Teslin Lake Bird Observatory Final Report 2008



Prepared by:

Ben Schonewille Teslin Lake Bird Observatory The 2008 operation of the Teslin Lake Bird Observatory was made possible due to support from the following organizations.















Environment Canada

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Cover Photos (all taken by Jukka Jantunen):

First Row (L to R): Sharp-shinned Hawk, Alder Flycatcher, Boreal Chickadee Second Row (L to R): Mountain Chickadee, Nashville Warbler, Yellow Warbler Third Row (L to R): Magnolia Warbler, American Redstart, Common Yellowthroat Fourth Row (L to R): MacGillvary's Warbler, Dark-eyed Junco, Rusty Blackbird

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1.0 Introduction

The Teslin Lake Bird Observatory operated during the spring and fall migration seasons in 2008. The observatory completed its fourth year of operation thanks to financial support from several government and non-government agencies including Environment Yukon, Teslin Renewable Resources Council, Yukon Fish and Wildlife Enhancement Trust Fund, Yukon Bird Club, Ducks Unlimited Canada, Teslin Tlingit Council and EDI Environmental Dynamics Inc.

The goals of the Teslin Lake Bird Observatory are to:

- Continue to gather baseline information on birds and bird migration in the Teslin area including specific studies such as feather collecting for stable isotope analysis and color banding.
- Provide a setting for the public including school groups to learn about birds and bird migration.
- Provide employment and training opportunities for students and volunteers.
- Provide a unique tourist attraction for the community of Teslin.

The banding observatory serves as a method of carrying out research on birds which is shared through an international database. This is due to the possibility of a banded bird being recaptured across international borders. Many of the birds banded at Teslin Lake are highly migratory spending the winter months as far south as Central and South America. In addition to the potential knowledge regarding band recoveries, the observatory also serves to continue gathering baseline data of birds (and their migration) in the Teslin region, and the Yukon as a whole. Due to the large landmass of the territory, and the relatively few advanced birders in the Yukon, there is still a great deal to be learnt regarding the bird life of the Yukon. The observatory serves as a highly valuable research and monitoring project to better understand the distribution of many of the Yukon's bird species, many of which are considered uncommon or rare.

The observatory also plays a role in education as a place where the public, volunteers and students can take part in a unique, community based research project. Across the Yukon (and the world), there are numerous people who have an interest in birds; however, many find it a daunting task to learn the various species. For such people, a visit to the observatory can be extremely rewarding as they often have the opportunity to view a wide variety of bird species up close. Many of these species are very difficult to observe naturally; however, through the use of mist nets, the highly trained individuals working at the observatory's have the ability to identify these species with ease.

2.0 Methods

Methods of data collection and mist netting were based upon those of the Canadian Migration Monitoring Network (CMMN).

2.1 Study Site

During the 2005 season, the observatory was located on the shoreline on Nisutlin Bay; however, issues associated with the site as a suitable study site led to a new site being used in 2006 and 2007. The new site was located on 10 Mile point approximately 10 km northwest of the community of Teslin. The observatory was located in the vegetated riparian zone between Teslin Lake and the Teslin Government Campground.

The vegetation within the site is a mixture featuring a transition from bare gravel lakeshore to shrubs and larger deciduous trees. Also within the site is a small wetland area connected to Teslin Lake which has greatly fluctuating water levels. The area is dominated by willow (*Salix* sp.) and alder (*Alnus* sp.) with some mature white spruce (*Picea glauca*), trembling aspen (*Populus tremuloides*) and balsam poplar (*P. balsamifera*) scattered throughout.

2.2 General Methods

Mist nets were used for capturing birds during the observatory's operation with a total of twenty nets being utilized. Mist nets were checked for birds every 15 - 30 minutes (depending on bird activity) and birds caught were placed in holding bags and returned to the banding lab. Birds were banded and the following data was collected (if possible):

- species
- band number
- age and criteria used
- sex and criteria used
- wing chord
- weight

- fat score (5 pt scale)
- status
- date
- time
- location banded
- bander's initials

- trap used
- net captured in
- molt information
- additional comments

All age and sex determinations were made according to the Identification guide to North American Birds (Pyle 1997). Birds were processed as quickly as possible and were released if showing signs of stress. Mist nets were closed upon the onset of inclement weather or when too many birds were captured to allow timely processing. The overall number of net hours per day was typically 6 hours; however, inclement weather or high numbers of birds often resulted in fewer net hours per day. All birds captured that were previously banded were also processed. For these birds, limited information was gathered to facilitate a faster release. In addition to the use of mist nets to capture birds for the purpose of banding, daily observations are also taken. Such data is collected through incidental observations but also through the use of visual migration counts. Visual counting involves watching (using high powered optics) for a set period of time and recording all birds observed. The weather conditions were recorded twice a day, once at the beginning of the day and once at the end of the day. Information collected at these times included temperature, wind direction and strength, cloud coverage, visibility and precipitation. For every day of operation, an estimated daily total was calculated for every species encountered.



Figure 1. Aerial photo and map of mist net locations used during the 2008 spring and fall seasons.

3.0 Results

A total of 3,567 birds of 61 species were banded during 2008 as summarized in Tables 1 – 4 and Figures 2 – 3. The all time total number of birds banded at Teslin Lake is now 6,970 birds of 75 species (Appendix 1). A detailed account of the 2008 estimated total data is shown in Appendix 2.

Table 1. Summary statistics of the 2008 spring and fall seasons.

Season	Start Date	End Date	# of Days Operated	Species Banded	Individuals Banded	Net Hrs.	Birds Banded / 100 Net Hrs	Species Observed
Spring	24 Apr	1 Jun	37	45	1248	2446	51.1	115
Fall	7 Aug	27 Sep	48	48	2319	3842	60.4	126
TOTAL	24 Apr	27 Sep	85	61	3567	6288	56.7	149

Table 2. Top 10 species banded by age ratio during the spring of 2008.

Species	# Banded	% SY Banded	% ASY Banded	% AHY Banded
White-crowned Sparrow	311	40	29	31
Dark-eyed Junco	255	44	44	12
Wilson's Warbler	151	11	70	19
Yellow-rumped Warbler	78	31	46	22
Ruby-crowned Kinglet	72	25	47	28
Orange-crowned Warbler	61	36	49	16
American Tree Sparrow	41	32	27	41
Yellow Warbler	31	61	32	6
Fox Sparrow	26	46	42	12
Bohemian Waxwing	23	61	49	0

Table 3. Top 10 species banded by age ratio during the fall of 2008.

Species	# Banded	% HY Banded	% AHY Banded
Alder Flycatcher	811	80	19
Yellow Warbler	486	61	39
Dark-eyed Junco	183	51	49
Boreal Chickadee	138	100	0
Wilson's Warbler	113	81	19
Orange-crowned Warbler	101	87	13
Common Yellowthroat	66	68	32
Black-capped Chickadee	57	98	2
Yellow-rumped Warbler	49	80	20
Blackpoll Warbler	47	96	4

Table 4. Birds banded during the spring and fall of 2008.

Common Name	Latin Name	Birds	Banded	Common Name	Latin Name	Birds B	Birds Banded	
Common Ivame	Latin Name	Spring	Fall	_ Common Name	Lami Name	Spring	Fall	
Northern Harrier	Circus cyaneus	1		Bohemian Waxwing	Bombycilla garrulus	23		
Sharp-shinned Hawk	Accipiter striatus	1	10	Tennessee Warbler	Vermivora peregrine	2		
Solitary Sandpiper	Tringa solitaria		2	Orange-crowned Warbler	Vermivora celata	61	101	
Spotted Sandpiper	Actitis macularia	1		Nashville Warbler	Vermivora ruficapilla		1	
Wilson's Snipe	Gallinago delicate	1	1	Yellow Warbler	Dendroica petechia	31	486	
Belted Kingfisher	Ceryle alcyon		8	Magnolia Warbler	Dendroica magnolia		1	
Yellow-bellied Sapsucker	Sphyrapicus varius	1		Cape May Warbler	Dendroica tigrina	1		
Downy Woodpecker	Picoides pubescens		1	Yellow-rumped Warbler	Dendroica coronata	79	50	
Olive-sided Flycatcher	Contopus cooperi	6		Townsend's Warbler	Dendroica townsendi	1		
Western Wood-Pewee	Contopus sordidulus		3	Blackpoll Warbler	Dendroica striata	5	47	
Yellow-bellied Flycatcher	Empidonax flaviventris		9	American Redstart	Setophaga ruticilla		10	
Alder Flycatcher	Empidonax alnorum	9	811	Northern Waterthrush	Seirus noveboracensis	4	46	
Least Flycatcher	Empidonax minimus	2	2	MacGillvary's Warbler	Oporornis tolmei		1	
Hammond's Flycatcher	Empidonax hammondi	18	6	Common Yellowthroat	Geothlypis trichas	21	66	
Dusky Flycatcher	Empidonax oberholseri		1	Wilson's Warbler	Wilsonia pusilla	151	113	
Say's Phoebe	Sayornis saya	1	1	American Tree Sparrow	Spizella arborea	41	19	
Warbling Vireo	Vireo gilvus	1	9	Chipping Sparrow	Spizella passerina	3	6	
Black-capped Chickadee	Poecile atricapillus	2	57	Savannah Sparrow	Passerculus sandwichensis	10	14	
Mountain Chickadee	Poecile gambelli	2	15	Fox Sparrow	Passerella iliaca	26	11	
Chestnut-backed Chickadee	Poecile rufescens		1	Lincoln's Sparrow	Melospiza lincolnii	21	5	
Boreal Chickadee	Poecile hudsonicus	8	138	White-crowned Sparrow	Zonotrichia leucophrys	311	1	
Hybrid Chickadee			1	Golden-crowned Sparrow	Zonotrichia atricapilla	9		
Red-breasted Nuthatch	Sitta candensis	1	1	Dark-eyed Junco	Junco hyemalis	255	193	
Ruby-crowned Kinglet	Regulus calendula	72	29	Lapland Longspur	Calcarius lapponica	5		
Gray-cheeked Thrush	Catharus minimus	1	1	Rusty Blackbird	Euphagus carolinus		11	
Swainson's Thrush	Catharus ustulatus	21	19	Purple Finch	Carpodacus purpureus	1		
Hermit Thrush	Catharus guttatus	1	1	White-winged Crossbill	Loxia leucoptera		2	
American Robin	Turdus migratorius	4		Common Redpoll	Cardeulis flammea	22		
Varied Thrush	Ixoreus naevius		3	Pine Siskin	Cardeulis pinus		1	
American Pipit	Anthus rubescens	1	1	TOTAL	l	1238	2319	

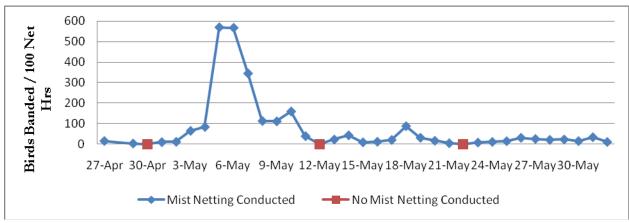


Figure 2. Summary of birds / 100 net hrs during the spring of 2008.

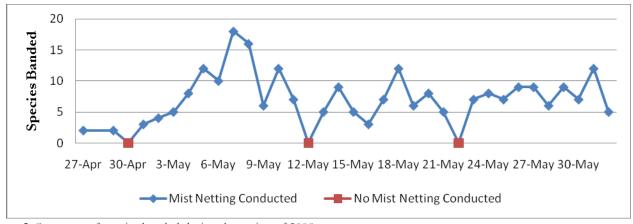


Figure 3. Summary of species banded during the spring of 2008.

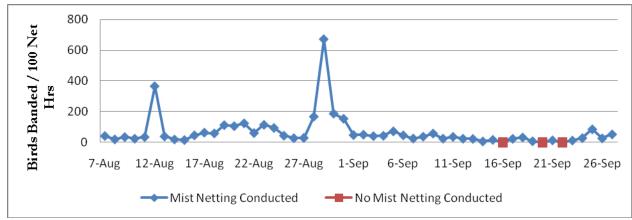


Figure 4. Summary of birds banded per 100 net hours during the fall of 2008.

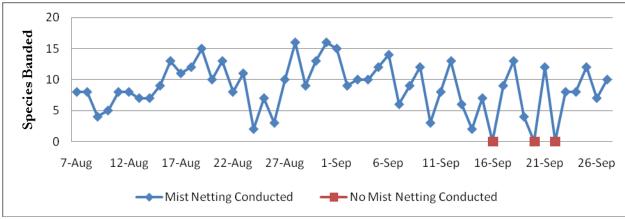


Figure 5. Summary of species banded during the fall of 2008.

3.1 Band Recoveries / Returns

During the previous three years since the observatory began operation, there have been no foreign band recoveries. However, 2 Dark-eyed Juncos banded during the spring/summer of 2007 in the community of Teslin (approximately 15km from the study site) were recaptured during the spring season of 2008 (Table 5).

Table 5. Banded birds recovered during the spring and fall of 2008.

0 .	Band	Banded			Recaptured		
Species	Number	Date	Age – Sex	Location	Date	Age	Location
Dark-eyed Junco	1921-25507	19-May-07	AHY-F	Teslin	17-May-08	ASY	Teslin Lake
Dark-eyed Junco	1921-25559	8-Jul-07	HY-U	Teslin	20-May-08	SY	Teslin Lake

In addition, there were a number of birds originally banded at the site in past years which were recaptured during the 2008 spring and fall seasons (Table 6). These birds are likely local breeders either within the study site or in nearby habitats.

Table 6. Summary of banded bird returns to the study site.

