1	1		35-40	W, 5	100	
T10	19	1	20-Jun	LALO	1	FD	1		1		35-40	W, 5	100	
T10	23	1	20-Jun	LALO	1	FD		1	1		35-40	W, 5	100	
T10	32	1	20-Jun	LALO	1	DI	1		1		35-40	W, 5	100	
T10	33	1	20-Jun	LALO	1	INC		1	1		35-40	W, 5	100	
T10	38	1	20-Jun	LALO	2	FD	1	1	2		35-40	W, 5	100	
T10	22	1	20-Jun	PESA	1	FLU		1	1		35-40	W, 5	100	
T10	22	1	20-Jun	LALO	1	ST	1		1		35-40	W, 5	100	
T10	8	1	20-Jun	PESA	1	FD	1		1		35-40	W, 5	100	
T10	8	1	20-Jun	PESA	1	FD		1	1		35-40	W, 5	100	
T10	4	1	20-Jun	LALO	1	INC		1	1		35-40	W, 5	100	
T11	6	1	20-Jun	LALO	1	DI	1		1		40s	W, 5	90	
T11	37	1	20-Jun	PESA	1	DI	1		1		40s	W, 5	90	
T11	4	1	20-Jun	SESA	1	FD			1		40s	W, 5	90	
T11	3	1	20-Jun	PESA	1	INC		1	1		40s	W, 5	90	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
T11	14	1	20-Jun	POJA	1	HU			1		40s	W, 5	90	
T11	14	1	20-Jun	LALO	1	DI	1		1		40s	W, 5	90	
T11	10	1	20-Jun	LALO	1	FD		1	1		40s	W, 5	90	
T11	12	1	20-Jun	PESA	1	INC		1	1		40s	W, 5	90	
T11	24	1	20-Jun	PESA	1	INC		1	1		40s	W, 5	90	
T11	17	1	20-Jun	LALO	1	INC		1	1		40s	W, 5	90	
T11	15	1	20-Jun	SESA	1	FD			1		40s	W, 5	90	
T11	39	1	20-Jun	LALO	2	DI	2		2		40s	W, 5	90	
T11	37	1	20-Jun	LALO	1	FD		1	1		40s	W, 5	90	
T11	35	1	20-Jun	SESA	1	INC			1		40s	W, 5	90	
T11	24	1	20-Jun	LALO	2	DI	2		2		40s	W, 5	90	
T11	26	1	20-Jun	PESA	1	FD	1		1		40s	W, 5	90	
T12	6	1	12-Jun	RUTU	1	ST			1		45	W, 3	5	Snow cover <5%.
T12	14	1	12-Jun	SESA	2	FD			2		45	W, 3	5	
T12	14	1	12-Jun	LALO	1	INC		1	1		45	W, 3	5	
T12	14	1	12-Jun	LALO	1	AL	1		1		45	W, 3	5	
T12	16	1	12-Jun	LALO	1	FD		1	1		45	W, 3	5	
T12	16	1	12-Jun	SESA	1	FD			1		45	W, 3	5	
T12	27	1	12-Jun	LTDU	2	SW	1	1	2		45	W, 3	5	
T12	27	1	12-Jun	PESA	1	FD		1	1		45	W, 3	5	
T12	31	1	12-Jun	DUNL	1	FD			1		45	W, 3	5	
T12	31	1	12-Jun	LALO	1	DI	1		1		45	W, 3	5	
T12	32	1	12-Jun	PESA	1	FD		1	1		45	W, 3	5	
T12	34	1	12-Jun	PESA	1	ST	1		1		45	W, 3	5	
T12	34	1	12-Jun	POJA	1	RE			1		45	W, 3	5	
T12	36	1	12-Jun	LALO	2	DI	2		2		45	W, 3	5	
T12	39	1	12-Jun	LALO	1	INC		1	1		45	W, 3	5	
T12	37	1	12-Jun	DUNL	1	INC			1		45	W, 3	5	
T12	29	1	12-Jun	PESA	2	FD	1	1	2		45	W, 3	5	
T12	25	1	12-Jun	DUNL	1	DI			1		45	W, 3	5	
T12	23	1	12-Jun	SESA	1	FD			1		45	W, 3	5	
T12	25	1	12-Jun	POJA	1	HU			1		45	W, 3	5	
T12	23	1	12-Jun	POJA	1	RE			1		45	W, 3	5	
T12	19	1	12-Jun	SESA	2	FD			2		45	W, 3	5	
T12	19	1	12-Jun	WRSA	4	FD			4		45	W, 3	5	
T12	19	1	12-Jun	WRSA	2	DI			2		45	W, 3	5	
T12		1	12-Jun	SESA	2	FD			2		45	W, 3	5	
T12		1	12-Jun	LALO	1	ST			1		45	W, 3	5	
T12		1	12-Jun	KIEI	2	RE	1	1	2		45	W, 3	5	
T13	37	1	12-Jun	LALO	1	INC		1	1		55	NW, 1-3	40	5% snow cover concentrated mainly in grids 8, 9.
