

PROJECT: BREEDING BIRD SURVEYS IN WRANGELL-ST ELIAS NATIONAL PARK AND PRESERVE, 1992

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INTRODUCTION

Historical data is limited for landbirds in Wrangell-St Elias National Park and Preserve (WRST). Laing and Taverner (1927) documented birds along the Chitina River. Shortt (1939) reported birds observed in Yakutat Bay. Fredrica de Laguna (1972) documented historical avifauna described to her by the Yakutat Tlingit. Sage (1975) reported birds observed near Rock and Ptarmigan Lakes. Yocum (1966) documented birds north of and adjacent to WRST, near Tok. Banfield (1953), Stelfox (1972), Hoefs (1973), and Theberge (1974) describe birds of Kluane National Park, adjacent to and east of WRST.

WRST personnel began collecting anecdotal information shortly after the Park was created in 1980. More formal bird surveys were begun in 1989. Two breeding bird survey (BBS) routes (Robbins et al 1966), 1 along the Nabesna Road (99-006) and 1 along the east end of the McCarthy Road (99-005), were established. A third survey route was added along the west end of the McCarthy Road (99-010) in 1990. Three off-road survey routes (Ralph et al 1992), 2 in May Creek and 1 in Chisana, were begun in 1992. All survey routes are run annually.

Objective 1. Document bird species and their seasonal distribution within WRST.

MIGRATION

WRST staff participated in an area wide effort to document spring arrival dates of birds within a 75 mile radius of Glennallen during 1991 and 1992. K Roberson (Alaska Department of Fish & Game, Glennallen, AK) has maintained a database on spring arrival dates of birds in the Copper River Basin since 1971. D Burgess (1992) documented fall migration of birds in Icy Bay near Yakutat.

BREEDING

J Bouton, D Rosenkrans, and K Kozie (WRST, Glennallen, AK) documented birds in the following areas of WRST: Chisana and Gold Hill, Nabesna, May Creek, Green Butte, Huberts Landing, Orange Hill, Bremner River, Nabesna Glacier, and Chicosa airstrip. Golden-crowned sparrows (Zonotrichia atricapilla), which are uncommon in central Alaska (they are more abundant along coastal areas) (Armstrong 1991), were the second most common species documented at Green Butte (J Bouton, pers commun). Blackpoll warblers (Dendroica striata) were a

relatively common species at May Creek. Documentation of all bird observations are maintained in WRST Resource Management files and are entered into the dBase file D:BIRDRECS.DBF.

There were three rare bird sightings during June. J Bouton observed a barn swallow (Hirundo rustica) and its nest at Gold Hill (Nabesna A-2) on June 6, 1992. He also observed a singing adult Brewer's sparrow (Spizella breweri) on June 22, 1992 in low shrubs above tree line, on the hillside northwest of the confluence of Bonanza Creek and the unnamed drainage north of Canyon Creek on Gold Hill (Nabesna A-2). This is the first sighting of a Brewer's sparrow in Alaska, and if confirmed as a breeder would represent a range extension for this species. There is an isolated population of Brewers sparrows that breed to the southeast in adjacent Kluane National Park (M Isleib, American Birds, Juneau, AK, pers commun). Observations to confirm breeding status of this species will be attempted in 1993.

W Weaver (Kenny Lake resident) recovered a dead red-breasted sapsucker (Sphyrapicus ruber) at mile 17.5 of the Edgerton Highway on July 17. It was found behind W. Weaver's house and had died within the last day. The bird was sent to the University of Alaska Museum in Fairbanks.

Objective 2: To monitor long and short term trends of breeding birds in WRST using the Breeding Bird Survey and off road point counts.

There were 3 BBS and 3 off road routes run in WRST in 1992. R Galipeau has run the McCarthy Road E BBS route since 1989 and J Baker has run the McCarthy Road W BBS route since 1990. The Nabesna Road BBS route has had 3 observers, K Mullen in 1989, K Beck in 1990, and B Route in 1991 and 1992. B Route was the observer at all 3 off road point counts which were begun in 1992.