0 .	Band	j	Banded			Recaptured			
Species	Number	Date	Age – Sex	Location	Date	Age	Location		
American Robin	852-55868	7-May-06	AHY-M	Teslin Lake	11-May-08	ASY	Teslin Lake		
Black-capped Chickadee	2400-70951	26-Apr-06	AHY-U	Teslin Lake	27-Apr-08	ASY	Teslin Lake		
Black-capped Chickadee	2430-38543	29-Apr-07	AHY-U	Teslin Lake	27-Apr-08	ASY	Teslin Lake		
Boreal Chickadee	2460-05141	19-May-07	AHY-F	Teslin Lake	7-May-08	ASY	Teslin Lake		
Swainson's Thrush	1811-60455	30-Jul-06	HY-U	Teslin Lake	29-May-08	TY	Teslin Lake		
Swainson's Thrush	1961-96951	3-Jun-07	SY-U	Teslin Lake	28-May-08	TY	Teslin Lake		
Yellow Warbler	2400-70620	27-May-06	AHY-M	Teslin Lake	31-May-08	ASY	Teslin Lake		
Yellow Warbler	2430-38167	30-Jul-06	HY-U	Teslin Lake	29-May-08	TY	Teslin Lake		
Yellow Warbler	2460-05641	2-Jun-07	SY-F	Teslin Lake	29-May-08	TY	Teslin Lake		
Yellow Warbler	2460-05680	3-Jun-07	ASY-F	Teslin Lake	31-May-08	ASY	Teslin Lake		
Yellow-rumped Warbler	2400-70602	27-May-06	AHY-M	Teslin Lake	26-May-08	ASY	Teslin Lake		
Northern Waterthrush	2400-70667	2-Jun-06	AHY-U	Teslin Lake	24-May-08	ASY	Teslin Lake		
Northern Waterthrush	2430-38157	14-Jul-06	AHY-U	Teslin Lake	1-Jun-08	ASY	Teslin Lake		
Dark-eyed Junco	1911-41433	12-May-06	SY-M	Teslin Lake	23-May-08	ASY	Teslin Lake		
Dark-eyed Junco	1921-25502	10-May-07	AHY-M	Teslin Lake	20-May-08	ASY	Teslin Lake		
Dark-eyed Junco	1921-25532	21-May-07	ASY-F	Teslin Lake	20-May-08	ASY	Teslin Lake		
Purple Finch	1921-25546	20-May-07	AHY-U	Teslin Lake	31-May-08	ASY	Teslin Lake		

3.2 Interesting & Notable Captures

As is the case in all years, the vast majority of birds banded at Teslin Lake in 2008 were species which are common and widespread north and west of the southern Yukon. The Teslin Lake study site appears to have low numbers of breeding birds, possibly due to the seasonal flooding which occurs due to rapid spring snowmelt. The observatory captures a very diverse grouping of bird species; however, there is a notable difference in species captured during the spring and fall seasons. Results to date suggest that the sparrows are more common during the spring with flycatchers and warblers present in higher numbers during the fall season. The section below outlines a number of interesting and/or notable captures and sightings from the 2008 season.

Double-crested Cormorant

This species has been recorded in the Teslin region in the past; however, any record of this species in the Yukon is considered notable. During the spring season, a pair of individuals was observed on the gull nesting colony near the observatory on May 30th.

Swainson's Hawk

During the spring season, one individual (dark/rufous intermediate morph) was observed in migration on May 4th. During the fall, the species was observed in migration on 3 days (all dark/rufous intermediate morph, 2 adults and 1 juvenile; 2 individuals on August 30th, 1 on September 2nd and 1 on September 24th.

Sanderling

During the fall season, single individuals (all juvenile) were observed on the following days; August 19th, August 21st and September 7th.

Parasitic Jeager

During the fall 2008 season, this species was observed on 28 days from August 7th to September 24th (all adults; all but two light morph). The high count for the season was 8 individuals on September 6th.

Sabine's Gull

During the fall season, this species was recorded on 3 days from August 8th to September 4th (2 adults, 2 juveniles) with a high count of 2 individuals on September 2nd.

Yellow-bellied Flycatcher

In the Yukon, this flycatcher species is considered to be rare. A total of nine individuals (1 AHY, 8 HY, Photo 1) were banded between August 11th and 22nd. This species is somewhat misunderstood in the Yukon in terms of migration timing and distribution. The relatively high number banded at Teslin Lake during the fall of 2008 continue to allow bird biologists to learn more about this species in the territory.





Photo 1. AHY-U (left) and HY-U (right) Yellow-bellied Flycatchers banded on August 12th and 26th (Photos: Jukka Jantunen).

European Starling

This species is rare in the southern Yukon and two migrating individuals were observed at the observatory on May 8th.

Nashville Warbler

One individual (HY-F, Photo 2) banded on September 23rd was the first of this species banded at the observatory and constituted only the second documented record of the species in the Yukon. This is one of the observatory's most notable captures of the 2008 season.





Photo 2. HY-F Nashville Warbler banded on September 23rd (Photos: Jukka Jantunen)

Magnolia Warbler

This small to medium sized warbler is considered rare in the south central Yukon. There is one previous record for the Teslin area (one banded at Nisutlin Bay during the spring of 2005);however, this species is rarely encountered west of the Liard River. One individual (HY-F, Photo 3) was banded during the fall 2008 season on August 19th.





Photo 3. HY-F Magnolia Warbler banded on August 19th (Photos: Jukka Jantunen)

Cape May Warbler

One individual (ASY-M, Photo 4) banded on May 31st constituted the first record of the species at the observatory and was one of only a few Yukon records west of the Liard River Valley.





Photo 4. ASY-M Cape May Warbler banded on May 31st (Photos: Ben Schonewille).

Townsend's Warbler

One individual (ASY-M, Photo 5) banded on May 18th was the first of this species banded at the observatory. This species is considered an uncommon breeding species in the Teslin area.





Photo 5. ASY-M Townsend's Warbler banded on May 18th (Photos: Ben Schonewille).

American Redstart

During the fall season, a total of 10 individuals were banded (5 AHY, 1 SY, 5 HY; Table 6, Photos 6 - 7). This species is not unexpected in the Teslin region; however, this species is considered very localized outside of the southeast Yukon and as such the capture of ten individuals is notable. In addition to banding results, the observatory also recorded American Redstarts on a total of 14 days from July 26th to September 18th.

Table 7. Breakdown of American Redstarts banded during the fall of 2008.

Age – Sex	13-Aug	15-Aug	17-Aug	23-Aug	28-Aug	31-Aug	4-Sep	18-Sep
HY-F	1							
HY-M		1	1	1	1			
SY-M			1					
AHY-F					1		1	
AHY-M						1		1





Photo 6. AHY-M American Redstart banded on August 31st (left); AHY-F American Redstart banded on September 4th (right; Photos: Jukka Jantunen).





Photo 7. HY-M American Redstart banded on August 17th (left; Photo Ben Schonewille); HY-F American Redstart banded on August 13th (right; Photo Jukka Jantunen).

MacGillvary's Warbler

One individual (AHY-M, Photo 8) banded on September 6th was the first of this species banded at the current study site. This species is considered is considered rare in the Yukon and is very localized in the southern portion of the territory. In addition to the individual banded, one individual was also observed on August 29th.





Photo 8. AHY-M MacGillvary's Warbler banded on September 6th (Photos: Jukka Jantunen).

3.2.1 Chickadee Movements

During the fall 2008 season, relatively high numbers of chickadees were banded and observed in migration. Typically, chickadees are considered year round residents (i.e. – they don't migrate); however, they have been known to stage southward irruptions. The reasons for such irruptions are unclear, but it is presumed to be caused by food shortages or exceptionally productive breeding seasons.

The two most common species of Yukon chickadees, the Boreal Chickadee (Photo 9, left) and Blackcapped Chickadee (Photo 9, right) were most common with 138 and 57 individuals banded, respectively.



Photo 9. Boreal Chickadee and Black-capped Chickadee banded during the fall of 2008 (Photos: Jukka Jantunen)

Another species of chickadee, Mountain Chickadee, (considered rare in the southern Yukon, Photo 10, left) was encountered in surprisingly high numbers during the fall of 2008. This species was previously thought to have a very limited distribution north of the Teslin Lake Observatory; however, the capture of 15 HY individuals suggests this species may be more common than previously thought. Even more uncommon, a Chestnut-backed Chickadee (Photo 10, right) was captured and subsequently banded on September 17th. This constituted only the second record of this species in the Yukon and provided the first photo of the species in the territory.



Photo 10. Mountain Chickadee (left) and Chestnut-backed Chickadee (right) banded during the fall of 2008 (Photos: Jukka Jantunen).

Although the above mentioned captures of the various chickadee species are truly exceptional, perhaps the most surprising capture this fall was a hybrid chickadee (Photo 11, 12) which appeared to be the result of hybridization between a Boreal Chickadee and Mountain Chickadee. A similar hybrid was banded at the same location during the spring of 2006, from which feathers were analyzed and it was confirmed that the maternal origin of the individual was indeed a Mountain Chickadee. These two captures represent the only known hybridizations between these two species; however, other species of chickadee (Black-capped and Mountain Chickadee) have been known to hybridize rarely.



Photo 11. Hybrid Chickadee (Boreal x Mountain Chickadee) banded during the fall of 2008 (Photos: Jukka Jantunen).



Photo 12. Mountain Chickadee (left), Hybrid Chickadee (center) and Boreal Chickadee (right) during the fall of 2008 (Photos: Jukka Jantunen).

3.3 Visual Migration Counts

To compliment the typical monitoring activities (banding) conducted at the observatory, visual migration counts were also conducted during 2008. Carry out migration counts often required an additional person to be presented at the observatoryas checking the mist nets and banding birds was the priority. During the spring season, the most comprehensive migration counts were completed from May 1st to 11th. For the fall

season, counts were conducted throughout the entire season. This component provided valuable data to the observatory and is presented for select species during the spring and fall seasons in Appendices 3 and 4.

3.4 Rusty Blackbirds

As part of an ongoing project in co-operation with Pam Sinclair (CWS-Whitehorse) and the Albert Creek Bird Observatory, all Rusty Blackbirds captured with fitted with color bands (light blue) in conjunction with the regular numbered leg band. The rationale for color banding individuals is to hopefully increase resightings of banded individuals which will provide banding location information without the bird being captured.

Additionally, a feather was collected from each Rusty Blackbird captured. Feather samples were to be analyzed for stable isotopes in an effort to make linkages between breeding and wintering grounds used by this species. During the spring of 2008, none were captured; however, during the fall season, a total of 11 individuals were banded (6 HY-M, 5 HY-F, Photo 13)





Photo 13. HY-M (left) and HY-F (right) Rusty Blackbird captured and colored banded during the fall of 2008 (Photo: Jukka Jantunen).

3.5 Owl Banding

New for 2008, the site was tested for the purposes of banding owls. Using generally accepted methods for capturing owls (nocturnal call playback) both Boreal Owl and Northern Saw-whet Owl were targeted. A total of 4 nets were tested (30 Aug, 5 Sep, 6 Sep, 20 Sep) tabulating a total of 24 net hours. Unfortunately, no owls were captured; however, further testing will be conducted during future years of operation at the observatory. Due to the irregular nature of owl migration, testing is required to take place over a number of years.

3.6 Visitors and Volunteers

Table 8 shows the number of hours spent at the observatory by visitors, volunteers and paid workers. Visitors were defined as those people who visited the observatory(often for a short time) and did not take part in activities at the observatory. Volunteers were those people which took part in the operation of the observatory (often extensively) without being financially compensated. Paid hours were spent by individuals being paid to be at the observatory. This category includes the Master Bander (Ben Schonewille) and the Bander In Charge (Jukka Jantunen, Jillian Johnston).

Table 8. Hours spent at the bird observatory by visitors, volunteers and paid individuals.

Season	Visitor Hours	Volunteer Hours	Paid Hours
Spring	112	75	215
Fall	64	161	281

Note that the values shown for "paid hours" only include those spent at the observatory and do not include the extensive amount of data entry, data analysis, report writing and other communication of the observatory's results.

4.0 Discussion

The results from this season's operation have continued to add to numerous aspects of bird biology in the Yukon, including: species distribution, migration timing and local productivity. The location of the study site has proven to be a very effective location for monitoring bird migration. The primary reason for this is the close proximity of the site to Teslin Lake. As the lake is a very large body of water which runs in a north/south direction, it acts as a funnel for migrants. Additionally, most migrating birds are tentative to cross the lake and many birds are funneled along the lakeshore and passed directly through the study site. On numerous occasions, flocks of migrating birds have been observed moving along the lakeshore and thus have yielded some very impressive banding totals at the observatory.

The educational capacity of the observatory was again increased during 2008. The observatory has been successful in attracting groups of students to the observatory to learn about birds and bird migration. For example, the Renewable Resource Management class from Yukon College visited the observatory during early May. In addition, the grade 11 Experience Science (ES) class from Wood Street School visited the observatory during early September. On both occasions, the visiting school groups were given an introduction to birds and the methods used for monitoring them.

During 2008, the Teslin Lake observatory completed its fourth consecutive year of spring migration monitoring. New for this year, the observatory also operated the complete fall migration season. The results from 2008 suggest that although high numbers of birds are encountered during the spring season, the fall season has a higher potential to monitor a widen diversity of bird species. During the spring, the observatory has consistently encountered very high numbers of sparrows including species such as Darkeyed Junco and White-crowned Sparrow. However, many of the later spring migrations (such as the warblers) have typically been underestimated during the spring season. A likely reason for this is the close proximity of the observatory to Teslin Lake, which remains frozen late into the spring season. As a result of this, the "green up" at the site is relatively late and likely causes the site to be less attractive to many of the later migrants, many of which feed on insects. Conversely, the sparrows are primarily seed eaters, and as such, the later "green up" of the site does not deter them from using the site.

As shown by the results from the 2008 fall season, the observatory has a very high potential for monitoring a wide diversity of species. The observatory was able to monitor a wide variety of species groups including waterbirds (loons and grebes), waterfowl, raptors and most songbirds. As described in the previous paragraph, sparrows have typically dominated the spring banding totals. Conversely, the fall banding totals show the warblers and flycatchers dominating the birds captured. Some of the additional findings from the fall season including the capture of the Nashville Warbler provide insight into the value of the data collected at the observatory. The impressive movement of chickadees was also very notable, as the location of the observatory (south central Yukon) allows for a unique number of chickadee species to be monitored.

Teslin lies within the core of Bird Conservation Region 4 (Northwestern Interior Forest) which encompasses a substantial portion of the boreal forest in western Canada. To put the results of the observatory into a conservation perspective, the following table outlines the priority bird species as stated on the BC/Yukon Partners in Flight website. A number of the priority species have been recorded at the observatory; however not all are encountered frequently enough to be monitored in a meaningful fashion. Those highlighted in red are encountered in relatively high numbers and with continued operation of the observatory (on a yearly basis), valuable trend data may be able to be obtained for this species. In addition, the species highlighted in orange have been recorded in low numbers at the observatory; however, trend analysis will be difficult to achieve for these species due to a relatively small sample size.

Table 9. Priority landbird species with BCR 4 shown by generalized habitat association (from BC/Yukon Partners in Flight website).

Conifer	Alpine / Sub-boreal	Riparian / Marsh
Black-backed Woodpecker	American Pipit	Alder Flycatcher
Blackpoll Warbler	American Tree Sparrow	American Dipper
Bohemian Waxwing	Golden-crowned Sparrow	Bank Swallow
Boreal Chickadee	Gray-crowned Rosy Finch	Northern Waterthrush
Boreal Owl	Northern Wheatear	Rusty Blackbird
Gray-cheeked Thrush	Smith's Longspur	
Gray-headed Chickadee	White-crowned Sparrow	Grassland
Northern Goshawk	White-tailed Ptarmigan	Brewer's Sparrow
Northern Hawk-Owl	Willow Ptarmigan	Short-eared Owl
Olive-sided Flycatcher	Yellow Wagtail	
Pine Grosbeak		Rock
Spruce Grouse	Shrub	Gyrfalcon
Swainson's Thrush	Wilson's Warbler	Rock Ptarmigan
Three-toed Woodpecker		
Townsend's Warbler	Woodland	
Varied Thrush	Northern Shrike	
White-winged Crossbill		

6.0 Conclusion and Recommendations

For 2009, it is hoped that financial support can be secured to operate the observatory at full capacity (iedaily coverage) during the spring and fall migration seasons. Should inadequate funding be secured to operate both seasons, the fall season would receive priority.