T13	27	1	12-Jun	LALO	1	ST	1		1		55	NW, 1-3	40	
T13	25	1	12-Jun	PESA	1	DI	1		1		55	NW, 1-3	40	
T13	31	1	12-Jun	LALO	1	U	1		1		55	NW, 1-3	40	
T13	27	1	12-Jun	LALO	1	INC		1	1		55	NW, 1-3	40	
T13	26	1	12-Jun	LALO	1	DI	1		1		55	NW, 1-3	40	
T13	26	1	12-Jun	LALO	1	FD		1	1		55	NW, 1-3	40	
T13	6	1	12-Jun	LALO	1	INC		1	1		55	NW, 1-3	40	
T14	40	1	17-Jun	LALO	1	DI	1		1		45	WNW, 3	90	
T14	37	1	17-Jun	SESA	3	FD			3		45	WNW, 3	90	
T14	37	1	17-Jun	LTDU	3	LD	1	2	3		45	WNW, 3	90	
T14	35	1	17-Jun	DUNL	2	CP	1	1	2		45	WNW, 3	90	
T14	38	1	17-Jun	LALO	1	FD		1	1		45	WNW, 3	90	
T14	40	1	17-Jun	WIPT	1	DI	1		1		45	WNW, 3	90	
T14	36	1	17-Jun	LALO	1	DI	1		1		45	WNW, 3	90	
T14	31	1	17-Jun	KIEI	3	SW	1	2	3		45	WNW, 3	90	
T14	32	1	17-Jun	SESA	1	FD			1		45	WNW, 3	90	
T14	30	1	17-Jun	LALO	1	FD	1		1		45	WNW, 3	90	
T14	28	1	17-Jun	LTDU	2	SW	1	1	2		45	WNW, 3	90	
T14	28	1	17-Jun	LALO	3	FD	2	1	3		45	WNW, 3	90	
T14	23	1	17-Jun	SESA	1	FD			1		45	WNW, 3	90	
T14	2	1	17-Jun	PESA	1	DI	1		1		45	WNW, 3	90	
T14	7	1	17-Jun	PESA	1	FLY	1		1		45	WNW, 3	90	
T14	7	1	17-Jun	LALO	1	FD	1		1		45	WNW, 3	90	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
T14	3	1	17-Jun	PAJA	1	HU			1		45	WNW, 3	90	
T14	13	1	17-Jun	RNPB	3	FLY			3		45	WNW, 3	90	
T14	15	1	17-Jun	PESA	1	ST	1		1		45	WNW, 3	90	
T14	20	1	17-Jun	PAJA	1	HU			1		45	WNW, 3	90	
T14	8	1	17-Jun	SESA	1	FD			1		45	WNW, 3	90	
T2	38	1	21-Jun	LALO	1	FL	1		1		35-40	NE, 2-5	80	
T2	36	1	21-Jun	COEI	1	ST		1	1		35-40	NE, 2-5	80	
T2	34	1	21-Jun	PESA	1	ST		1	1		35-40	NE, 2-5	80	
T2	31	1	21-Jun	LALO	1	DI	1		1		35-40	NE, 2-5	80	
T2	32	1	21-Jun	SESA	1	FD			1		35-40	NE, 2-5	80	
T2	24	1	21-Jun	LALO	1	ST	1		1		35-40	NE, 2-5	80	
T2	22	1	21-Jun	PESA	1	INC		1	1		35-40	NE, 2-5	80	
T2	27	1	21-Jun	LALO	1	INC		1	1		35-40	NE, 2-5	80	
T2	37	1	21-Jun	PAJA	5	HU			5		35-40	NE, 2-5	80	
T2	34	1	21-Jun	COEI	1	ST	1		1		35-40	NE, 2-5	80	
T2	11	1	21-Jun	PESA	1	INC		1	1		35-40	NE, 2-5	80	
T2	15	1	21-Jun	STSA	1	ST			1		35-40	NE, 2-5	80	
T2	14	1	21-Jun	LALO	2	FD	1	1	2		35-40	NE, 2-5	80	
T3	17	1	21-Jun	PESA	2	FD		2	2		30s	Light NE	100	
T3	17	1	21-Jun	LALO	1	DI	1		1		30s	Light NE	100	
T3	13	1	21-Jun	LALO	1	FD	1		1		30s	Light NE	100	
T3	4	1	21-Jun	LBDO	1	INC			1		30s	Light NE	100	
T3	9	1	21-Jun	LTJA	1	HU			1		30s	Light NE	100	
T3	22	1	21-Jun	LALO	1	INC		1	1		30s	Light NE	100	
T3	38	1	21-Jun	LBDO	1	FD			1		30s	Light NE	100	
T3	38	1	21-Jun	LALO	1	DI	1		1		30s	Light NE	100	
T4	28	1	21-Jun	PESA	1	DI	1		1		36	N, 5	100	Very wet plot.
T4	23	1	21-Jun	PESA	1	FD	1		1		36	N, 5	100	
T4	11	1	21-Jun	LALO	1	INC		1	1		36	N, 5	100	
T4	18	1	21-Jun	PESA	1	FL		1	1		36	N, 5	100	
T4	16	1	21-Jun	LALO	2	FD	1	1	2		36	N, 5	100	
T4	12	1	21-Jun	LALO	2	FD	2		2		36	N, 5	100	
T5	39	1	22-Jun	SESA	1	DI			1		46	NW, 10	30	
T5	37	1	22-Jun	PESA	1	FLY	1		1		46	NW, 10	30	
T5	31	1	22-Jun	PESA	1	FD	1		1		46	NW, 10	30	
T5	23	1	22-Jun	BBSA	1	INC		1	1		46	NW, 10	30	
T5	21	1	22-Jun	LALO	1	DI	1		1		46	NW, 10	30	
T5	11	1	22-Jun	LALO	2	DI	2		2		46	NW, 10	30	
T5	1	1	22-Jun	PAJA	1	HU			1		46	NW, 10	30	
T5	4	1	22-Jun	LBDO	1	FD			1		46	NW, 10	30	
T6	16	1	14-Jun	POJA	1	HU			1		50	N, 5-8	10	No snow on plot other than small amount at stream bank in grids 32, 33.