Data from BBS routes are analyzed for regional and national population trends by the US Fish & Wildlife Service at Patuxent, MD. Methodology for analysis of off road point count data is being developed by T Pogson (Alaska Bird Observatory, Fairbanks, AK) and C Handel (US Fish & Wildlife Service, Anchorage, AK). A summary of the 1992 data for WRST is listed in Table 1.

Neotropical migrants, whose numbers have been declining at a significantly faster rate than short distance migrants or permanent residents (Robbins et al 1989), are the recent focus of this monitoring program, but all landbird species (with the exception of most raptors) are monitored using this protocol. "A" species are neotropical migrants with the majority of their winter range south the US/Mexico border and "B" species are neotropical migrants with the majority of their winter range north of the US/Mexico border but some populations winter in Central and South America.

Table 1. Breeding Bird Survey and off road point count route

summaries for WRST from 1989-1992.

Breeding Bird Surveys

1. McCarthy Road West (1)

ROUTE DESCRIPTION YES HABITAT ANALYSIS YES

DATE	OBSERVER	TOTAL SPECIES	NEOTROP A	NEOTROP B	TOTAL INDIVID
6/13/90	Baker	32	13%	25%	303
6/15/91	Baker	32	28%	25%	487
6/13/92	Baker	37	24%	24%	548

SPECIES	1989	1990	1991	1992
Pacific Loon			2	2
Common Loon				2
Trumpeter Swan				6
Green-winged Teal		1		
Mallard			4	
Ring-necked Duck				1
Greater Scaup		2		
Lesser Scaup		2	2	4
Bald Eagle		3		2
Red-tailed Hawk		1	2	
Greater Yellowlegs		4		
Lesser Yellowlegs		1	7	2
Common Snipe		1	5	
Bonapartes Gull				4
Herring Gull		1		4
Glaucous-winged Gull		2		
Arctic Tern				1
Great-horned Owl		1		
Belted Kingfisher				1
Hairy Woodpecker			7	
Downy Woodpecker		1		
Three-toed Woodpecker				1
Olive-sided Flycatcher		2	1	2
Western Wood Peewee		1	2	3
Alder Flycatcher		6	18	20
Violet-green Swallow			6	15
Gray Jay		8	14	22
Black-billed Magpie				1
Common Raven		2	6	2
Black-capped Chickadee			2	
Boreal Chickadee		3	6	5
Red-breasted Nuthatch		1		
Golden-crowned Kinglet		2		
Ruby-crowned Kinglet		2	3	9
Gray-cheeked Thrush			1	
Swainsons Thrush		56	97	115
Hermit Thrush		1		4
Varied Thrush		12	25	19
SPECIES	1989	1990	1991	1992

American Robin	18	21	26
Bohemian Waxwing	2		3
Orange-crowned Warbler		4	12
Myrtle Warbler	39	44	47
Blackpoll Warbler			1
Wilsons Warbler	2	1	6
Northern Waterthrush			1
Savannah Sparrow	6	8	4
Fox Sparrow	5	3	12
Lincolns Sparrow		2	
White-crowned Sparrow	43	41	67
Slate-colored Junco	72	100	97
Rusty Blackbird	3		3
Pine Grosbeak	1	7	
White-winged Crossbill		37	
Common Redpoll		7	22

2. McCarthy Road East (2)

ROUTE DESCRIPTION NO HABITAT ANALYSIS NO

DATE	OBSERVER	TOTAL SPECIES	NEOTROP A	NEOTROP B	TOTAL INDIVID
6/13/89	Galipeau	18	11%	39%	132
6/13/90	Galipeau	17	12%	35%	265
6/13/91	Galipeau	23	13%	22%	347
6/12/92	Galipeau	23	13%	26%	297