On an administrative level, work will continue on developing a long term monitoring protocol for the observatory. This is required to continue meaningful long term migration monitoring of songbirds within the Teslin region.

7.0 Acknowledgements

First and foremost, the author would like to thank Jukka Jantunen who was the primary Bander In Charge during both the spring and fall seasons. Jukka's excellent bird identification skills undoubtedly increased the quality of the data collected at the observatory during 2008. In addition, many of the high quality photos included in this report we taken by Jukka. Other people who assisted with the Bander In Charge duties included Ted Murphy-Kelly, Jillian Johnston and Gwen Baluss. Also not unnoticed are the numerous volunteers who visited this year and helped out with day to day operations at the observatory. Also, the long list of funders to this project deserve a big thank you for continuing to support this project and allowing us to begin to strive towards maximizing the monitoring taking place. To the staff of

Environment Yukon, particularly Cameron Eckert, thank you for providing logistical help and sharing a wealth of bird knowledge. Also thank you to the staff of the Canadian Wildlife Service particularly Pam Sinclair.

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APPENDIX 1 – TESLIN LAKE ALL TIME BANDING TOTALS	

	Spri	ng 2005	Sprii	ng 2006	Sprii	ng 2007	Sprii	ng 2008	ALL	Fall 2005	Fall 2006	Fall 2007	Fa	11 2008	ALL	ALL
Species	# Banded	# Banded / 100 Net Hrs	# Banded	# Banded / 100 Net Hrs	# Banded	# Banded / 100 Net Hrs	# Banded	# Banded / 100 Net Hrs	TIME SPRING TOTAL	# Banded	# Banded	# Banded	# Banded	# Banded / 100 Net Hrs	TIME FALL TOTAL	TIME TOTAL
Northern Harrier Sharp-shinned Hawk					2	0.102	1	0.041 0.041	1 3				10	0.260	10	1 13
Solitary Sandpiper					2	0.102	1	0.041	3		2		2	0.052	4	4
Spotted Sandpiper Wilson's Snipe	1	0.029	2	0.098	1	0.051	1	0.041 0.041	5	-			1	0.026	1	5 2
Belted Kingfisher							1	0.041	1		8		8	0.028	16	16
Yellow-bellied	2	0.059	2	0.098	2	0.102	1	0.041	7				2	0.050	2	7
Downy Woodpecker Hairy Woodpecker	2	0.059							2				2	0.052	2	2 2
Northern Flicker	1	0.029			1	0.051			2							2
Olive-sided Western Wood-	3	0.088	11 2	0.537 0.098	2	0.102	6	0.245	17 7				3	0.078	3	17 10
Yellow-bellied	2	0.059	1	0.049	1	0.051			4	2			1	0.026	3	7
Alder Flycatcher	17	0.498	38	1.854	10	0.508	9	0.368	74	9	18	5	811	21.109	843	917
Least Flycatcher Hammond's	7	0.088 0.205	5	0.195 0.244	3 11	0.152 0.559	2 18	0.082 0.736	12 41				6	0.052 0.156	6	14 47
Dusky Flycatcher	2	0.059			2	0.102			4				1	0.026	1	5
Eastern Phoebe Say's Phoebe			1 2	0.049	2	0.102	1	0.041	5				1	0.026	1	6
Warbling Vireo	13	0.381	1	0.049	2	0.102	1	0.041	15		4		9	0.234	13	28
Gray Jay	5	0.146	2	0.146	1	0.051			6							6
Horned Lark Tree Swallow	5	0.146	3	0.146					5	L		<u> </u>				3 5
Black-capped			4	0.195	2	0.102	2	0.082	8	3	3		57	1.484	63	71
Mountain Chickadee Chestnut-backed							2	0.082	2	 			15 1	0.390 0.026	15 1	17 1
Boreal Chickadee	2	0.059	3	0.146	2	0.102	8	0.327	15				138	3.592	138	153
Hybrid Chickadee Red-breasted			1	0.049			1	0.041	1	-			3	0.026	1	2
Winter Wren	1	0.029					1	0.041	1				3	0.078	3	1
Golden-crowned										1					1	1
Ruby-crowned Gray-cheeked	25 4	0.732 0.117	51 2	2.488 0.098	27 5	1.371 0.254	72 1	2.944 0.041	175 12	7	3		29	0.755 0.026	39 1	214 13
Swainson's Thrush	99	2.901	35	1.707	48	2.438	21	0.859	203	9	10		19	0.495	38	241
Hermit Thrush American Robin	1 27	0.029 0.791	1 35	0.049 1.707	17	0.863	1 4	0.041 0.164	3 83		5		1	0.026	1 5	4 88
Varied Thrush	21	0.771	1	0.049	2	0.102	7	0.104	3		3		1	0.026	1	4
American Pipit			2	0.098			1	0.041	3				1	0.026	1	4
Bohemian Waxwing Tennessee Warbler	4	0.117	40	1.951 0.195	6	0.305	23	0.940 0.082	63 16							63 16
Orange-crowned	16	0.469	25	1.220	47	2.387	61	2.494	149	6	1		101	2.629	108	257
Nashville Warbler Yellow Warbler	10	0.293	50	2.439	37	1.879	31	1.267	128	3	19	3	486	0.026 12.650	511	639
Magnolia Warbler	1	0.029	30	2.137	31	1.079	31	1.207	1		17	3	1	0.026	1	2
Cape May Warbler							1	0.041	1							1
Yellow-rumped "Myrtle" Warbler	60	1.758	63	3.073	29	1.473	78	3.189	230	3	5		49	1.275	57	287
Integrade Yellow-							1	0.041	1				1	0.026	1	2
rumped Warbler Townsend's Warbler							1	0.041	1							1
Blackpoll Warbler	3	0.088	21	1.024	10	0.508	5	0.204	39	2	4		47	1.223	53	92
American Redstart Northern	4	0.117	6 14	0.293 0.683	1 11	0.051 0.559	4	0.164	7 33	1	10		10 46	0.260 1.197	14 57	21 90
MacGillvary's	1	0.029	1	0.049			·		2				1	0.026	1	3
Common Wilson's Warbler	1 116	0.029 3.399	17 54	0.829 2.634	63	0.559 3.200	21 151	0.859 6.173	50 384	8	5	6	66 113	1.718 2.941	76 126	126 510
Western Tanager	110	3.399	1	0.049	0.5	3.200	131	0.173	1	0	3		113	2.941	120	1
American Tree	220	6.446	13	0.634	72	3.657	41	1.676	346		1		19	0.495	20	366
Chipping Sparrow Brewer's Sparrow	28	0.820	3	0.146	6	0.305	3	0.123	40		1		6	0.156	6	46
Savannah Sparrow	11	0.322	2	0.098	24	1.219	10	0.409	47	2	2		14	0.364	18	65
Fox Sparrow Lincoln's Sparrow	106 9	3.106 0.264	3 6	0.146 0.293	17 39	0.863 1.981	26 21	1.063 0.859	152 75	1	1		11 5	0.286 0.130	11 7	163 82
White-throated		0.201	-	0.273	1	0.051		0.007	1	1	1		5	0.150	,	1
Gambel's White- crowned Sparrow	86	2.520	13	0.634	579	29.406	311	12.715	989	3			1	0.026	4	993
Golden-crowned	1	0.029			16	0.813	9	0.368	26	 						26
Dark-eyed "Slate-	165	4.834	137	6.683	135	6.856	224	9.158	661	12	5		182	4.737	199	860
colored" Junco Integrade Dark-eyed					9	0.457	31	1.267	40				11	0.286	11	51
Red-winged			1	0.049	1	0.457	Ji		2				11	0.200	11	2
Lapland Longspur	10	0.557	2	0.146	2	0.102	5	0.204	5			4	1.1	0.207	12	5
Rusty Blackbird Brown-headed	19 1	0.557 0.029	3	0.146	2	0.102			24 1			1	11	0.286	12	36 1
Pine Grosbeak	25		2	0.098		0.00=		00	2							2
Purple Finch Red Crossbill	27 3	0.791 0.088	3	0.146	6	0.305	1	0.041	37	-						37
White-winged			5	0.244					5				2	0.052	2	7
Common Redpoll Hoary Redpoll			107	5.220	3	0.051 0.152	22	0.899	130	-						130
Pine Siskin	28	0.820	1	0.049	3	0.152			29	<u>L</u> _			1	0.026	1	30
TOTAL INDIVIDUALS		1142		802	1	267	1	238	4449	72	115	15	,	2309	2511	6960
BANDED		12	'	~~ <u>~</u>	1	207			7719	14	113	1.0			2711	0,000
TOTAL NET HOURS		3413	2	2050	1	969	2	2446	-	-	-	-	:	3842	-	-
TOTAL BANDED	3	53.46	3	9.12	6	4.35	5	0.61	-	-	-	-	(50.10	-	-
/ 100 NET HRS TOTAL SPECIES									70	4.4	04	4			FA	77
BANDED		43		48		43	ĺ	45	70	16	21	4		48	51	77

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APPENDIX 2 –ESTIMATED TOTAL SUMMARY CHARTS	
Teslin Lake Bird Observatory	

SPRING & FALL ESTIMATED TOTAL (ET) SUMMARY CHARTS

Chart Explanation

The "Mean # of Birds / Day" summarizes the total number of birds banded per week, on average. Below is a summary of the number of days operated during each week:

Spring	Fall
Week $1 - 27$ Apr to 3 May (5 days)	Week 1 - 7 Aug to 13 Aug (7 days)
Week $2 - 4$ May to 10 May (7 days)	Week 2 - 14 Aug to 20 Aug (7 days)
Week $3 - 11$ May to 17 May (7 days)	Week 3 - 21 Aug to 27 Aug (7 days)
Week 4 – 18 May to 24 May (7 days)	Week $4 - 28$ Aug to 3 Sep (7 days)
Week 5- 25 May to 1 Jun (8 days)	Week 5 – 4 Sep to 10 Sep (7 days)
	Week 6 – 11 Sep to 17 Sep (7 days)
	Week 7 – 18 Sep to 24 Sep (7 days)
	Week 8 – 25 Sep to 27 Sep (3 days)

Note that the data presented in these tables outlines only the continuous coverage during each season and do not include the stations "non-standard banding" outside of the above mentioned dates. For this reason, the banding totals shown below may differ from those shown in the results section of the report.

For the birds banded section of the table, the numbers as presented as shown below:

Spring = # total banded (# ASY banded - # SY Banded - # AHY Banded)
Fall = # total banded (# AHY banded - # HY Banded - # U Banded)

Red-throated Loon (Gavia stellata)

1100 011100000	(0		,								
SPRING	April		May								
	Week	1	Week 2	Week 3	Week 4	Week 5		TOTAL			
Mean # Birds / Day						0.5		0.5			
# Days Observed						3		3			
# Banded											
First Observed: 30 M	First Observed: 30 May		Last Observed: 1 Jun		Peak Date (s): 30 May	/ #: 2					

FALL		Augus	st		September						
	Week 1	Week 2	Week 3	Week 4	4 Week 5	Week 6	Week 7	Week 8	TOTAL		
Mean # Birds / Day	1.7	2.1	1.3	2.4	11.6	4.1	3.1	2.0	3.7		
# Days Observed	3	5	4	4 4		5	7	2	37		
# Banded	# Banded										
First Observed: 7 Au	g	Last C	bserved: 26 Se	p	Peak Date (s): 4 Sep #: 32						

Pacific Loon (Gavia pacifica)

FALL		August			September						
	Week 1	Week 2	Week 3	Wee	ek 4	Week 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day	2.6	2.1	2.3	3.	.3	10.3	7.1	1.9	0.7	4.0	
# Days Observed	5	4	4	Ę	5	7	5	5	1	36	
# Banded											
First Observed: 7 Aug	7	Last C	bserved: 25 Se	р	Peak Date (s): 17 Sep #: 40						

Common Loon (Gavia immer)

SPRING	April		May								
	Week 1		Week 2	Week 3	Week 4	Week 5		TOTAL			
Mean # Birds / Day				0.71		2.2		0.44			
# Days Observed						4		5			
# Banded											
First Observed: 16 May		Last Observed: 1 Jun		Peak Date (s): 16 May							

FALL		Augu	st		September						
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	TOTAL		
Mean # Birds / Day	1.3	2.6	2.0	1.1	5.7	1.3	0.3	0.3	3.7		
# Days Observed	4	4	4	4	7	5	2	1	12		
# Banded											
First Observed: 7 Aug]	Last C	Last Observed: 25 Sep Peak Date (s): 8 Sep, 9 Sep								

Horned Grebe (Podiceps auritus)

FALL		Augu	August				September				
	Week 1	Week 2	Week 3	Week	4 W	eek 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day	4.1	1.0					0.3	1.3	0.7	0.9	
# Days Observed	3	1					2	5	2	13	
# Banded											
First Observed: 7 Aug	Last C	Last Observed: 26 Sep				Date (s): 8 Aug		#: 15			

Red-necked Grebe (Podicpes grisegena)

FALL	·		September						TOTAL						
	Week 1	Week 2	Week 3	We	Week 4		Week 4		Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	21.9	39.0	20.3			17.3		4.1	2.3	1.7	16.2				
# Days Observed	7	7	6	-	7		,	6	6	2	48				
# Banded	ded														
First Observed: 7 Aug]	Last C	bserved: 26 Se		Peak Date (s): 17 Aug #: 63										

Double-crested Cormorant (Phalacrocorax auritus)

FALL				September									
	Week 1	Week 2	Week 3	We	Week 4		Week 4		ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day										0.3	0.06		
# Days Observed										1	1		
# Banded	ded												
First Observed: 30 Ma	ay	Las	st Observed: NA		•		Peak	Date (s): 30 Mag	У	#: 2			

Greater White-fronted Goose (Anser albifrons)

SPRING	April		May		Jur	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day		0.9				0.2
# Days Observed		1				1
# Banded						
First Observed: 7 May		Last Observed: 7 May	1	Peak Date (s): 7 May	#: 6	

FALL	August					September					TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.4	64.4	11	7.1	7.	1				25.5
# Days Observed		1	2	4	1	1					8
# Banded											
First Observed: 16 Au	Aug Last Observed: 7 Sep)		Peak Date (s): 29 Aug #: 445					