T6	6	1	14-Jun	LALO	1	FD	1		1		50	N, 5-8	10	
T6	8	1	14-Jun	SESA	1	FD			1		50	N, 5-8	10	
T6	6	1	14-Jun	LALO	1	FD		1	1		50	N, 5-8	10	
T6	2	1	14-Jun	PESA	1	ST	1		1		50	N, 5-8	10	
T6	10	1	14-Jun	LALO	1	FLU		1	1		50	N, 5-8	10	
T6	16	1	14-Jun	POJA	1	HU			1		50	N, 5-8	10	
T6	16	1	14-Jun	LALO	1	DI	1		1		50	N, 5-8	10	
T6	17	1	14-Jun	SESA	1	FD			1		50	N, 5-8	10	
T6	15	1	14-Jun	SESA	1	INC			1		50	N, 5-8	10	
T6	15	1	14-Jun	LALO	1	FD	1		1		50	N, 5-8	10	
T6	37	1	14-Jun	PESA	1	FLU		1	1		50	N, 5-8	10	
T6	31	1	14-Jun	SESA	1	FD			1		50	N, 5-8	10	
T6	22	1	14-Jun	PESA	1	DI	1		1		50	N, 5-8	10	
T6	21	1	14-Jun	PESA	1	INC		1	1		50	N, 5-8	10	
T6	21	1	14-Jun	DUNL	2	FD			2		50	N, 5-8	10	
T6	37	1	14-Jun	POJA	1	HU			1		50	N, 5-8	10	
T7	17	1	14-Jun	LALO	1	ST	1		1		45-50	NE, 5-10	5	No snow on plot.
T7	7	1	14-Jun	PESA	1	DI	1		1		45-50	NE, 5-10	5	
T7	7	1	14-Jun	PESA	1	FD		1	1		45-50	NE, 5-10	5	
T7	5	1	14-Jun	SESA	2	FD			2		45-50	NE, 5-10	5	
T7	3	1	14-Jun	LALO	1	FLY	1		1		45-50	NE, 5-10	5	
T7	5	1	14-Jun	SESA	1	INC			1		45-50	NE, 5-10	5	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
T7	5	1	14-Jun	LALO	1	INC		1	1		45-50	NE, 5-10	5	
T7	1	1	14-Jun	LALO	1	DI	1		1		45-50	NE, 5-10	5	
T7	4	1	14-Jun	SESA	1	FD			1		45-50	NE, 5-10	5	
T7	14	1	14-Jun	BBSA	1	FD			1		45-50	NE, 5-10	5	
T7	26	1	14-Jun	SESA	1	FD			1		45-50	NE, 5-10	5	
T7	28	1	14-Jun	AGPL	1	ST			1		45-50	NE, 5-10	5	
T7	28	1	14-Jun	PESA	1	FD		1	1		45-50	NE, 5-10	5	
T7	30	1	14-Jun	LALO	1	DI	1		1		45-50	NE, 5-10	5	
T7	38	1	14-Jun	DUNL	1	FD			1		45-50	NE, 5-10	5	
T7	38	1	14-Jun	SESA	1	LND			1		45-50	NE, 5-10	5	
T7	35	1	14-Jun	PESA	1	ST			1		45-50	NE, 5-10	5	
T7	29	1	14-Jun	LALO	1	DI	1		1		45-50	NE, 5-10	5	
T7	25	1	14-Jun	SESA	2	FLU			2		45-50	NE, 5-10	5	
T8	2	1	12-Jun	LALO	1	DI	1		1		45-50	WNW, 3	5	Approx. 5% snow cover.
T8	10	1	12-Jun	SEOW	1	HU			1		45-50	WNW, 3	5	
T8	8	1	12-Jun	DUNL	2	FD			2		45-50	WNW, 3	5	
T8	10	1	12-Jun	PESA	2	DI			2		45-50	WNW, 3	5	
T8	10	1	12-Jun	LALO	2	FD	1	1	2		45-50	WNW, 3	5	
T8	10	1	12-Jun	BBSA	1	FD			1		45-50	WNW, 3	5	
T8	14	1	12-Jun	LALO	2	DI	2		2		45-50	WNW, 3	5	
T8	18	1	12-Jun	SESA	1	FD			1		45-50	WNW, 3	5	
T8	30	1	12-Jun	PESA	1	FD	1		1		45-50	WNW, 3	5	
T8	30	1	12-Jun	LALO	2	FD	1	1	2		45-50	WNW, 3	5	
T8	35	1	12-Jun	PESA	1	FD	1		1		45-50	WNW, 3	5	
T8	29	1	12-Jun	PESA	1	DI	1		1		45-50	WNW, 3	5	
T8	29	1	12-Jun	DUNL	1	INC			1		45-50	WNW, 3	5	
T8	19	1	12-Jun	LALO	2	FD	1	1	2		45-50	WNW, 3	5	
T8	17	1	12-Jun	PESA	1	DI	1		1		45-50	WNW, 3	5	
T8		1	12-Jun	PESA	1	FD		1	1		45-50	WNW, 3	5	
T8	17	1	12-Jun	LALO	1	INC		1	1		45-50	WNW, 3	5	
T8		1	12-Jun	LALO	1	U	1		1		45-50	WNW, 3	5	
T8	7	1	12-Jun	LALO	1	FD	1		1		45-50	WNW, 3	5	
T9	38	1	17-Jun	LALO	1	DI	1		1		40s	NE, <5	85	Some snow along creek in grids 37, 39.