SPECIES	1989	1990	1991	1992
Pacific Loon		1	1	
Common Loon	1	1	1	
Trumpeter Swan	2			
American Widgeon				3
Greater Scaup	4			55
Lesser Scaup		2	41	
White-winged Scoter			10	12
Common Goldeneye			2	7
Bald Eagle			1	
Northern Goshawk				1
Willow Ptarmigan			1	
Greater Yellowlegs	6			
Lesser Yellowlegs		1	5	1
Wandering Tattler				3
Common Snipe	3		3	
Red-necked Phalarope			1	
Downy Woodpecker			1	
Hairy Woodpecker				3
Alder Flycatcher	3			
Tree Swallow	10	4		
Violet-green Swallow			10	14
Gray Jay	3	1	3	1
Common Raven	1	1	1	
Boreal Chickadee			4	2
SPECIES	1989	1990	1991	1992

Townsend's Solitaire	2			
Swainson's Thrush	11	39	43	43
Hermit Thrush	1			1
Varied Thrush	10	16	14	5
American Robin	55	5	68	55
Bohemian Waxwing		1		
Orange-crowned Warbler				
Yellow Warbler				2
Myrtle Warbler	50	39	21	25
Blackpoll Warbler				
Wilson's Warbler		2	6	
Savannah Sparrow		6	6	8
Golden-crowned Sparrow				1
White-crowned Sparrow	16	26	48	25
Slate-colored Junco	49	71	56	28
Pine Grosbeak		11		
Rusty Blackbird				1
Common Redpoll	7			

3. Nabesna Road

ROUTE DESCRIPTION YES HABITAT ANALYSIS YES

DATE	OBSERVER	TOTAL SPECIES	NEOTROP A	NEOTROP B	TOTAL INDIVID
6/06/89	Mullen	26	8%	35%	239
6/13/90	Beck	27	11%	33%	321
6/14/91	Route	26	15%	23%	397
6/19/92	Route	25	23%	28%	392

SPECIES	1989	1990	1991	1992
Horned Grebe			1	
Trumpeter Swan	4	4		
Mallard			1	
Northern Pintail	2			
American Widgeon	3	2		
Greater Scaup		9		
Lesser Scaup	2		3	
Scaup				2
Golden Eagle	1			
Willow Ptarmigan	1	3		
Lesser Yellowlegs	1	14	7	3
Upland Sandpiper		2	5	3
Common Snipe	8	7	4	2
Mew Gull	2			4
Herring Gull				
Arctic Tern		1		2
Great-horned Owl			1	
Northern Hawk Owl				1
Hairy Woodpecker			1	
Yellow-shafted Flicker	5	2		2
Olive-sided Flycatcher		11	10	19
Alder Flycatcher			1	3
SPECIES	1989	1990	1991	1992

Tree Swallow	2			3
Gray Jay	23	18	7	13
Black-billed Magpie	5	3	2	2
Common Raven	1	9	3	6
Black-capped Chickadee	2		9	
Boreal Chickadee		2		
American Dipper		1		
Ruby-crowned Kinglet		4	5	10
Gray-cheeked Thrush			11	10
Swainsons Thrush	25	6	31	17
Hermit Thrush	2	6		
Varied Thrush	12	8	15	16
American Robin	54	59	71	64
Bohemian Waxwing		1		
Myrtle Warbler	4	31	14	37
Wilsons Warbler	4	3	13	16
Northern Waterthrush				4
American Tree Sparrow			1	
Savannah Sparrow	1	7	9	10
Fox Sparrow		2		
White-crowned Sparrow	22	54	69	63
Slate-colored Junco	42	52	70	77
White-winged Crossbill			33	
Pine Grosbeak	7			
Common Redpoll	1			4

Off Road Point Counts

1. May Creek 1 (Chititu Trail)

ROUTE DESCRIPTION YES HABITAT ANALYSIS NO

DATE	OBSERVER	TOTAL SPECIES	NEOTROP A	NEOTROP B	TOTAL INDIVID
6/11/92	Route	8	38%	50%	76

SPECIES	1992
Swainsons Thrush	32
0-3 min (<50m/>50m)	28 (13/15)
3-5 min (<50m/>50m)	3 (1/2)
Flyover 3-5 min	1 (0/1)
Varied Thrush	5
0-3 min	5 (2/3)
American Robin	1
0-3	1 (1/0)
Yellow Warbler	1
0-3 min	1 (1/0)