Snow Goose (Chen caerulescens)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day		2.8				0.6
# Days Observed		1				1
# Banded						
First Observed: 7 Mag	у	Last Observed: 7 May	,	Peak Date (s): 7 May	#: 20	

FALL	August					September				
	Week 1	Week 2	Week 3	Week 4	4 W	eek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day								14.3	0.7	2.0
# Days Observed								2	1	3
# Banded										
First Observed: 20 Se	p Last Observed: 25 Sep			p	Peak Date (s): 24 Sep #: 70					

Canada Goose (Branta canadensis)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL
Mean # Birds / Day	7.0	4.4	0.3	0.7	0.5	2.3
# Days Observed	2	5	1	1	2	11
# Banded						
First Observed: 2 May	First Observed: 2 May Last		ny	Peak Date (s): 3 May	#: 19	•

FALL	August					September					TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day				1	0	51	.4	6.1	20.7		11.9
# Days Observed					2	2	2	2	6		12
# Banded											
First Observed: 29 Au	d: 29 Aug Last Observed: 24 Sep			p	Peak Date (s): 6 Sep #: 312						

Trumpeter Swan (Cygnus buccinator)

-	<u> </u>	/				
SPRING	April		Jun	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day	64.2	19.9			0.1	13.6
# Days Observed	1	1			1	3
# Banded						
First Observed: 3 Mar	У	Last Observed: 31 Ma	ay	Peak Date (s): 3 May	#: 321	

Tundra Swan (Cygnus columbianus)

SPRING	April		May June June									
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL						
Mean # Birds / Day	98.8	50.1		0.4		25.1						
# Days Observed	2	3		2		7						
# Banded												
First Observed: 2 May	у	Last Observed: 21 Ma	ay	Peak Date (s): 3 May	#: 329							

FALL		August				September					TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day									37.3		5.0
# Days Observed									2		2
# Banded											
First Observed: 23 Se	p Last Observed: 24 Sep			p		Peak Date (s): 23 Sep #: 178				#: 178	

Gadwall (Anas strepera)

SPRING	April		May Ju								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL					
Mean # Birds / Day		0.1			0.3	0.09					
# Days Observed		1			1	2					
# Banded											
First Observed: 8 May	у	Last Observed: 27 Ma	ay	Peak Date (s): 27 May	/ #: 2						

American Wigeon (Anas americana)

SPRING	April			May			June	TOTAL
	Week	1	Week 2 Week 3 Week 4 16.3 0.6 0.1		Week 4	Week 5		IOIAL
Mean # Birds / Day	2.2		16.3	0.6	0.1	0.1		3.9
# Days Observed	2		4	1	1	1		9
# Banded								
First Observed: 2 May		Last Observed: 27 Ma	ay	Peak Date (s): 8 May	#: 92			

FALL	August					September					TOTAL
	Week 1	Week 2	Week 3	We	Week 4 Wee		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		2.4	0.1	4	.6	3.	6	14.4	8.4	0.3	4.5
# Days Observed		1	1	2	2	2	2	4	4	1	15
# Banded											
First Observed: 17 Au	Aug Last Observed: 26 Sep			p	Peak Date (s): 14 Sep #: 72						

Mallard (Anas platyrhynchos)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day	15.0	4.3	0.9	2.9	1.6	4.2
# Days Observed	2	4	1	5	2	14
# Banded						
First Observed: 2 Mar	У	Last Observed: 29 Ma	ay	Peak Date (s): 3 May	#: 50	

FALL		Augus	st					Septembe	er		TOTAL
	Week 1	Week 2	Week 3	We	Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.3	2.3	1.9	1.	.3	0.	6	1.9	4.1		1.7
# Days Observed	1	3	4	4	4	3	3	2	2		19
# Banded											
First Observed: 9 Aug	J	Last C	Last Observed: 24 Sep				Peak Date (s): 24 Sep #: 24				

Blue-winged Teal (Anas discors)

SPRING	April	,	May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day					1	0.2
# Days Observed					2	2
# Banded						
First Observed: 25 Ma	ay	Last Observed: 28 Ma	ау	Peak Date (s): 28 May	#: 6	

Northern Shoveler (Anas clypeata)

SPRING	April		May								
	Week 1	Wee	k 2	Week 3	Week 4	Week 5		TOTAL			
Mean # Birds / Day		0.3	3			2.0		0.5			
# Days Observed		1				2		3			
# Banded											
First Observed: 6 May	у	Last Obser	ved: 30 May		Peak Date (s): 27 May	#: 14					

FALL		Augu	st				Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	We	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.3	0	.1	1.3	4.0		8.0
# Days Observed				1		1	1	4		7
# Banded										
First Observed: 1 Sep)	Last C	Observed: 24 Se	p		Peak	Date (s): 18 Sep	/ 20 Sep	#: 12	

Northern Pintail (Anas acuta)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	
Mean # Birds / Day	179.4	85.1	1.1	2.9		44.7
# Days Observed	2	4	1	3		10
# Banded						
First Observed: 2 May	у	Last Observed: 24 Ma	ау	Peak Date (s): 3 May	#: 750	

FALL		Augu	st					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	We	Week 4		k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	4.3	3.6	0.6	5	.9	5.9	9	4.4	5.1		4.0
# Days Observed	2	2	1	4		2		1	4		16
# Banded											
First Observed: 8 Aug]	Last Observed: 24 Sep				Peak Date (s): #:				#:	

American Green-winged Teal (Anas crecca)

FALL		Augu	st					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	We	Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		2.4	1.7					1.0	5.7		1.5
# Days Observed		2	3	3				3	3		11
# Banded											
First Observed: 17 Au	g Last Observed: 24 Sep				•		Peak I	Date (s): 22 Sep)	#: 34	

Canvasback (Aythya valisineria)

()		,											
FALL		Augu	ıst					Septembe	er		TOTAL		
	Week 1	Week 2	Week 3	We	Week 4		Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				TYOUR O TYOUR I				0.7	1.3		0.3		
# Days Observed								1	2		3		
# Banded													
First Observed: 16 Se	ер	Last Observed: 22 Sep				-	Peak I	Date (s): 19 Sep)	#: 8			

Ring-necked Duck (Aythya collaris)

SPRING	April		May		Ju	ne TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day					0.1	0.03
# Days Observed					1	1
# Banded						
First Observed: 27 Ma	ay	Last Observed: NA		Peak Date (s): NA	#: NA	

FALL		Augu	st					Septemb	er		TOTAL		
	Week 1	Week 2	Week 3	We	Week 4		Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				0.3			0.04		
# Days Observed								1			1		
# Banded													
First Observed: 14 Se	ер	Last Observed: NA					Peak I	Date (s): NA		#: NA			

Greater Scaup (Aythya marila)

FALL		Augu	st				Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4		Week 5	5 Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day								2.6		0.3
# Days Observed								5		5
# Banded										
First Observed: 18 Se	ep	Last C	Observed: 24 Se	p		Р	Peak Date (s): 23 Se	р	#: 9	

Lesser Scaup (Aythya affinis)

SPRING	April		May								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL					
Mean # Birds / Day					0.5	0.1					
# Days Observed					1	1					
# Banded											
First Observed: 30 Ma	ay	Last Observed: NA		Peak Date (s): NA	#: NA						

FALL	August							Septemb	er		TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.3	0.1					12.3	24.3		5.0
# Days Observed		1	1					3	6		11
# Banded											
First Observed: 17 Au	17 Aug Last Observed: 24 Sep				Peak Date (s): 14 Sep #: 53						

Harlequin Duck (Histrionicus histrionicus)

SPRING	April		June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	
Mean # Birds / Day				0.3		0.06
# Days Observed				1		1
# Banded						
First Observed: 19 Ma	ay	Last Observed: NA		Peak Date (s): 19 May	<i>t</i> #: 2	

FALL		August				September					
	Week 1	Week 1 Week 2 Week 3 Week					ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day									0.1		0.02
# Days Observed									1		1
# Banded											
First Observed: 20 Se	ер	Last Observed: NA				Peak Date (s): 20 Sep #: 1				#: 1	

Surf Scoter (Melanitta perspicillata)

SPRING	April		May								
	Week 1	Week 2	Week 3	Week 4	Week 5		TOTAL				
Mean # Birds / Day					1.25		0.3				
# Days Observed					2		2				
# Banded											
First Observed: 30 Ma	ay	Last Observed: 31 Ma	ay	Peak Date (s): 30 May	#: 9						

FALL		August					Septembe	er		TOTAL
	Week 1	Week 2	Week 3	Week	4 W	eek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	5.3	5.9				8.7	1.0	2.1		3.1
# Days Observed	2	4				2	2	3		13
# Banded										
First Observed: 12 Au	ıg	Last C	bserved: 24 Se	24 Sep			Peak Date (s): 10 Sep #:			

White-winged Scoter (Melanitta fusca)

FALL		August	1			TOTAL				
	Week 1	Week 2	Week 3	We	ek 4	Week 5	Week 6	Week 7	Week 8	IOTAL
Mean # Birds / Day		1.0				1.4	0.9	0.6		0.5
# Days Observed		1				1	1	1		4
# Banded										
First Observed: 14 Au	ıg	Last C	Observed: 19 Se	р	Peak Date (s): 10 Sep #: 10				#: 10	

Long-tailed Duck (Clangula hyemalis)

		<u> </u>									
SPRING	April		May								
	Week '	1	Week 2	Week 3	Week 4	Week 5		TOTAL			
Mean # Birds / Day						0.5		0.1			
# Days Observed						1		1			
# Banded											
First Observed: 30 Ma	ay	La	ast Observed: NA	•	Peak Date (s): 30 May	#: 4					

FALL		August				September					
	Week 1	Week 2	Week 3	Week 3 Week 4		Wee	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day											
# Days Observed											
# Banded											
First Observed:	•	Last Observed:				Peak Date (s): #:				#:	

Common Goldeneye (Bucephala clangula)

	-J - (I					
SPRING	April		Ju	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day		0.7	0.3	1	1.75	0.8
# Days Observed		1	1	4	3	9
# Banded						
First Observed: 6 May	у	Last Observed: 31 Ma	ay	Peak Date (s): 26 May	<i>t</i> #: 8	

FALL		August						Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Wee	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.	.6						0.1
# Days Observed				1							1
# Banded											
First Observed: 28 Aug Last Observed: NA							Peak I	Date (s): 28 Aug	1	#: 1	

Barrow's Goldeneye (Bucephala islandica)

SPRING	April			June TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day		0.4	1.3	0.3		0.4
# Days Observed		1	4	1		6
# Banded						
First Observed: 6 Mar	у	Last Observed: 18 Ma	ay	Peak Date (s): 6 May	/ 17 May #: 3	

Common Merganser (Mergus merganser)

SPRING	April		May		J	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day			0.3	2.0	0.9	0.7
# Days Observed			1	3	4	8
# Banded						
First Observed: 11 Ma	ay	Last Observed: 1 Jun		Peak Date (s): 18 May	#: 8	

FALL	August				September					TOTAL	
	Week 1	Week 2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	4.0	2.4	0.1	1	.6	3.4	4	1.4	2.9	3.3	2.3
# Days Observed	2	1	1	2	2	4		1	4	1	16
# Banded											
First Observed: 7 Aug	Last Observed: 26 Sep			p		Peak Date (s): 20 Aug #: 17					

Red-breasted Merganser (Mergus serrator)

		0				
SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day				1.6	1.5	0.7
# Days Observed				4	4	8
# Banded						
First Observed: 19 Ma	ay	Last Observed: 31 Ma	ay	Peak Date (s): 21 May	/ #: 5	

FALL		Augu	st			September					TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day			1.1								0.2
# Days Observed			1								1
# Banded											
First Observed: 21 Au	Observed: 21 Aug Last Observed: NA						Peak I	Date (s): 21 Aug]	#: 8	

Osprey (Pandion haliaetus)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day	0.6					0.09
# Days Observed	1					1
# Banded						
First Observed: 3 May	y	Last Observed: NA		Peak Date (s): 3 May	#: 3	

FALL	August					September					TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day						0.1	1		1.4	0.7	0.3
# Days Observed						1			5	2	8
# Banded											
First Observed: 4 Ser	p Last Observed: 27 Sep			ep		Peak Date (s): 24 Sep #: 5				#: 5	

Bald Eagle (Haliaeetus leucocephalus)

SPRING	April		May			June TOTA
	Week 1	Week 2	Week 3	Week 4	Week 5	1012
Mean # Birds / Day	1.4	0.3			0.1	0.3
# Days Observed	2	1			1	4
# Banded						
First Observed: 2 May		Last Observed: 31 Ma	ay	Peak Date (s): 3 May		

FALL	August				September					TOTAL	
	Week 1	Week 2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	2.1	2.1	1.3	1	.1	0.9	9	0.7	1.7	0.7	1.4
# Days Observed	7	7	6	į	5	6	;	4	6	2	43
# Banded											
First Observed: 7 Aug	' Aug Last Observed: 26 Sep			p	Peak Date (s): 24 Sep #: 5						

Northern Harrier (Circus cyaneus)

SPRING	April		May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day	11.8	9.4	0.9	0.4		3.9				
# Days Observed	3	7	4	2		16				
# Banded		1 (1-0-0)				1				
First Observed: 1 May	y	Last Observed: 20 Ma	ay	Peak Date (s): 4 May	#: 49					

FALL	August					September				
	Week 1	Week 2	Week 3	Wee	ek 4	Week 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day		0.4	0.9	6.	6	2.0	0.9	9.3	3.0	2.9
# Days Observed		2	2	7	7	7	3	5	3	29
# Banded										
First Observed: 17 Au	ug Last Observed: 27 Sep			p	Peak Date (s): 30 Aug #: 25					

Sharp-shinned Hawk (Accipiter striatus)

1								
SPRING	April	May						
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL		
Mean # Birds / Day	2.2	3.0	0.1			1.0		
# Days Observed	3	3	1			7		
# Banded	1 (1-0-0)					1		
First Observed: 1 Mar	У	Last Observed: 11 Ma	ay	Peak Date (s): 4 May	#: 12			

FALL	August				September					
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day	0.3	1.0	0.9	6.1	2.1	1.0	1.3	1.7	3.4	
# Days Observed	2	5	3	6	7	5	6	3	37	
# Banded	1 (0-1-0)	1 (0-1-0)	2 (0-2-0)	2 (0-2-0)	3 (1-2-0)	1 (0-1-0)			10	
First Observed: 10 Aug Last Observed: 27 Se			p	Pea	k Date (s): 30 Aug		#: 31			

Northern Goshawk (Accipiter striatus)

SPRING	April		June	TOTAL			
	Week 1	Week 2	Week 3	Week 4	Week 5		IOIAL
Mean # Birds / Day	0.4						0.06
# Days Observed	1						1
# Banded							
First Observed: 3 May		Last Observed: NA		Peak Date (s): 3 May	#: 2		