T9	33	1	17-Jun	LALO	1	INC		1	1		40s	NE, <5	85	
T9	33	1	17-Jun	LALO	2	FD	2		2		40s	NE, <5	85	
T9	23	1	17-Jun	PESA	1	FD		1	1		40s	NE, <5	85	
T9	23	1	17-Jun	SESA	1	FD			1		40s	NE, <5	85	
T9	21	1	17-Jun	SESA	1	INC			1		40s	NE, <5	85	
T9	19	1	17-Jun	LALO	1	INC		1	1		40s	NE, <5	85	
T9	16	1	17-Jun	AGPL	2	FD			2		40s	NE, <5	85	
T9	13	1	17-Jun	SESA	1	FD			1		40s	NE, <5	85	
T9	11	1	17-Jun	PESA	1	DI	1		1		40s	NE, <5	85	
T9	11	1	17-Jun	PESA	1	FD		1	1		40s	NE, <5	85	
T9	7	1	17-Jun	DUNL	1	DI			1		40s	NE, <5	85	
T9	14	1	17-Jun	SESA	1	INC			1		40s	NE, <5	85	
T9	8	1	17-Jun	DUNL	1	INC			1		40s	NE, <5	85	
T9	3	1	17-Jun	ROPT	1	ST	1		1		40s	NE, <5	85	
T9	3	1	17-Jun	PESA	1	DI	1		1		40s	NE, <5	85	
T9	18	1	17-Jun	DUNL	2	FD			2		40s	NE, <5	85	
T9	22	1	17-Jun	LALO	1	DI	1		1		40s	NE, <5	85	
T9	22	1	17-Jun	PESA	1	WA		1	1		40s	NE, <5	85	
T9	38	1	17-Jun	LALO	1	INC		1	1		40s	NE, <5	85	
R1	28	2	4-Jul	RNPH	1	INC	1		1		30s	NE, 5-10	100	
R1	33	2	4-Jul	REPH	1	INC	1		1		30s	NE, 5-10	100	
R1	9	2	4-Jul	PESA	1	INC		1	1		30s	NE, 5-10	100	
R1	4	2	4-Jul	SEOW	1	HU			1		30s	NE, 5-10	100	
R1	16	2	4-Jul	LALO	2	FY	1	1	2		30s	NE, 5-10	100	
R1	8	2	4-Jul	LALO	1	FD		1	1		30s	NE, 5-10	100	
R1	14	2	4-Jul	REPH	1	AL	1		1		30s	NE, 5-10	100	
R1	26	2	4-Jul	LALO	1	FD		1	1		30s	NE, 5-10	100	
R1	25	2	4-Jul	LBDO	1	INC			1		30s	NE, 5-10	100	
R1	40	2	4-Jul	LALO	3	FD	1	2	3		30s	NE, 5-10	100	
R1	11	2	4-Jul	LALO	1	FD	1		1		30s	NE, 5-10	100	
R10	15	2	25-Jun	PESA	1	INC		1	1		40	NE, 15-20	100	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
R10	18	2	25-Jun	PESA	1	INC		1	1		40	NE, 15-20	100	
R10	12	2	25-Jun	LALO	1	ST	1		1		40	NE, 15-20	100	
R10	2	2	25-Jun	LALO	1	ST	1		1		40	NE, 15-20	100	
R10	2	2	25-Jun	SESA	1	FD			1		40	NE, 15-20	100	
R10	37	2	25-Jun	LALO	1	FLY		1	1		40	NE, 15-20	100	
R10	32	2	25-Jun	LALO	1	FLY		1	1		40	NE, 15-20	100	
R10	26	2	25-Jun	SESA	1	INC			1		40	NE, 15-20	100	
R10	23	2	25-Jun	LALO	1	DI	1		1		40	NE, 15-20	100	
R11	17	2	5-Jul	SESA	1	ST			1		38-40	N, 1-3	100	Light snow from last night beginning to melt.
R11	21	2	5-Jul	LALO	1	INC		1	1		38-40	N, 1-3	100	
R11	28	2	5-Jul	ROPT	1	WA	1		1		38-40	N, 1-3	100	
R11	27	2	5-Jul	LALO	1	ST	1		1		38-40	N, 1-3	100	
R11	34	2	5-Jul	LALO	1	ST	1		1		38-40	N, 1-3	100	
R11	34	2	5-Jul	LALO	1	FLY		1	1		38-40	N, 1-3	100	
R11	33	2	5-Jul	LALO	1	FLY	1		1		38-40	N, 1-3	100	
R11	30	2	5-Jul	PESA	1	INC		1	1		38-40	N, 1-3	100	
R11	34	2	5-Jul	AGPL	1	FD			1		38-40	N, 1-3	100	
R11	11	2	5-Jul	LALO	1	INC		1	1		38-40	N, 1-3	100	
R11	5	2	5-Jul	LALO	1	FY		1	1		38-40	N, 1-3	100	
R11	4	2	5-Jul	LALO	1	ST	1		1		38-40	N, 1-3	100	
R12	2	2	25-Jun	LALO	1	DI	1		1		45	NE, 10-15	5	
R12	1	2	25-Jun	SESA	1	INC			1		45	NE, 10-15	5	
R12	13	2	25-Jun	PESA	1	U			1		45	NE, 10-15	5	
R12	38	2	25-Jun	LALO	1	DI	1		1		45	NE, 10-15	5	
R12	35	2	25-Jun	AGPL	1	FD	1		1		45	NE, 10-15	5	
R12	29	2	25-Jun	PESA	1	FD		1	1		45	NE, 10-15	5	
R12	18	2	25-Jun	PESA	1	INC		1	1		45	NE, 10-15	5	
R12	33	2	25-Jun	PAJA	2	HU			2		45	NE, 10-15	5	
R13	12	2	26-Jun	LALO	1	FLY	1		1		45	E, 5-10	65	
R13	16	2	26-Jun	PESA	1	INC		1	1		45	E, 5-10	65	
R13	20	2	26-Jun	LALO	1	FD	1		1		45	E, 5-10	65	
R13	19	2	26-Jun	PESA	1	FD		1	1		45	E, 5-10	65	
R13	9	2	26-Jun	SESA	1	INC		1	1		45	E, 5-10	65	
R13	31	2	26-Jun	LALO	1	INC		1	1		45	E, 5-10	65	
R13	27	2	26-Jun	LALO	1	DI	1		1		45	E, 5-10	65	
R13	25	2	26-Jun	SESA	1	INC			1		45	E, 5-10	65	
R13	21	2	26-Jun	REPH	1	INC	1		1		45	E, 5-10	65	
R14	5	2	1-Jul	PESA	1	INC		1	1		40-42	E, 5-10	10	
R14	27	2	1-Jul	SESA	1	INC			1		40-42	E, 5-10	10	
R14	32	2	1-Jul	SESA	1	INC			1		40-42	E, 5-10	10	
R14	2	2	1-Jul	LALO	2	DI	2		2		40-42	E, 5-10	10	
R14	5	2	1-Jul	AGPL	1	INC			1		40-42	E, 5-10	10	
R14	3	2	1-Jul	SESA	1	INC			1		40-42	E, 5-10	10	
R14	5	2	1-Jul	SESA	1	ST			1		40-42	E, 5-10	10	