SPECIES 1992

Myrtle Warbler	17
0-3 min	15 (12/3)
3-5 min	2 (2/0)

Blackpoll Warbler	7
0-3 min	7 (7/0)

White-crowned Sparrow	3
0-3 min	2 (1/1)
3-5 min	1 (1/0)

Slate-colored Junco	10
0-3 min	10 (4/6)

2. May Creek 2 (Dan Creek Trail)

ROUTE DESCRIPTION	<u>YES</u>	HABITAT ANALYSIS	<u>NO</u>
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		TOTAL			TOTAL
DATE	OBSERVER	SPECIES	NEOTROP A	NEOTROP B	INDIVID
6/11/92	Route	16	38%	31%	69

SPECIES	1992
Belted Kingfisher	1
0-3 min	1 (1/0)

Hairy Woodpecker	1
3-5 min	1 (1/0)

Olive-sided Flycatcher	2
0-3 min	2 (2/0)

Western Wood Pewee	6
0-3 min	3 (3/0)
3-5 min	3 (1/2)

Ruby-crowned Kinglet	3
0-3 min	2 (1/1)
3-5 min	1 (0/1)

Bank Swallow	1
Flyover 0-3 min	1

Swainsons Thrush	26
0-3 min	25 (10/15)
Flyover 0-3 min	1

Varied Thrush	5
0-3 min	4 (4/0)
3-5 min	1 (0/1)

SPECIES	1992
American Robin	1
0-3 min	1 (1/0)
3-5 min	
Myrtle Warbler	8
0-3 min	7 (6/1)
3-5 min	1 (1/0)
Blackpoll Warbler	4
0-3 min	4 (4/0)
Northern Waterthrush	1
3-5 min	1 (1/0)
White-crowned Sparrow	6
0-3 min	6 (2/4)
Slate-colored Junco	3
0-3 min	2 (2/0)
3-5 min	1 (0/1)
Common Redpoll	1
0-3 min	1 (0/1)

3. Chisana 1 (Alder Lakes Trail)

ROUTE DESCRIPTION	<u>YES</u>	HABITAT ANALYSIS	<u>NO</u>
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DATE	OBSERVER	TOTAL SPECIES	NEOTROP A	NEOTROP B	TOTAL INDIVID
6/13/92	Route	19	11%	32%	97

SPECIES	1992
Greater Scaup	15
0-3 min	15 (14/1)
Bufflehead	2
0-3 min	2 (2/0)
Lesser Yellowlegs	2
0-3 min	2 (2/0)
Mew Gull	1
3-5 min	1 (1/0)
Hairy Woodpecker	1
1-3 min	1 (0/1)
Yellow-shafted Flicker	1
0-3 min	1 (0/1)

SPECIES	1992
Gray Jay	3
0-3 min	2 (1/1)
3-5 min	1 (0/1)
Boreal Chickadee	2
0-3 min	2 (2/0)
Swainsons Thrush	2
3-5 min	2 (1/1)
Varied Thrush	2
0-3 min	2 (1/1)
American Robin	10
0-3 min	7 (2/5)
3-5 min	3 (2/1)
Yellow Warbler	1
0-3 min	1 (1/0)
Myrtle Warbler	2
1-3 min	2 (1/1)
American Tree Sparrow	3
0-3 min	3 (1/2)
Fox Sparrow	1
0-3 min	1 (0/1)
White-crowned Sparrow	12
0-3 min	12 (1/11)
Slate-colored Junco	35
0-3 min	33 (13/20)
3-5 min	2 (2/0)
Common Redpoll	2
Flyover 0-3 min	1
Flyover 3-5 min	1

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