FALL	August				September					
	Week 1	Week 2	Week 3	Week 4	Week	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day				0.1			0.7	0.3	0.1	
# Days Observed				1			4	1	6	
# Banded										
First Observed: 30 Au	Last C	Observed: 25 Se	·p	ı	Peak Date (s): 20	Sep	#: 2			

Swainson's Hawk (Buteo swainsoni)

SPRING	April	,	May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day		0.1				0.03				
# Days Observed		1				1				
# Banded										
First Observed: 4 May	y	Last Observed: NA		Peak Date (s): 4 May	#: 1					

FALL	August					September					TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Weel	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0	.4				0.1		0.1
# Days Observed				:	2				1		3
# Banded											
First Observed: 30 Aug			Observed: 24 Se	p	•		Peak I	Date (s): 30 Aug		#: 2	

Red-tailed Hawk (Buteo jamaicensis)

SPRING	April	May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL			
Mean # Birds / Day	1.8	3.3	0.4	0.1	0.1	1.1			
# Days Observed	1	3	1	1	1	7			
# Banded									
First Observed: 3 May	У	Last Observed: 30 Ma	ay	Peak Date (s): 4 May	#: 16				

FALL	August				September					
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day	0.1	0.1		14.6	0.3		12.4	1.7	3.8	
# Days Observed	1	1		3	1		2	2	10	
# Banded										
First Observed: 10 Aug			bserved: 27 Se	p	Peak	Date (s): 30 Aug]	#: 89		

Rough-legged Hawk (Buteo lagopus)

SPRING	April	_	May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day	0.6	0.1				0.1
# Days Observed	2	1				3
# Banded						
First Observed: 2 May		Last Observed: 4 May	/	Peak Date (s): 3 May	#: 2	

FALL		Augu	st				Septembe	er		TOTAL
	Week 1	Week 2	Week 3	Week	4 W	eek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day								0.6		0.1
# Days Observed								1		1
# Banded										
First Observed: 24 Se	rst Observed: 24 Sep Last Observed: NA					Peak	Date (s): 24 Sep	1	#: 4	

Golden Eagle (Aquila chrysaetos)

SPRING	April	·	June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day	1.2	3.4				0.9
# Days Observed	2	3				5
# Banded						
First Observed: 2 May	у	Last Observed: 7 May	,	Peak Date (s): 4 May	#: 22	

FALL		Augu	ıst		September						TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.3					1.1		0.2
# Days Observed				1					1		2
# Banded											
First Observed: 30 Au	rved: 30 Aug Last Observed: 24 Sep			p			Peak I	Date (s): 24 Sep)	#: 8	

American Kestrel (Falco sparverius)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL
Mean # Birds / Day	0.4	0.7				0.2
# Days Observed	1	2				3
# Banded						
First Observed: 3 May		Last Observed: 7 May	1	Peak Date (s): 4 May	#: 3	

FALL		Augu	st		September						
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	TOTAL		
Mean # Birds / Day			0.1	4.9	0.1	0.4	4.7	1.7	1.5		
# Days Observed			1	4	1	2	4	2	14		
# Banded											
First Observed: 27 Aug Last 0			bserved: 26 Se	р	Peak	Date (s): 24 Sep)	#: 28			

Merlin (Falco columbianus)

SPRING	April		May		J	une TOTA
	Week 1	Week 2	Week 2 Week 3		Week 5	1017
Mean # Birds / Day	0.6	0.4				0.2
# Days Observed	2	1				3
# Banded						
First Observed: 2 May		Last Observed: 4 Ma	av	Peak Date (s): 4 May	#: 3	

FALL	August				September						
	Week 1	Week 2	Week 3	We	Week 4		ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day		0.1		2.3		0.	3	0.1	0.4	0.3	0.5
# Days Observed		1		4		2	2	1	3	1	12
# Banded											
First Observed: 18 Aug Last Observed: 25 Se				ep.			Peak	Date (s): 30 Auc		#: 11	

Peregrine Falcon (Falco peregrinus)

U								
SPRING	April			May			June	TOTAL
	Week	1	Week 2	Week 3	Week 4	Week 5		IOTAL
Mean # Birds / Day			0.1					0.03
# Days Observed			1					1
# Banded								
First Observed: 8 May			Last Observed: NA		Peak Date (s): 8 May	#: 2		·

FALL	August					September					
	Week 1	Week 2	Week 3	Week 4		Wee	k 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day			0.1	0	0.1			0.1	0.7		0.2
# Days Observed			1		1			1	2		5
# Banded											
First Observed: 24 Au	24 Aug Last Observed: 24 Sep			ер	Peak Date (s): 19 Sep #: 3						

Ruffed Grouse (Bonasa umbellus)

SPRING	April	,	May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day	1.4	1.6	1.4	1.3	1.4	1.4
# Days Observed	5	6	6 6		8	31
# Banded						
First Observed: 27 Ap	or	Last Observed: 1 Jun		Peak Date (s): many	#: 2	

FALL	August					September					
	Week 1	Week 2	Week 3	Week 4		Wee	k 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day	1.1	1.1	0.6	0	.7	1.1		0.7	0.9	1.3	0.9
# Days Observed	5	6	3	4	5	6	;	3	4	2	34
# Banded											
First Observed: 7 Aug	Last Observed: 26 Sep				Peak Date (s): many #: 2						

Spruce Grouse (Falcipennis canadensis)

1	\ 1								
SPRING	April	May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL			
Mean # Birds / Day	0.2					0.03			
# Days Observed	1					1			
# Banded									
First Observed: 2 May	y	Last Observed: NA		Peak Date (s): 2 May	#: 1				

Sandhill Crane (Grus canadensis)

FALL	August				September						TOTAL
	Week 1	Week 2	Week 3	Wee	ek 4	Week	5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.	3				4.6		0.7
# Days Observed				1					1		2
# Banded											
First Observed: 29 Aug Last Observed: 24 Sep			Peak Date (s): 24 Sep #: 32								

American Golden Plover (Pluvialis dominica)

SPRING	April				June	TOTAL		
	Week	1	Week 2 Week 3		Week 4	Week 5		IUIAL
Mean # Birds / Day			0.1					0.03
# Days Observed			1					1
# Banded								
First Observed: 10 May		Last Observed: NA		Peak Date (s): 10 May #: 1				

Semi-palmated Plover (Charadrius semipalmatus)

1										
FALL	August				September					
	Week 1	Week 2	Week 3	Week 4		Week 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day	0.7	0.7	0.4	0	.3					0.3
# Days Observed	4	3	2	2	2					11
# Banded										
First Observed: 8 Aug	g Last Observed: 31 Aug			ıg	Peak Date (s): 9 Aug / 27 Aug #: 2					

Killdeer (Charadrius vociferous)

SPRING	April		June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day		0.3			0.3	0.1
# Days Observed		2			1	3
# Banded						
First Observed: 4 May		Last Observed: 30 Ma	ay	Peak Date (s): 30 May		

Greater Yellowlegs (Tringa melanoleuca)

SPRING	April May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL		
Mean # Birds / Day		0.1	0.1			0.06		
# Days Observed		1	1			2		
# Banded								
First Observed: 8 May	У	Last Observed: 16 Ma	ay	Peak Date (s): both da	ays #: 1			

Lesser Yellowlegs (Tringa flavipes)

Lebber Tenowie	Lesser Tenowiego (Tringu Jurospes)										
SPRING	April		May								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL					
Mean # Birds / Day	12.2	29.7	0.6	0.3		8.1					
# Days Observed	1	5	2	2		10					
# Banded											
First Observed: 3 May	First Observed: 3 May Last Observed: 20 May			Peak Date (s): 7 May	#: 133						

Solitary Sandpiper (Tringa solitaria)

SPRING	April	_		June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5		IOIAL
Mean # Birds / Day		2.1		1.1	0.1		0.7
# Days Observed		2		3	1		6
# Banded							
First Observed: 7 Mag	v	Last Observed: 29 Ma	av	Peak Date (s): 7 May	#: 14		

FALL		August			September					
	Week 1	Week 2	Week 3	Week 4	We	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day	0.3	0.6	0.1	0.1						0.2
# Days Observed	2	3	1	1						7
# Banded	1 (0-1-0)									1
First Observed: 7 Aug	Last Observed: 30 Aug				Peak Date (s): 16 Aug #: 2					•

Spotted Sandpiper (Actitis macularius)

SPRING	April	May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL			
Mean # Birds / Day				0.1	2.3	0.6			
# Days Observed				1	6	7			
# Banded					1 (0-0-1)	1			
First Observed: 21 Ma	ay	Last Observed: 1 Jun		Peak Date (s): 30 May	#: 5				

FALL	August					September					TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	2.4	3.7	2.1	0	.3	0.1	1		0.4		1.2
# Days Observed	7	7	6	6 2		1			2		25
# Banded											
First Observed: 7 Aug	Last Observed: 20 Sep				Peak Date (s): 16 Aug #: 8						

Sanderling (Calidris alba)

FALL		August			September					
	Week 1	Week 2	Week 3	Week 4		Week 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day		0.1	0.1			0.1				0.1
# Days Observed		1	1			1				3
# Banded										
First Observed: 19 Au	erved: 19 Aug Last O			1		Pea	ak Date (s): all day	'S	#: 1	

Semi-palmated Sandpiper (Calidris pusilla)

FALL	•	Augu	st					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 3 Wee			k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.4								0.1	
# Days Observed		2									2
# Banded		-									
First Observed: 16 Au	ıg	Last C	ıg			Peak I	Date (s): 16 Aug	3	#: 2		

Least Sandpiper (Calidris minutilla)

SPRING	April		May			June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5		IOIAL
Mean # Birds / Day	0.2	0.4		0.6			0.2
# Days Observed	1	1		1			3
# Banded							
First Observed: 3 May		Last Observed: 24 Ma	ay	Peak Date (s): 24 May			

FALL		Augu	st					Septembe	er		TOTAL
	Week 1	Week 2	Week 3	Week 3 Week 4		Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.4	0.4									0.1
# Days Observed	1	2									3
# Banded											
First Observed: 11 Au	ıg	Last C	ıg			Peak I	Date (s): 11 Aug]	#: 3		

Baird's Sandpiper (Calidris bairdii)

SPRING	April	,	May		Jun	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day				0.1		0.03
# Days Observed				1		1
# Banded						
First Observed: 21 Ma	ay	Last Observed: NA		Peak Date (s): 21 May	/ #: 1	

FALL		Augu	st					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	We	Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.1							0.02
# Days Observed					1						1
# Banded											
First Observed: 2 Sep	Last Observed: NA						Peak I	Date (s): 2 Sep		#: 1	

Pectoral Sandpiper (Calidris melanotos)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	
Mean # Birds / Day		0.1		0.1		0.06
# Days Observed		1		1		2
# Banded						
First Observed: 7 May	У	Last Observed: 20 Ma	ay	Peak Date (s): both da	•	

FALL		Augu	ıst					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.1							0.02
# Days Observed					1						1
# Banded											
First Observed: 29 Au	g Last Observed: NA				•		Peak I	Date (s): 29 Aug	1	#: 1	

Short-billed Dowitcher (Limnodromus griseus)

		<u> </u>				
SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day				0.1		0.03
# Days Observed				1		1
# Banded						
First Observed: 24 M	ay	Last Observed: NA		Peak Date (s): 24 May	/ #: 1	

Long-billed Dowitcher (Limnodromus scolopaceus)

0				<u> </u>							
FALL		Augu	ıst					Septemb	er		TOTAL
	Week 1	Week 2	Week 3				k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.1					0.1		0.04
# Days Observed					1				1		2
# Banded											
First Observed: 29 A	na	Last Observed: 19 Sep					Peak [Date (s): both da	avs	#: 1	

Wilson's Snipe (Gallinago delicata)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL
Mean # Birds / Day	14.4	9.9	0.1			4.2
# Days Observed	2	6	1			9
# Banded	1 (0-0-1)					1
First Observed: 2 May	/	Last Observed: 16 Ma	ay	Peak Date (s): 3 May	#: 71	

FALL		Augu	st				Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week	4	Neek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.1		0.1			0.3	0.1
# Days Observed				1		1			1	3
# Banded				1 (0-0-	1)					1
First Observed: 31 au	ıg	Last Observed: 25 Sep			•	Peak	Date (s): all day	S	#: 1	

Parasitic Jaeger (Stercorarius parasiticus)

•													
FALL		Augu	st					Septemb	er		TOTAL		
	Week 1	Week 2	Week 3	We	Week 4		Week 4		k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.1		0.7			3.	1	2.6	2.1		1.4		
# Days Observed	1		2	7		7	,	5	6		28		
# Banded													
First Observed: 7 Aug	נ	Last C	Last Observed: 24 Sep			Peak Date (s): 8 Sep / 14 Sep #: 8							

Bonaparte's Gull (Larus philadeplhia)

SPRING	April		,	May			June	TOTAL
	Week	1	Week 2	Week 3	Week 4	Week 5		IOTAL
Mean # Birds / Day			0.7	0.3				0.2
# Days Observed			2	1				3
# Banded								
First Observed: 7 May	У	L	ast Observed: 11 Ma	ay	Peak Date (s): 7 May	#: 4		

FALL		Augu	st					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.1	0.3	0.1								0.1
# Days Observed	1	1	1								3
# Banded											
First Observed: 7 Aug)	Last Observed: 24 Aug					Peak I	Date (s): 20 Aug	3	#: 2	

Mew Gull (Larus canus)

SPRING	April		May								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL					
Mean # Birds / Day		0.4	0.1	0.3	0.9	0.4					
# Days Observed		2	1	2	3	8					
# Banded											
First Observed: 8 Mar	у	Last Observed: 1 Jun		Peak Date (s): 1 Jun	#: 4						

FALL		Augu	st				Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	We	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	3.7	15.7	10.3	3.3	3	.4				4.9
# Days Observed	7	7	7	7		3				31
# Banded										
First Observed: 7 Aug]	Last C	bserved: 6 Sep		Peak Date (s): 14 Aug #: 51					

Herring Gull (Larus argentatus)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL
Mean # Birds / Day	26.0	51.1	10.0	17.1	42.6	30.2
# Days Observed	5	7	5	6	6	29
# Banded						
First Observed: 27 Ap	or	Last Observed: 1 Jun		Peak Date (s): 30 May	#: 140	

FALL		Augu	st					Septembe	er		TOTAL	
	Week 1	Week 2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	IOIAL	
Mean # Birds / Day	82.6	54.1	40.6	18	3.9	8.0	0	4.7	8.1	3.0	29.4	
# Days Observed	7	7	7	-	7	7		6	6	2	49	
# Banded												
First Observed: 7 Aug)	Last Observed: 26 Sep					Peak Date (s): 7 Aug to 10 Aug #: 100					

Thaver's Gull (Larus thaveri)