R14	7	2	1-Jul	LALO	1	FLY			1		40-42	E, 5-10	10	
R14	14	2	1-Jul	LALO	1	INC		1	1		40-42	E, 5-10	10	
R14	16	2	1-Jul	AGPL	1	FD			1		40-42	E, 5-10	10	
R14	17	2	1-Jul	SESA	1	INC			1		40-42	E, 5-10	10	
R14	7	2	1-Jul	PAJA	2	HU			2		40-42	E, 5-10	10	
R14	2	2	1-Jul	LALO	1	FLY	1		1		40-42	E, 5-10	10	
R14	31	2	1-Jul	LALO	1	DI	1		1		40-42	E, 5-10	10	
R14	32	2	1-Jul	BBSA	1	INC		1	1		40-42	E, 5-10	10	
R14	22	2	1-Jul	SESA	1	ST			1		40-42	E, 5-10	10	
R14	22	2	1-Jul	LALO	1	ST	1		1		40-42	E, 5-10	10	
R14	22	2	1-Jul	SESA	1	INC			1		40-42	E, 5-10	10	
R14	35	2	1-Jul	LALO	1	DI	1		1		40-42	E, 5-10	10	
R2	15	2	4-Jul	ROPT	1	INC		1	1		35	N, 8-12	100	
R2	40	2	4-Jul	LALO	1	FLY		1	1		35	N, 8-12	100	
R2	40	2	4-Jul	LALO	1	FLY	1		1		35	N, 8-12	100	
R2	25	2	4-Jul	LALO	1	FLY	1		1		35	N, 8-12	100	
R2	20	2	4-Jul	LALO	2	ST	2		2		35	N, 8-12	100	
R2	16	2	4-Jul	LALO	1	FY		1	1		35	N, 8-12	100	
R2	8	2	4-Jul	PESA	1	INC		1	1		35	N, 8-12	100	
R2	19	2	4-Jul	LBDO	1	FLY			1		35	N, 8-12	100	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
R2	2	2	4-Jul	PESA	1	FD		1	1		35	N, 8-12	100	
R3	28	2	4-Jul	AGPL	1	FLY			1		40-45	N, 5	100	Slight precipitation, standing water in troughs only.
R3	28	2	4-Jul	PESA	1	INC		1	1		40-45	N, 5	100	
R3	26	2	4-Jul	PESA	1	INC		1	1		40-45	N, 5	100	
R3	28	2	4-Jul	LALO	1	FD	1		1		40-45	N, 5	100	
R3	21	2	4-Jul	LALO	1	FD		1	1		40-45	N, 5	100	
R3	18	2	4-Jul	LALO	1	INC		1	1		40-45	N, 5	100	
R3	4	2	4-Jul	PESA	1	FLY		1	1		40-45	N, 5	100	
R4	4	2	26-Jun	ROPT	1	ST	1		1		48	W, 2	90	
R4	18	2	26-Jun	LALO	1	DI	1		1		48	W, 2	90	
R4	25	2	26-Jun	LALO	1	INC		1	1		48	W, 2	90	
R4	23	2	26-Jun	PAJA	1	HU			1		48	W, 2	90	
R4	23	2	26-Jun	LTJA	1	HU			1		48	W, 2	90	
R4	28	2	26-Jun	LALO	1	DI	1		1		48	W, 2	90	
R5	14	2	26-Jun	LALO	1	FY		1	1		50	NE, Light	30	Wet plot.
R5	39	2	26-Jun	KIEI	1	INC		1	1		50	NE, Light	30	
R5	20	2	26-Jun	LALO	1	DI	1		1		50	NE, Light	30	
R5	40	2	26-Jun	LBDO	1	FD			1		50	NE, Light	30	
R5	31	2	26-Jun	LALO	1	FD	1		1		50	NE, Light	30	
R5	1	2	26-Jun	LALO	1	INC		1	1		50	NE, Light	30	
R6	25	2	1-Jul	SESA	1	INC			1		40s	E, 10	<10	
R6	16	2	1-Jul	SESA	1	FD			1		40s	E, 10	<10	
R6	17	2	1-Jul	ROPT	1	ST	1		1		40s	E, 10	<10	
R6	10	2	1-Jul	PESA	1	INC		1	1		40s	E, 10	<10	
R6	38	2	1-Jul	LALO	3	FD	1	2	3		40s	E, 10	<10	
R6	34	2	1-Jul	LALO	1	DI	1		1		40s	E, 10	<10	
R6	26	2	1-Jul	LALO	2	FD	1	1	2		40s	E, 10	<10	
R7	18	2	1-Jul	SESA	1	INC			1		40	E, 5-8	10	
R7	21	2	1-Jul	SESA	1	INC			1		40	E, 5-8	10	
R7	21	2	1-Jul	SESA	1	AL			1		40	E, 5-8	10	
R7	25	2	1-Jul	LALO	1	FLY	1		1		40	E, 5-8	10	
R7	23	2	1-Jul	LALO	1	FD	1		1		40	E, 5-8	10	
R7	25	2	1-Jul	SESA	2	FD			2		40	E, 5-8	10	
R7	25	2	1-Jul	LALO	1	FD	1		1		40	E, 5-8	10	
R7	29	2	1-Jul	CAGO	1	INC			1		40	E, 5-8	10	
R7	34	2	1-Jul	LALO	1	INC		1	1		40	E, 5-8	10	
R7	40	2	1-Jul	LALO	3	FD	2	1	3		40	E, 5-8	10	
R7	34	2	1-Jul	SESA	1	INC			1		40	E, 5-8	10	
R7	34	2	1-Jul	LALO	1	FD	1		1		40	E, 5-8	10	
R7	26	2	1-Jul	LALO	1	PR		1	1		40	E, 5-8	10	
R7	22	2	1-Jul	LALO	1	DI	1		1		40	E, 5-8	10	
R7	14	2	1-Jul	BBSA	1	INC			1		40	E, 5-8	10	
R7	6	2	1-Jul	LALO	1	INC		1	1		40	E, 5-8	10	
R7	4	2	1-Jul	LALO	2	FD	1	1	2		40	E, 5-8	10	
R7	19	2	1-Jul	LALO	1	DI	1		1		40	E, 5-8	10	
R8	1	2	25-Jun	LALO	1	DI	1		1		Low 40s	NE, 5-10	>10	
R8	2	2	25-Jun	LALO	1	DI	1		1		Low 40s	NE, 5-10	>10	
R8	3	2	25-Jun	PESA	1	FD		1	1		Low 40s	NE, 5-10	>10	
R8	11	2	25-Jun	LALO	1	DI	1		1		Low 40s	NE, 5-10	>10	
R8	13	2	25-Jun	LALO	1	DI	1		1		Low 40s	NE, 5-10	>10	
R8	12	2	25-Jun	PESA	1	FD		1	1		Low 40s	NE, 5-10	>10	
R8	29	2	25-Jun	LALO	2	DI	2		2		Low 40s	NE, 5-10	>10	
R8	31	2	25-Jun	WIPT	2	ST	1	1	2		Low 40s	NE, 5-10	>10	
R8	14	2	25-Jun	PAJA	1	HU			1		Low 40s	NE, 5-10	>10	
R9	36	2	5-Jul	LALO	1	FY		1	1		Low 30s	NE, Light	100	Fresh snow on ground.
R9	28	2	5-Jul	LALO	3	FD	3		3		Low 30s	NE, Light	100	
R9	25	2	5-Jul	SESA	2	DI			2		Low 30s	NE, Light	100	
R9	37	2	5-Jul	LALO	1	FD	1		1		Low 30s	NE, Light	100	
R9	13	2	5-Jul	LALO	1	FD		1	1		Low 30s	NE, Light	100	
R9	9	2	5-Jul	PESA	1	INC		1	1		Low 30s	NE, Light	100	
R9	11	2	5-Jul	LALO	1	ST			1		Low 30s	NE, Light	100	
T1	27	2	2-Jul	LALO	1	INC		1	1		45-50	E, Light	15	
T1	23	2	2-Jul	DUNL	1	ST			1		45-50	E, Light	15	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
T1	21	2	2-Jul	PESA	1	ST		1	1		45-50	E, Light	15	
T1	26	2	2-Jul	LALO	1	INC		1	1		45-50	E, Light	15	
T1	28	2	2-Jul	LALO	1	FD	1		1		45-50	E, Light	15	
T1	28	2	2-Jul	SESA	1	FD			1		45-50	E, Light	15	
T1	16	2	2-Jul	KIEI	1	INC		1	1		45-50	E, Light	15	
T1	39	2	2-Jul	LALO	2	FD	2		2		45-50	E, Light	15	
T1	39	2	2-Jul	PAJA	1	HU			1		45-50	E, Light	15	
T1	19	2	2-Jul	PESA	1	FD		1	1		45-50	E, Light	15	
T10	19	2	29-Jun	LALO	2	FY	1	1	2		40	ENE, 5-10	100	
T10	33	2	29-Jun	LALO	1	FY		1	1		40	ENE, 5-10	100	
T10	39	2	29-Jun	LALO	2	FY	1	1	2		40	ENE, 5-10	100	
T10	27	2	29-Jun	LALO	1	DI	1		1		40	ENE, 5-10	100	
T10	25	2	29-Jun	LALO	1	INC		1	1		40	ENE, 5-10	100	
T10	25	2	29-Jun	HOLA	1	FD			1		40	ENE, 5-10	100	
T10	U	2	29-Jun	PAJA	1	HU			1		40	ENE, 5-10	100	
T10	23	2	29-Jun	LALO	1	DI	1		1		40	ENE, 5-10	100	
T10	7	2	29-Jun	LALO	1	INC		1	1		40	ENE, 5-10	100	
T10	9	2	29-Jun	LALO	1	DI	1		1		40	ENE, 5-10	100	
T10	1	2	29-Jun	LALO	1	DI	1		1		40	ENE, 5-10	100	
T10	14	2	29-Jun	LALO	1	FD	1		1		40	ENE, 5-10	100	
T11	35	2	30-Jun	SESA	1	INC			1		40	NE, 2-4	100	
T11	22	2	30-Jun	PESA	1	INC		1	1		40	NE, 2-4	100	
T11	39	2	30-Jun	LALO	1	FD		1	1		40	NE, 2-4	100	
T11	38	2	30-Jun	LALO	1	INC		1	1		40	NE, 2-4	100	
T11	37	2	30-Jun	LALO	1	DI	1		1		40	NE, 2-4	100	
T11	34	2	30-Jun	LALO	1	DI	1		1		40	NE, 2-4	100	
T11	30	2	30-Jun	LALO	1	FD		1	1		40	NE, 2-4	100	
T11	26	2	30-Jun	SESA	1	FD			1		40	NE, 2-4	100	
T11	26	2	30-Jun	LALO	2	FD	1	1	2		40	NE, 2-4	100	
T11	22	2	30-Jun	DUNL	2	LD			2		40	NE, 2-4	100	
T11	21	2	30-Jun	LALO	1	FD		1	1		40	NE, 2-4	100	
T11	21	2	30-Jun	LALO	1	DI	1		1		40	NE, 2-4	100	
T11	1	2	30-Jun	LALO	1	DI	1		1		40	NE, 2-4	100	
T11	13	2	30-Jun	LALO	3	FD	2	1	3		40	NE, 2-4	100	
T11	11	2	30-Jun	LALO	1	INC		1	1		40	NE, 2-4	100	
T11	20	2	30-Jun	LALO	1	DI	1		1		40	NE, 2-4	100	
T11	20	2	30-Jun	LALO	2	FD	2		2		40	NE, 2-4	100	
T12	39	2	24-Jun	LALO	1	INC		1	1		30s	ENE, 10-15	0	
T12	37	2	24-Jun	LALO	1	DI	1		1		30s	ENE, 10-15	0	
T12	33	2	24-Jun	LALO	1	DI	1		1		30s	ENE, 10-15	0	
T12	31	2	24-Jun	DUNL	1	FD			1		30s	ENE, 10-15	0	
T12	2	2	24-Jun	LALO	1	DI	1		1		30s	ENE, 10-15	0	
T12	36	2	24-Jun	SESA	1	INC			1		30s	ENE, 10-15	0	
T13	37	2	24-Jun	LALO	1	DI	1		1		40-43	NE, 15-18	0	
T13	33	2	24-Jun	LALO	1	DI	1		1		40-43	NE, 15-18	0	
T13	27	2	24-Jun	LALO	1	INC		1	1		40-43	NE, 15-18	0	
T13	22	2	24-Jun	LALO	1	INC		1	1		40-43	NE, 15-18	0	
T13	36	2	24-Jun	PESA	1	FD		1	1		40-43	NE, 15-18	0	
T13	38	2	24-Jun	SESA	1	INC			1		40-43	NE, 15-18	0	
T13	38	2	24-Jun	PESA	1	FD		1	1		40-43	NE, 15-18	0	
T13	8	2	24-Jun	LALO	1	DI	1		1		40-43	NE, 15-18	0	
T13	10	2	24-Jun	DUNL	1	ST			1		40-43	NE, 15-18	0	
T13	17	2	24-Jun	LTDU	2	SW	1	1	2		40-43	NE, 15-18	0	