I may cr o Gan (2	2001 103 0130	us on a year									
FALL		Augu	st					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day								0.1	0.1		0.04
# Days Observed								1	1		2
# Banded											
First Observed: 17 Se	en	Last Observed: 20 Sep					Peak I	Date (s): both da	avs	#: 1	

Glaucous Gull (Larus hyperboreus)

FALL		Augu	st			September					
	Week 1	Week 2	Week 3	We	ek 4	Week	< 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day			0.1						0.1		0.04
# Days Observed			1						1		2
# Banded											
First Observed: 27 Au	ıg	Last Observed: 19 Sep			•	Peak Date (s): both days #: 1				#: 1	

Sabine's Gull (Xema sabini)

FALL		Augu	st					Septembe	er		TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.1			0	.3	0.	1				0.1
# Days Observed	1				1	1					3
# Banded											
First Observed: 8 Aug]	Last Observed: 4 Sep				Peak Date (s): 2 Sep #: 2				#: 2	·

Arctic Tern (Sterna paradisaea)

SPRING	April			May			June	TOTAL
	Week	1	Week 2	Week 3	Week 4	Week 5		IOIAL
Mean # Birds / Day					0.3	5.4		1.3
# Days Observed					1	8		9
# Banded								
First Observed: 24 M	First Observed: 24 May Last Observed: 1				Peak Date (s): 30 May	v / 31 Mav #: 10		

FALL		Augu	st			Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	4.9	2.3	0.1		0.1				1.0
# Days Observed	5	2	1		1				9
# Banded									
First Observed: 7 Aug]	Last C	bserved: 5 Sep	p Peak Date (s): 14 Aug #: 13					

Great Horned Owl (Bubo virginianus)

FALL	·	Augu	st			Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day							0.1		0.02
# Days Observed							1		1
# Banded									
First Observed: 24 Se	ер	Last C	Observed: NA	Peak Date (s): 24 Sep #: 1					

Common Nighthawk (Chordeiles minor)

FALL	August					September						
	Week 1	Week 2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day				0	.6						0.1	
# Days Observed				:	2						2	
# Banded												
First Observed: 29 Au	g Last Observed: 30 Aug				Peak Date (s): 30 Aug #: 3					#: 3		

Belted Kingfisher (Ceryle alcyon)

SPRING	April			Ju	TOTAL		
	Week	1	Week 2	Week 3	Week 4	Week 5	TOTAL
Mean # Birds / Day			0.1	0.6	0.6	1	0.5
# Days Observed			1	4	3	6	14
# Banded							
First Observed: 8 May	у	Last Observed: 1 Jun Peak Date (s): 24 May / 25 May #: 2					

FALL	August				September						
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	TOTAL		
Mean # Birds / Day	2.9	1.6	1.7	1.9	1.6	0.9	0.1		1.4		
# Days Observed	7	7	7	7	7	5	1				
# Banded	1 (0-1-0)	2 (1-1-0)	1 (0-1-0)	1 (0-1-0)	2 (0-2-0)	1 (0-1-0)			8		
First Observed: 7 Aug	Last Observed: 21 Se			p	Peak	Date (s): 10 Aug		#: 5	•		

Yellow-bellied Sapsucker (Sphyrapicus varius)

SPRING	April	May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL			
Mean # Birds / Day		0.6	0.1	0.7	0.3	0.4			
# Days Observed		2	1	3	2	8			
# Banded		1 (1-0-0)				1			
First Observed: 8 May	y	Last Observed: 27 Ma	ay	Peak Date (s): 8 May	#: 3				

Downy Woodpecker (Picoides pubescens)

•											
FALL		August				September					
	Week 1	Week 2	Week 3	Wee	ek 4	Week 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day		0.1							0.3	0.04	
# Days Observed		1							1	2	
# Banded		1 (0-1-0)							1 (0-1-0)	2	
First Observed: 18 Au	ıa					Peak Date (s): both days #: 1					

Hairy Woodpecker (Picoides villosus)

SPRING	April	May June								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day	0.2					0.03				
# Days Observed	1					1				
# Banded										
First Observed: 1 May	у	Last Observed: NA		Peak Date (s): 1 May	#: 1					

FALL		Augu	st				Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	We	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day			0.1							0.02
# Days Observed			1							1
# Banded										
First Observed: 21 Au	First Observed: 21 Aug Last Observed: NA					Peak	Date (s): 21 Aug]	#: 1	

American Three-toed Woodpecker (Picoides dorsalis)

FALL	August							Septembe	er		TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day			0.1	0	.1	0.	1			1.0	0.1
# Days Observed			1		1	1				2	5
# Banded											
First Observed: 27 Au	ug Last Observed: 27 Sep			p	Peak Date (s): 26 Sep #: 2					#: 2	

Black-backed Woodpecker (Picoides arcticus)

FALL		Augu	st				Septemb	er		TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Week 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.1				0.1	0.1		0.3	0.1
# Days Observed		1				1	1		1	4
# Banded										
First Observed: 16 Au	First Observed: 16 Aug Last Observed: 26 S			ер		Pea	k Date (s): all day	S	#: 1	

Northern Flicker (Colaptes auratus)

SPRING	April		May								
	Week	c 1	Week 2	Week 3	Week 4	Week 5		TOTAL			
Mean # Birds / Day			4.6	1.7	1.7	0.8		1.8			
# Days Observed			7	6	6	6		25			
# Banded											
First Observed: 4 May	/	Last C	Observed: 1 Jun		Peak Date (s): 7 May	#: 12	•	•			

FALL		Augu	st				Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.6	1.1	0.6	0.6	0.	1	0.3			0.4
# Days Observed	3	6	3	4	1		1			18
# Banded										
First Observed: 10 Au	irst Observed: 10 Aug Last Observed: 14 Sep					Peak	Date (s): 11 Aug	g / 15 Aug	#: 2	

Olive-sided Flycatcher (Contopus cooperi)

SPRING	April		June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day	0.2	0.1	0.7	0.9		0.4
# Days Observed	1	1	4	2		8
# Banded			1 (0-0-1)	5 (4-0-1)		6
First Observed: 3 May		Last Observed: 19 Ma	ay	Peak Date (s): 18 May	#: 5	

Western Wood-pewee (Contopus cooperi)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	
Mean # Birds / Day					0.4	0.09
# Days Observed					3	3
# Banded						
First Observed: 28 Ma	ay	Last Observed: 1 Jun		Peak Date (s): all days	s #: 1	

FALL						Septembe	er		TOTAL		
	Week 1	Week 2	Week 3	Wee	k 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.3		0.1		0.	.1				0.1
# Days Observed		2		1		1	ı				4
# Banded				1 (0-1	I-0)	1 (0-	·1-0)	1 (0-1-0)			3
First Observed: 15 Au	Observed: 15 Aug Last Observed: 4 Sep						Peak I	Date (s): all days	S	#: 1	

Yellow-bellied Flycatcher (Empidonax flaviventris)

FALL		Augu	st			Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.3	0.7	0.3						0.2
# Days Observed	2	4	1						7
# Banded	2 (1-1-0)	5 (0-5-0)	2 (0-2-0)						9
First Observed: 11 A	ua	Last C	Observed: 22 Au	ıa	Peak	Date (s): 18 Au	a / 22 Aug	#: 2	

Alder Flycatcher (Empidonax alnorum)

SPRING	April	,	May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day					1.9	0.4
# Days Observed					5	5
# Banded					9 (0-0-9)	9
First Observed: 28 M	ay	Last Observed: 1 Jun)	Peak Date (s): 30 Ma	y #: 6	

FALL		August					September			
	M/1-4	\\\\-\-0	\\\\-\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			\A/	\\\\-\-\\\\\	\\\\ \. 7	Week	TOTAL
	Week 1	Week 2	Week 3	Week 4	4	Week 5	Week 6	Week 7	8	
Mean # Birds / Day	12.3	43.0	28.1	31.0		11.1	1.6	0.4		17.2
# Days Observed	5	7	7	7		7	5	3		41
	71	283	181	192		70	12	1		
# Banded	(57-13-1)	(50-233-0)	(19-162-0)	(34-158-	-0)	(3-67-0)	(1-11-0)	(0-1-0)		810
First Observed: 7 Aug	irst Observed: 7 Aug Last Obser					Peak	Date (s): 19 Au	g	#: 90	

Least Flycatcher (Empidonax minimus)

•							
SPRING	April			June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5		IUIAL
Mean # Birds / Day					0.4		0.09
# Days Observed					3		3
# Banded					2 (0-0-2)		2
First Observed: 27 Ma	ay	Last Observed: 1 Jun		Peak Date (s): all days	s #: 1		

FALL			Augus	t					Septemb	er		TOTAL
	Week 1	Week	(2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.1		0.1								0.04
# Days Observed		1		1								2
# Banded		1 (0-1-	-0)	1 (0-1-0)								2
First Observed: 16 Au	ıg Last Observed: 23 Aug				g			Peak [Date (s): all day	/S	#: 1	

Hammond's Flycatcher (Empidonax hammondii)

	,	\	· I · · · · · · · · · · · · · · · · · ·									
SPRING	April		May			June TOT						
	Week	1 Week 2	Week 3	Week 4	Week 5	101						
Mean # Birds / Day		0.9	1.6	4.9	2.6	2.						
# Days Observed		3	4	7	8	22						
# Banded		4 (1-1-2)	4 (1-0-3)	12 (5-1-6)		20						
First Observed: 5 Ma	У	Last Observed:	1 Jun	Peak Date (s): 18 May	/ #: 8	•						

FALL		Au	gust					Septembe	er		TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.1	0.4	0.1					0.1	0.1		0.1
# Days Observed	1	3	1					1	1		7
# Banded	1 (0-1-0)	3 (0-3-0)	1 (0-1-0)						1 (0-1-0)		6
First Observed: 7 Aug	Last Observed: 21 Sep				Peak Date (s): all days #: 1				#: 1		

Dusky Flycatcher (Empidonax oberholseri)

FALL						Septembe	r		TOTAL		
	Week 1	Week 2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day								0.3			0.04
# Days Observed								2			2
# Banded								1 (0-1-)			1
First Observed: 11 Se	red: 11 Sep Last Observed: 13 Sep						Peak	Date (s): both da	ays	#: 1	

Say's Phoebe (Sayornis saya)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day		0.3		0.1		0.09
# Days Observed		1		1		2
# Banded		1 (1-0-0)				1
First Observed: 7 May	У	Last Observed: 18 Ma	ıy	Peak Date (s): 7 May	#: 2	

FALL		Augu	ıst				Septembe	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				1.1	0.	.3		0.1		0.2
# Days Observed				4	2	2		1		7
# Banded				1 (0-1-0)						1
First Observed: 28 Au	ıg	Last (ep		Peak	Date (s): 30 Aug		#: 5		

Warbling Vireo (Vireo gilvus)

SPRING	April		May			June	TOTAL
	Week 1	Week 1 Week 2 Week 3 Week 4 Week 5					IOIAL
Mean # Birds / Day				0.1	0.3		0.09
# Days Observed				1	2		3
# Banded				1 (1-0-0)			1
First Observed: 20 Ma	av	Last Observed: 31 Ma	av	Peak Date (s): all day	s #: 1		

FALL	August				September						
	Week 1	Week 2	Week 3	Week 4	We	ek 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day	1.0	0.3	0.1							0.2	
# Days Observed	4	1	1							6	
# Banded	4 (0-4-0)	1 (0-1-0)								5	
First Observed: 8 Aug Last Observed: 22 Aug				g		Peak	Date (s): 8 Aug	•	#: 3		

Gray Jay (Perisoreus canadensis)

SPRING	April		May			June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5		IOIAL
Mean # Birds / Day		0.1		0.7	0.4		0.3
# Days Observed		1		3	2		6
# Banded							
First Observed: 8 May		Last Observed: 1 Jun		Peak Date (s): 23 May			

Black-billed Magpie (Pica hudsonia)

SPRING	April		May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day				0.4	0.1	0.1				
# Days Observed				3	1	4				
# Banded										
First Observed: 19 May		Last Observed: 26 Ma	ay	Peak Date (s): all days	s #: 1					

FALL	August					September				
	Week 1	Week 2	Week 3	Week 4		Week 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day						0.6	0.1	0.7	1.3	0.3
# Days Observed						4	1	4	2	11
# Banded										
First Observed: 7 Sep Last Observed: 26 Sep				p	Peak Date (s): 24 Sep to 26 Sep #: 2					

Common Raven (Corvus corax)

SPRING	April		May								
	Week 1	x 1 Week 2 Week 3 Week 4				TOTAL					
Mean # Birds / Day	5.4	4.9	2.2	1.6	3.1	3.3					
# Days Observed	5	7	6	6	8	32					
# Banded											
First Observed: 27 Apr		Last Observed: 1 Jun		Peak Date (s): 3 May	#: 16						

FALL	August					September					TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	4.7	4.4	4.1	4	.7	3.	7	7.0	6.6	4.7	5.0
# Days Observed	7	7	7	-	7	7	,	5	6	2	48
# Banded											
First Observed: 7 Aug Last Observed: 26 Sep			p	Peak Date (s): 12 Sep #: 17					#: 17		

Horned Lark (Eremophila alpestris)

SPRING	April	May June								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day	15.4	0.6				2.4				
# Days Observed	1	2				3				
# Banded										
First Observed: 3 May		Last Observed: 8 May	,	Peak Date (s): 3 May	#: 77					

Tree Swallow (*Tachycineta bicolor*)

SPRING	April			J	June	ΓΟΤΑL		
	Week 1		Week 2	Week 3	Week 4	Week 5		UTAL
Mean # Birds / Day			6.3	13.1	6.7	3.6		6.2
# Days Observed			4	3	4	7		18
# Banded								
First Observed: 6 May	First Observed: 6 May		Last Observed: 1 Jun		Peak Date (s): 17 May	y #: 87		

FALL	August					September					TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.1	0.1								0.04
# Days Observed		1	1								2
# Banded											
First Observed: 16 Aug Last Observed: 22 Aug				g			Peak	Date (s): both d	ays	#: 1	

Violet-green Swallow (Tachycineta thalassina)

SPRING	April		June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day		1.4	1.7	0.9	0.1	0.9
# Days Observed		2	1	2	1	6
# Banded						
First Observed: 7 May	у	Last Observed: 30 Ma	ay	Peak Date (s): 17 May	#: 12	

FALL	August				September						TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.1							0.1		0.04
# Days Observed		1							1		2
# Banded											
First Observed: 16 Aug Last Observed: 19 Aug				g			Peak I	Date (s): both da	ays	#: 1	

Bank Swallow (Riparia riparia)

SPRING	April		May		Ju	ne TOTAL	
	Week 1	Week 2	Week 2 Week 3 Week 4 Week 5				
Mean # Birds / Day					0.4	0.09	
# Days Observed					2	2	
# Banded							
First Observed: 30 Ma	ay	Last Observed: 31 Ma	ay	Peak Date (s): both da			