T13	17	2	24-Jun	PESA	1	ST	1		1		40-43	NE, 15-18	0	
T13	17	2	24-Jun	DUNL	1	FD			1		40-43	NE, 15-18	0	
T13	13	2	24-Jun	LALO	2	FD	1	1	2		40-43	NE, 15-18	0	
T14	40	2	30-Jun	LALO	2	FD	2		2		38-40	NE, 5-7	100	
T14	40	2	30-Jun	LALO	2	FD		2	2		38-40	NE, 5-7	100	
T14	37	2	30-Jun	CAGO	2	WA			2		38-40	NE, 5-7	100	
T14	24	2	30-Jun	PESA	1	ST	1		1		38-40	NE, 5-7	100	
T14	26	2	30-Jun	LALO	1	FD		1	1		38-40	NE, 5-7	100	
T14	22	2	30-Jun	LALO	2	FD	2		2		38-40	NE, 5-7	100	
T14	22	2	30-Jun	LALO	1	FD		1	1		38-40	NE, 5-7	100	
T14	19	2	30-Jun	SESA	1	WA			1		38-40	NE, 5-7	100	
T14	15	2	30-Jun	ROPT	2	ST	1	1	2		38-40	NE, 5-7	100	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
T14	25	2	30-Jun	LALO	1	FD		1	1		38-40	NE, 5-7	100	
T14	1	2	30-Jun	PESA	1	FD		1	1		38-40	NE, 5-7	100	
T14	2	2	30-Jun	LALO	1	FD		1	1		38-40	NE, 5-7	100	
T14	1	2	30-Jun	PESA	1	DI	1		1		38-40	NE, 5-7	100	
T14	2	2	30-Jun	SESA	1	FD			1		38-40	NE, 5-7	100	
T14	11	2	30-Jun	LTDU	2	SW	1	1	2		38-40	NE, 5-7	100	
T14	13	2	30-Jun	NOHA	2	HU			2		38-40	NE, 5-7	100	
T14	14	2	30-Jun	SESA	1	INC			1		38-40	NE, 5-7	100	
T14	4	2	30-Jun	SESA	1	INC			1		38-40	NE, 5-7	100	
T2	22	2	2-Jul	PESA	1	INC		1	1		55	NE, 2-3	0	
T2	32	2	2-Jul	LALO	1	FD		1	1		55	NE, 2-3	0	
T2	22	2	2-Jul	LALO	1	FD		1	1		55	NE, 2-3	0	
T2	24	2	2-Jul	LALO	1	FD	1		1		55	NE, 2-3	0	
T2	17	2	2-Jul	LALO	1	FD	1		1		55	NE, 2-3	0	
T3	39	2	2-Jul	KIEI	1	INC		1	1		50	NE, 4-6	10	
T3	22	2	2-Jul	LALO	1	FD		1	1		50	NE, 4-6	10	
T3	24	2	2-Jul	LALO	1	ST	1		1		50	NE, 4-6	10	
T3	27	2	2-Jul	PESA	1	FD		1	1		50	NE, 4-6	10	
T4	36	2	3-Jul	LALO	1	FD		1	1		60	0	2	
T4	36	2	3-Jul	LALO	1	DI	1		1		60	0	2	
T4	31	2	3-Jul	PESA	1	FLY		1	1		60	0	2	
T4	3	2	3-Jul	LALO	3	FLY	3		3		60	0	2	
T4	14	2	3-Jul	LALO	1	FLY	1		1		60	0	2	
T4	17	2	3-Jul	LALO	1	INC		1	1		60	0	2	
T4	20	2	3-Jul	PESA	1	LND		1	1		60	0	2	
T5	22	2	3-Jul	STSA	1	FL			1		60	N, 1-2	5	
T5	27	2	3-Jul	LALO	2	FD		2	2		60	N, 1-2	5	
T5	22	2	3-Jul	LALO	1	FD		1	1		60	N, 1-2	5	
T5	26	2	3-Jul	LALO	2	FD	1			1	60	N, 1-2	5	
T5	9	2	3-Jul	LALO	1	FL		1	1		60	N, 1-2	5	
T5	13	2	3-Jul	PAJA	2	HU			2		60	N, 1-2	5	
T6	22	2	29-Jun	PAJA	1	HU			1		40	NE, 5-10	100	
T6	24	2	29-Jun	LALO	1	FD	1		1		40	NE, 5-10	100	
T6	28	2	29-Jun	LALO	1	FD		1	1		40	NE, 5-10	100	
T6	22	2	29-Jun	LALO	1	FD		1	1		40	NE, 5-10	100	
T6	28	2	29-Jun	SESA	1	INC			1		40	NE, 5-10	100	
T6	1	2	29-Jun	LALO	1	DI	1		1		40	NE, 5-10	100	
T6	33	2	29-Jun	LALO	1	DI	1		1		40	NE, 5-10	100	
T6	40	2	29-Jun	LALO	1	FD		1	1		40	NE, 5-10	100	
T6	40	2	29-Jun	LALO	1	INC		1	1		40	NE, 5-10	100	
T6	1	2	29-Jun	DUNL	2	FLU			2		40	NE, 5-10	100	
T6	35	2	29-Jun	PESA	1	INC		1	1		40	NE, 5-10	100	
T6	6	2	29-Jun	LALO	1	ST	1		1		40	NE, 5-10	100	
T6	23	2	29-Jun	LALO	1	FLU		1	1		40	NE, 5-10	100	
T6	21	2	29-Jun	PESA	1	INC		1	1		40	NE, 5-10	100	
T6	20	2	29-Jun	SESA	1	FD			1		40	NE, 5-10	100	
T6	15	2	29-Jun	SESA	1	INC			1		40	NE, 5-10	100	
T6	1	2	29-Jun	SESA	1	FD			1		40	NE, 5-10	100	
T6	1	2	29-Jun	DUNL	1	INC			1		40	NE, 5-10	100	
T6	6	2	29-Jun	LALO	1	FD		1	1		40	NE, 5-10	100	
T6	10	2	29-Jun	DUNL	1	INC			1		40	NE, 5-10	100	
T6	12	2	29-Jun	SESA	1	FD			1		40	NE, 5-10	100	
T7	20	2	29-Jun	LTJA	1	HU			1		40	NE, 5-10	80	Partial fog lifting during survey.