FALL		Augu	ıst					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Wee	Week 4		ek 5	Week 6	Week 7	Week 8	IOTAL
Mean # Birds / Day		0.3	0.3		0.3		3				0.1
# Days Observed		1		1		1					3
# Banded											
First Observed: 16 Au	g Last Observed: 9 Sep)	•	Peak Date (s): all days #: 2					

Cliff Swallow (Petrochelidon pyrrhonota)

SPRING	April		June	TOTAL									
	Week 1	Week 2	Week 3	Week 4	Week 5	IUIAL							
Mean # Birds / Day		0.7		0.1		0.2							
# Days Observed		3		1		4							
# Banded													
First Observed: 6 Ma	V	Last Observed: 20 Ma	av	Peak Date (s): 6 May									

FALL		Augu	st					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	2.9										0.4
# Days Observed	1										1
# Banded											
First Observed: 10 Au	ıg	Last Observed: NA				Peak Date (s): 10 Aug #: 20					

Barn Swallow (Hirundo rustica)

FALL		Augu	st					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	1.3	2.3									0.5
# Days Observed	3	5									8
# Banded											
First Observed: 7 Aug]	Last Observed: 20 Aug				Peak Date (s): 16 Aug #: 6				#: 6	

Black-capped Chickadee (Poecile atricapillus)

SPRING	April	May								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day	2.2	2.3	1.4	1.1	1.3	1.6				
# Days Observed	5	7	6	5	7	30				
# Banded		3 (2-0-1)				3				
First Observed: 27 Ap	or	Last Observed: 1 Jun		Peak Date (s): 2 May	/ 7 May #: 3					

FALL		Augu	st					Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Wee	Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	3.7	2.0	1.3	2.0		0 2.		6.4	4.4	5.7	3.3
# Days Observed	7	7	4	7		7	7	4	6	3	45
# Banded	4 (0-4-0)	2 (0-2-0)	2 (0-2-0) 2 (0-2		2-0) 1 (0-1-0)		·1-0)	15 (0-15-0)	13 (1-12-0)	12 (0-12-0)	51
First Observed: 7 Aug	Last Observed: 27 Sep				Peak Date (s): 11 Sep #: 30						

Mountain Chickadee (Poecile gambeli)

SPRING	April	8 /	May								
	Week 1	Week 2	Week 3	Week 4	Week 5		OTAL				
Mean # Birds / Day	0.4						0.06				
# Days Observed	1						1				
# Banded	2 (2-0-0)										
First Observed: 2 May	y	Last Observed: NA		Peak Date (s): 2 May	#: 2						

FALL		Augu	st				Septembe	r		TOTAL
	Week 1	Week 2	Week 3	Week 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.1	0.	4		1.3	2.3	0.4
# Days Observed				1	2)		3	2	8
# Banded				1 (0-1-0)				9 (0-9-0)	5 (0-5-0)	15
First Observed: 3 Sep	Last Observed: 26 Se			р	Peak Date (s): 25 Sep #: 6				#: 6	

Chestnut-backed Chickadee (Poecile rufescens)

FALL		Augu	ıst					Septembe	er		TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day								0.1			0.02
# Days Observed								1			1
# Banded								1 (0-1-0)			
First Observed: 17 Se	p Last Observed: NA					Peak Date (s): 17 Sep #: 1					

Boreal Chickadee (Poecile hudsonica)

SPRING	April	·	May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day		0.6	0.3	0.4	1.0	0.5
# Days Observed		3	2	2	6	13
# Banded			2 (1-1-0)	2 (0-0-2)	3 (0-1-2)	7
First Observed: 7 May	/	Last Observed: 1 Jun		Peak Date (s): 24 to 2	26 May #: 2	

FALL		Augus	st			Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.6	1.0	11.0	8.3	7.6	5.6	18.3	5.6
# Days Observed		2	2	2 7		4	5	3	29
# Banded		4 (0-4-0)	3 (0-3-0) 30 (0-30-0)		17 (0-17-0)	23 (0-23-0)	26 (0-26-0)	35 (0-35-0)	138
First Observed: 16 Au	Last Observed: 27 Sep			р	Peak Date (s): 11 Sep #: 40				

Hybrid Chickadee (Mountain Chickadee x Boreal Chickadee: $Poecile\ gambeli\ x\ Poecile\ budsonica$

FALL		А	ugust			September					
	Week 1	Week 2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day										0.3	0.02
# Days Observed										1	1
# Banded										1 (0-1-0)	1
First Observed: 25 Se	ер	La	st Observed: NA				Peak	Date (s): 25 Sep)	#: 1	

Red-breasted Nuthatch (Sitta canadensis)

SPRING	April	,	May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day		0.1		0.1	0.1	0.09				
# Days Observed		1		1	1	3				
# Banded		1 (1-0-0)				1				
First Observed: 4 May	у	Last Observed: 29 Ma	у	Peak Date (s): all day	s #: 1					

FALL		Augus	st		September						
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	TOTAL		
Mean # Birds / Day	1.0	1.9	0.3	0.1					0.4		
# Days Observed	6	7	2	1					16		
# Banded		3 (0-3-0)							3		
First Observed: 7 Aug)	Last C	bserved: 2 Sep	l.	Peak	Date (s): 18 Aug]	#: 5			

Golden-crowned Kinglet (Regulus satrapa)

SPRING	April	May June							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL			
Mean # Birds / Day			0.1			0.03			
# Days Observed			1			1			
# Banded									
First Observed: 11 Ma	ay	Last Observed: NA		Peak Date (s): 11 May	/ #: 1				

Ruby-crowned Kinglet (Regulus calendula)

SPRING	April		May			June TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day	14.2	16.7	1.4	0.4	0.4	6.0
# Days Observed	5	7	2	1	3	18
# Banded	29 (18-1-10)	39 (15-17-7)	2 (1-0-1)	2 (0-0-2)		72
First Observed: 27 Ar	or	Last Observed: 1 Jun		Peak Date (s): 3 May	/ 5 May #: 30	

FALL		Augu	st			Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.4		1.6	2.1	1.1	1.0		0.8
# Days Observed		2		7	7	3	5		24
# Banded				5 (0-5-0)	9 (0-9-0)	8 (0-8-0)	4 (1-3-0)		26
First Observed: 17 Au	ıg	Last C	Observed: 24 Se	р	Peak	Date (s): 12 Sep)	#: 6	

Mountain Bluebird (Sialia curocoides)

SPRING	April	May June							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL			
Mean # Birds / Day	2.4	1.7				0.7			
# Days Observed	3	1				4			
# Banded									
First Observed: 27 Ap	or	Last Observed: 7 May	1	Peak Date (s): 7 May	#: 12				

FALL		Augu	st			September					
	Week 1	Week 2	Week 3	Wee	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day									0.4		0.1
# Days Observed									2		2
# Banded											
First Observed: 18 Se	ep	Last 0	Observed: 21 Se	p		-	Peak I	Date (s): 18 Sep	1	#: 2	·

Townsend's Solitaire (Myadestes townsendi)

FALL		Augu	st			September					TOTAL
	Week 1	Week 2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day						0.	4		0.4		0.1
# Days Observed						2	!		2		4
# Banded											
First Observed: 5 Sep Last Observed: 19 Se			ep	Peak Date (s): 5 Sep / 18 Sep #: 2							

Gray-cheeked Thrush (Catharus minimus)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	
Mean # Birds / Day					0.1	0.03
# Days Observed					1	1
# Banded					1 (0-1-0)	1
First Observed: 30 Ma	ay	Last Observed: NA		Peak Date (s): 30 May	y #: 1	

FALL		Augu	st		September					
	Week 1	Week 2	Week 3	Week 4	We	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day				0.3						0.04
# Days Observed				1						1
# Banded				1 (0-1-0)						1
First Observed: 1 Sep)	Last (Observed: NA			Peak	Date (s): 1 Sep		#: 2	

Swainson's Thrush (Catharus ustulatus)

SPRING	April		May		June	TOTAL
	Week	1 Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day		0.1		1.4	4.3	1.3
# Days Observed		1		3	8	12
# Banded		1 (1-0-0)		5 (3-2-0)	15 (4-3-8)	21
First Observed: 10 Ma	av	Last Observed: 1 Jun	1	Peak Date (s): 24 Mar	y / 31 May #: 8	

FALL		August				September					
	Week 1	Week 2	Week 3	Weel	Week 4		5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day	0.7	1.7	0.9	6.7	7	1.1			0.3		1.5
# Days Observed	5	4	4	4 7		5			2		27
# Banded	3 (0-3-0)	4 (0-4-0)	4-0) 3 (0-3-0) 7 (0-7-		7-0) 1 (0-1-0)		1 (0-1-0)		19		
First Observed: 7 Aug	Last Observed: 24 Sep				Peak Date (s): 29 Aug #: 15				#: 15		

Hermit Thrush (Catharus guttatus)

		<u> </u>				
SPRING	April		Ju	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day		0.1			0.4	0.1
# Days Observed		1			3	4
# Banded		1 (1-0-0)				1
First Observed: 8 May	y	Last Observed: 29 Ma	ay	Peak Date (s): all days	s #: 1	

FALL		August				September					
	Week 1	Week 2	Week 3	Week 4		Wee	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day				0.1		0.1			0.1		0.1
# Days Observed					1 1				1		3
# Banded									1 (0-1-0)		1
First Observed: 30 Au) Aug Last Observed: 21 Se			p	Peak Date (s): all days #: 1					#: 1	

American Robin (Turdus migratorius)

SPRING	April		Jun	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day	129.2	140.3	3.4	3.3	2.0	49.8
# Days Observed	3	7	6	6	8	30
# Banded		2 (1-1-0)	2 (1-0-1)		1 (0-1-0)	5
First Observed: 1 May	у	Last Observed: 1 Jun		Peak Date (s): 3 May	#: 618	

FALL		Augus	st		September						
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	TOTAL		
Mean # Birds / Day	1.3	0.1		10.7	8.1	7.9	25.3	2.0	7.3		
# Days Observed	3	1		7	7	2	6	1	27		
# Banded											
First Observed: 7 Aug Last Observed:				p	Peak	Date (s): 12 Sep)	#: 54			

Varied Thrush (Ixoreus naevius)

SPRING	April			June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5		IUIAL
Mean # Birds / Day	4.0	3.4 0.4		1.0	1.0 1.0		1.8
# Days Observed	2	6 2		7 8			25
# Banded							
First Observed: 1 Ma	у	Last Observed: 1 Jun	/ 8 May #: 13				

FALL		Augu	st		September						
	Week 1	Week 2	Week 3	Week 4	We	ek 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day		0.1		1.4	11	1.4	1.6	3.9	0.3	2.5	
# Days Observed		1	1			7	3	3	1	20	
# Banded					1 (0	-1-0)	1 (0-1-0)			3	
First Observed: 16 Aug Last Observed: 26 Sep				р		Peak	Date (s): 5 Sep		#: 49		

European Starling (Sturnus vulgaris)

SPRING	April		May			June TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day		0.3				0.06
# Days Observed		1				1
# Banded						
First Observed: 8 Mag	у	Last Observed: NA		Peak Date (s): 8 May	#: 2	

American Pipit (Anthus rubescens)

SPRING	April			June	TAL		
	Week 1	Week 2	Week 3	Week 4	Week 5		IAL
Mean # Birds / Day	34.6	19.7	1.1	4.6	0.1	10	0.4
# Days Observed	3	7	4	6	1	2	21
# Banded		1 (0-0-1)				·	1
First Observed: 1 May		Last Observed: 26 Ma	ay	Peak Date (s): 3 May	#: 161		

FALL	August				September						
	Week 1	Week 2	Week 3	Week	4 We	ek 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day		0.4	0.7	5.3	3	.4	4.4	4.9	0.3	2.6	
# Days Observed		2	3	7	(3	4	5	1	28	
# Banded				1 (0-1-	0)					1	
First Observed:	Last Observed:			•	Peak Date (s): #:						

Bohemian Waxwing (Bombycilla garrulus)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	
Mean # Birds / Day	0.8	52.7	8.1	2.3		13.1
# Days Observed	1	6 5		3		15
# Banded		22 (9-13-0)		1 (0-1-0)		23
First Observed: 3 Mag	у	Last Observed: 20 Ma	ay	Peak Date (s): 9 May	#: 108	

FALL			September						TOTAL		
	Week 1	Week 2	Week 3	Week 4		Week 5		Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.1	4.1	0.1	0	.3	0.	3	38.6	35.6	19.3	11.8
# Days Observed	1	2	1 2		2	1		3	5	3	18
# Banded											
First Observed: 8 Aug Last Observed: 27 Sep				p	Peak Date (s): 14 Sep #: 200						

Tennessee Warbler (Vermivora peregrina)

SPRING	April		Jun	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL
Mean # Birds / Day					0.3	0.06
# Days Observed					2	2
# Banded					2 (1-0-1)	2
First Observed: 26 M	av	Last Observed: 28 Ma	ay	Peak Date (s): both da	ays #: 1	

Orange-crowned Warbler (Vermivora celata)

SPRING	April		June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day		1.0	4.4	8.1	2.8	3.4
# Days Observed		4	6	6	7	23
# Banded		5 (5-0-0)	12 (7-1-4)	32 (17-9-6)	13 (1-12-0)	61
First Observed: 6 May	У	Last Observed: 31 Ma	ny	Peak Date (s): 18 May	#: 18	

FALL	August							Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.1	0.9	1.7	10.6	6	2.	1	1.1	2.9	1.3	2.7
# Days Observed	1	4	5	5 6		5		3	5	2	31
# Banded	1 (0-1-0)	6 (0-6-0)	9 (0-9-0)	55 (5-5	(0-0	10 (3-	-7-0)	5 (2-3-0)	12 (0-12-0)	3 (1-2-0)	101
First Observed: 11 Aug Last Observed: 26 Sep				ep	Peak Date (s): 29 Aug #: 30						

Nashville Warbler (Vermivora ruficapilla)

FALL	August							Septembe	er		TOTAL
	Week 1	Week 2	Week 3	We	Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day									0.1		0.02
# Days Observed									1		1
# Banded									1 (0-1-0)		1
First Observed: 23 Sep Last Observed: NA				•	•		Peak	Date (s): 23 Sep		#: 1	

Yellow Warbler (Dendroica petechia)

SPRING	April			J	une TOT	Α1		
	Week	1	Week 2	Week 3	Week 4	Week 5		AL
Mean # Birds / Day					0.1	9.9	2.4	4
# Days Observed					1	8	9	
# Banded						31 (10-19-2)	31	1
First Observed: 23 Ma	ay		Last Observed: 1 Jun	<u> </u>	Peak Date (s): 31 May	<i>t</i> #: 18		