T7	17	2	29-Jun	PESA	1	INC		1	1		40	NE, 5-10	80	
T7	U	2	29-Jun	LALO	1	LND	1		1		40	NE, 5-10	80	
T7	5	2	29-Jun	SESA	1	INC			1		40	NE, 5-10	80	
T7	26	2	29-Jun	BBSA	1	INC			1		40	NE, 5-10	80	
T7	26	2	29-Jun	SESA	1	INC			1		40	NE, 5-10	80	
T7	22	2	29-Jun	LALO	1	DI	1		1		40	NE, 5-10	80	
T7	24	2	29-Jun	DUNL	1	FD			1		40	NE, 5-10	80	
T7	40	2	29-Jun	BBSA	1	FD			1		40	NE, 5-10	80	
T7	40	2	29-Jun	PAJA	2	HU			2		40	NE, 5-10	80	
T7	40	2	29-Jun	SESA	1	AL			1		40	NE, 5-10	80	
T7	4	2	29-Jun	LALO	1	DI			1		40	NE, 5-10	80	

Appendix Table D1. continued

Plot	Grid	Period	Date	Species Code	Number Seen	Behav	Male	Female	Adult	Fledge	Estimated Weather Conditions			Comments
											Temperature (degrees F)	Wind Direction and speed (MPH)	Percent Cloud Cover	
T7	21	2	29-Jun	PAJA	2	HU			2		40	NE, 5-10	80	
T8	38	2	24-Jun	LALO	1	FLY	1		1		45	NE, 20	1	
T8	33	2	24-Jun	PESA	1	FD		1	1		45	NE, 20	1	
T8	29	2	24-Jun	DUNL	1	INC			1		45	NE, 20	1	
T8	17	2	24-Jun	PESA	1	INC		1	1		45	NE, 20	1	
T8	17	2	24-Jun	LALO	1	INC		1	1		45	NE, 20	1	
T8	15	2	24-Jun	LALO	1	DI	1		1		45	NE, 20	1	
T8	7	2	24-Jun	LALO	1	FLY			1		45	NE, 20	1	
T8	7	2	24-Jun	LALO	1	FLU		1	1		45	NE, 20	1	
T8	4	2	24-Jun	PESA	1	FD	1		1		45	NE, 20	1	
T8	2	2	24-Jun	LALO	2	FD	1	1	2		45	NE, 20	1	
T8	2	2	24-Jun	LALO	4	DI	1		4		45	NE, 20	1	
T8	14	2	24-Jun	LALO	1	INC		1	1		45	NE, 20	1	
T8	20	2	24-Jun	LALO	1	INC		1	1		45	NE, 20	1	
T9	38	2	30-Jun	LALO	2	FY	1	1	2		40s	ENE, 5-10	100	
T9	21	2	30-Jun	SESA	1	INC			1		40s	ENE, 5-10	100	
T9	21	2	30-Jun	SESA	1	U			1		40s	ENE, 5-10	100	
T9	14	2	30-Jun	SESA	1	INC			1		40s	ENE, 5-10	100	
T9	8	2	30-Jun	DUNL	1	INC			1		40s	ENE, 5-10	100	
T9	38	2	30-Jun	LALO	1	DI	1		1		40s	ENE, 5-10	100	
T9	28	2	30-Jun	LALO	1	FD		1	1		40s	ENE, 5-10	100	
T9	27	2	30-Jun	PESA	1	INC		1	1		40s	ENE, 5-10	100	
T9	21	2	30-Jun	LALO	1	INC		1	1		40s	ENE, 5-10	100	
T9	18	2	30-Jun	PESA	1	INC		1	1		40s	ENE, 5-10	100	
T9	16	2	30-Jun	LALO	1	FLU	1		1		40s	ENE, 5-10	100	
T9	16	2	30-Jun	LALO	1	INC		1	1		40s	ENE, 5-10	100	
T9	12	2	30-Jun	ROPT	1	ST	1		1		40s	ENE, 5-10	100	
T9	3	2	30-Jun	PESA	1	INC		1	1		40s	ENE, 5-10	100	
T9	17	2	30-Jun	LTJA	1	HU			1		40s	ENE, 5-10	100	
T9	21	2	30-Jun	LALO	2	DI	2		2		40s	ENE, 5-10	100	