FALL		Augu	st				Septembe	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	10.3	27.3	25.7	39.7	10	.6	0.4	0.6	0.7	15.5
# Days Observed	7	7	7	7	7	,	2	3	2	42
	39	97 116		176	49	9	2	3	2	484
# Banded	(4-35-0)	(4-35-0) (16-81-0) (30-86-0)			(36-1	3-0)	(1-1-0)	(2-1-0)	(2-0-0)	404
First Observed: 7 Aug Last Observed: 25 Sep				р		Peak	Date (s): 29 Aug		#: 85	

Magnolia Warbler (Dendroica magnolia)

0					-							
FALL		А	August						Septemb	er		TOTAL
	Week 1	Week 2	2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.1										0.02
# Days Observed		1										1
# Banded		1 (0-1-0	0)									1
First Observed: 19 Aug Last Observed: NA							Peak [Date (s): 19 Aug	1	#: 1		

Cape May Warbler (Dendroica tigrina)

SPRING	April		May			June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5		IOIAL
Mean # Birds / Day					0.1		0.03
# Days Observed					1		1
# Banded					1 (1-0-0)		
First Observed: 31 Ma	ay	Last Observed: NA		Peak Date (s): 31 May	#: 1		

Yellow-rumped Warbler (Dendroica coronata)

-						
SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOTAL
Mean # Birds / Day	1.6	11.4	5.3	7.0	7.5	6.9
# Days Observed	3	7	6	6	8	30
# Banded		22 (17-3-2)	11 (5-1-5)	22 (10-5-7)	23 (5-15-3)	78
First Observed: 1 May	У	Last Observed: 1 Jun	1	Peak Date (s): 7 May	#: 35	

FALL	August							Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4		Wee	k 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	2.1	10.0	3.6	10	10.4		.1	2.1	4.3	5.0	6.0
# Days Observed	6	7	5	5 7		7		5	5	3	45
# Banded	3 (0-3-0)	14 (0-14-0)	6 (1-5-0) 11 (0-1		11-0)			2 (1-1-0)	2 (0-2-0)	8 (5-3-0)	46
First Observed: 7 Aug	served: 7 Aug Last Observed: 27 Sep						Peak I	Date (s): 5 Sep		#: 29	

Townsend's Warbler (Dendroica townsendi)

SPRING	April	·	Ju	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day				0.1		0.03
# Days Observed				1		1
# Banded				1 (1-0-0)		
First Observed: 18 May Last Observed: NA				Peak Date (s): 18 May	/ #: 1	

FALL		August						Septembe	er		TOTAL		
	Week 1	Week 2	Week 3	We	Week 4		Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day								0.1			0.02		
# Days Observed								1			1		
# Banded													
First Observed: 17 Sep Last Observed: NA							Peak I	Date (s): 17 Sep	1	#: 1			

Blackpoll Warbler (Dendroica striata)

SPRING	April		May								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL					
Mean # Birds / Day					1.25	0.3					
# Days Observed					5	5					
# Banded					5 (1-4-0)	5					
First Observed: 27 Ma	ay	Last Observed: 1 Jun		Peak Date (s): 31 May	#: 5						

FALL		Augus	st				Septemb	September					
	Week 1	Week 2	Week 3	Week	4	Week 5	Week 6	Week 7	Week 8	TOTAL			
Mean # Birds / Day	1.1	5.6	1.6	3.3		0.1	0.7			1.7			
# Days Observed	6	6	4	7		1	2			26			
# Banded	7 (0-7-0)	19 (0-19-0)	5 (0-5-0) 12 (1-1		1-11-0) 1 (0-1-0)		1 (0-1-0)			45			
First Observed: 7 Aug	Last Observed: 12 Sep				Peak Date (s): 20 Aug #: 15								

American Redstart (Setophaga ruticilla)

		<u> </u>							
FALL		Augus	st			Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.3	0.6	0.1	0.9	0.1		0.1		0.3
# Days Observed	2	3	1	5	1		1		13
# Banded	1 (0-1-0)	3 (1-2-0)	1 (0-1-0)	3 (2-1-0)	1 (1-0-0)		1 (1-0-0)		10
First Observed: 8 Aug	Aug Last Observed: 18 Sep			ep	Peak Date (s): 17 Aug / 28 Aug #: 2				

Northern Waterthrush (Seirus noveboracensis)

SPRING	April	May June								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day				0.4	2.5	0.7				
# Days Observed				2	8	10				
# Banded				2 (2-0-0)	2 (1-0-1)	4				
First Observed: 19 May Last		Last Observed: 1 Jun		Peak Date (s): 25 May	#: 4					

FALL		Augu	st		September						TOTAL
	Week 1	Week 2	Week 3	Wee	Week 4		ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	5.7	3.9	4.3	2.4		0.	3	0.1			2.3
# Days Observed	7	7	7	7	•	2		1			31
	17	12	10	5	i	1		1			46
# Banded	(0-17-0)	(3-9-0)	(1-9-0)	(1-4	(1-4-0)		-0)	(1-0-0)			40
First Observed: 7 Aug	Last C	Last Observed: 12 Sep			Peak Date (s): 20 Aug				#: 11		

MacGillvary's Warbler (Oporornis tolmei)

FALL		Augu	st		September						TOTAL		
	Week 1	Week 2	Week 3	Week 4		Wee	k 5	Week 6	Week 7	Week 8	IOIAL		
Mean # Birds / Day				0.1		0.1	1				0.04		
# Days Observed				1		1					2		
# Banded							1 (1-0		0-0)				1
First Observed: 29 Aug Last Observed: 6 Sep)			Peak I	Date (s): both da	ays	#: 1				

Common Yellowthroat (Geothlypis trichas)

			71 /							
SPRING	April		May J							
	Week	:1	Week 2	Week 3	Week 4	Week 5	TOTAL			
Mean # Birds / Day					0.1	3.5	0.9			
# Days Observed					1	7	8			
# Banded					1 (0-1-0)	20 (1-7-12)	21			
First Observed: 20 M	av		Last Observed: 1 Jun		Peak Date (s): 31 May	v #: 10				

FALL		Augu	st		September					
	Week 1	Week 2	Week 3	Week	4	Week 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day	0.3	1.4	3.0	5.0 5.3		3.4	1.7	1.4		2.2
# Days Observed	2	4	7	7		7	3	3		33
# Banded	1 (0-1-0)	6 (0-6-0)	9 (0-9-0)	21 (1-20)-0) 1:	3 (8-5-0)	9 (7-2-0)	7 (5-2-0)		66
First Observed: 7 Aug	d: 7 Aug Last Observed: 24 Sep			ep	Peak Date (s): 29 Aug #: 10					

Wilson's Warbler (Wilsonia pusilla)

SPRING	April		June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL
Mean # Birds / Day		0.6	7.6	23.3	2.3	7.0
# Days Observed		2	6	7	8	23
# Banded		2 (1-1-0)	25 (20-1-4)	109 (84-6-19)	14 (1-9-4)	150
First Observed: 9 Mar	V	Last Observed: 1 Jun		Peak Date (s): 18 May	#: 125	

FALL		Augus	st			Septemb	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	3.3	2.4	2.1	2.1 7.0		1.6	1.7	4.3	2.9
# Days Observed	6	6	3	7	5	4	5	3	39
	14	13	13	35	9	10	9	10	113
# Banded	(0-14-0)	(0-13-0)	(0-13-0)	(7-28-0)	(4-5-0)	(5-5-0)	(3-6-0)	(2-8-0)	
First Observed: 8 Aug	Observed: 8 Aug Last Observed: 27 Sep				Peak Date (s): 30 Aug #: 16				

American Tree Sparrow (Spizella arborea)

SPRING	April	May								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day	0.8	7.0	0.7	0.1		1.7				
# Days Observed	3	4	3	1		11				
# Banded		38 (11-12-15)	2 (0-1-1)	1 (0-0-1)		41				
First Observed: 29 Ap	or	Last Observed: 18 Ma	ау	Peak Date (s): 5 May	#: 18					

FALL	August				September						TOTAL
	Week 1	Week 2	Week 3	Week 4		Week 5		Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day				0.1		1.1		0.3	1.4	4.3	0.7
# Days Observed				1	1		4	1	4	3	13
# Banded				1 (0-	1 (0-1-0)		-1-0)		7 (1-6-0)	5 (2-3-0)	15
First Observed: 30 Aug Last Observed: 27 Se			p	•	•	Peak I	Date (s): 25 Sep		#: 10		

Chipping Sparrow (Spizella passerina)

SPRING	April		May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL				
Mean # Birds / Day					0.4	0.09				
# Days Observed					2	2				
# Banded					3 (1-2-0)	3				
First Observed: 29 May		Last Observed: 30 Ma	у	Peak Date (s): 30 May	#: 2					

FALL		Augu	st				Septembe	er		TOTAL
	Week 1	Week 2	Week 3	Week 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.4	0.7	0.1	0.3	0.	1				0.2
# Days Observed	2	2	1	2	1					8
# Banded	1 (1-0-0)	2 (0-2-0)		2 (0-2-0)	1 (0-	1-0)				6
First Observed: 8 Aug Last Observed: 9 Sep)		Peak	Date (s): 15 Aug	•	#: 4		

Savannah Sparrow (Passerculus sandwichensis)

SPRING	April			June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 5	
Mean # Birds / Day	0.2	1.9	0.1	0.7	0.5		0.7
# Days Observed	1	5	1	3	3		13
# Banded	1 (1-0-0)	5 (1-0-4)		2 (0-1-1)	2 (0-0-2)		10
First Observed: 29 Apr		Last Observed: 29 Ma	ay	Peak Date (s): 7 May	#: 8		

FALL		August				September					TOTAL
	Week 1	Week 2	Week 3	Wee	k 4	We	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day		0.4	0.6	3.6	6	0	.9	0.1	0.7		0.8
# Days Observed		2	3	7		4	4	1	1		18
# Banded		2 (0-2-0)	1 (0-1-0)	6 (0-6	6-0)	1 (0	-1-0)	1 (0-1-0)	2 (0-2-0)		13
First Observed: 15 Aug Last Observed: 21 Sep			Peak Date (s): 30 Aug #: 7								

Fox Sparrow (Passerella iliaca)

SPRING	April	,	May					
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL		
Mean # Birds / Day	0.2	7.3				1.5		
# Days Observed	1	7				8		
# Banded		26 (11-12-3)				26		
First Observed: 3 May	y	Last Observed: 10 Ma	ay	Peak Date (s): 5 May	#: 15			

FALL	August				September					TOTAL	
	Week 1	Week 2	Week 3	Wee	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				0.	7	0.	6	0.3		1.0	0.3
# Days Observed				3	3	3	3	1		2	9
# Banded				4 (2-	2-0)	2 (0-	2-0)	1 (0-1-0)		3 (0-3-0)	10
First Observed: 31 Au	Aug Last Observed: 27 Se			ep			Peak I	Date (s): 12 Sep	/ 25 Sep	#: 2	

Lincoln's Sparrow (Melospiza lincolnii)

SPRING	April	May					
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL	
Mean # Birds / Day	0.4	2.1	0.3	1.0	0.5	0.9	
# Days Observed	2	7	2	5	3	19	
# Banded	2 (1-0-1)	11 (7-1-3)	1 (0-0-1)	5 (0-0-5)	1 (1-0-0)	21	
First Observed: 1 May	у	Last Observed: 31 Ma	ay	Peak Date (s): 4 May	#: 4		

FALL		August			September					
	Week 1	Week 2	Week 3	Week 4	Weel	k 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day	0.1		0.1	0.3				0.1	0.3	0.1
# Days Observed	1		1	2				1	1	6
# Banded	1 (0-1-0)			2 (0-2-0)				1 (0-1-0)		4
First Observed: 12 Aug Last Observed: 25 Se			р		Peak D	Date (s): all days	5	#: 1		

White-crowned Sparrow (Zonotrichia leucophyrs)

SPRING	April		Ju	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day	46.2	91.2	15.4	3.1	1.3	29.9
# Days Observed	4	7	6	6	6	29
# Banded	69 (26-13-30)	197 (60-86-51)	37 (4-22-11)	10 (1-4-5)		311
First Observed: 29 Apr		Last Observed: 31 Ma	av	Peak Date (s): 6 May	#: 220	

FALL		Augu	st				TOTAL			
	Week 1	Week 2	Week 3	Week	4 We	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day	0.3	0.1	0.1	0.7	(.3				0.2
# Days Observed	1	1	1	3		2				8
# Banded				1 (0-1-0	0)					1
First Observed: 12 Au	First Observed: 12 Aug Last Observed: 8 Sep)	Peak Date (s): 29 Aug #: 3				#: 3	

Golden-crowned Sparrow (Zonotrichia atricapilla)

SPRING	April	May							
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTA			
Mean # Birds / Day	0.4	2.1	1.7	0.3		0.9			
# Days Observed	2	6	6	2		16			
# Banded	1 (0-0-1)	5 (1-3-1)	3 (1-1-1)	1 (0-0-1)		9			
First Observed: 2 Mag	у	Last Observed: 21 Ma	ıy	Peak Date (s): 14 May	#: 6				

Dark-eyed Junco (Junco hyemalis)

SPRING	April	May				
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL
Mean # Birds / Day	1.6	206.4	5.7	3.3	1.9	45.0
# Days Observed	5	7	6	6	7	31
# Banded	1 (1-0-0)	231 (109-97-25)	10 (0-3-7)	6 (2-2-2)	1 (0-0-1)	249
First Observed: 27 Ap	or	Last Observed: 1 Jun		Peak Date (s): 6 May	#: 796	

FALL		Aı	August				September				
	Week 1	Week 2	Week 3	Week 4	We	ek 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day	0.4	1.1	1.6	10.4	19	9.3	4.3	9.4	54.0	9.4	
# Days Observed	3	4	3	7		7	6	7	3	40	
# Banded		2 (0-2-0)	1 (0-1-0)	25 (0-25-0	0) 43 (0-	-43-0)	7 (1-6-0)	9 (2-7-0)	100 (82-18-0)	187	
First Observed: 8 Aug	9	La	st Observed: 27 Se	ep		Peak I	Date (s): 25 Sep	1	#: 111		

Lapland Longspur (Calcarius lapponicus)

SPRING	April	May June								
	Week 1	Week 2	Week 3	Week 4	Week 5					
Mean # Birds / Day	22.0	210.4	0.7	0.4		46.8				
# Days Observed	2	7	1	1		11				
# Banded		5 (2-0-3)				5				
First Observed: 2 May	у	Last Observed: 18 Ma	ıy	Peak Date (s): 6 May	#: 705					

FALL		Augu	st		September						TOTAL
	Week 1	Week 2	Week 3	Wee	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	IOIAL
Mean # Birds / Day				1.	1	1.	0	0.1	1.7	0.3	0.6
# Days Observed				4	ļ	5	5	1	4	1	15
# Banded											
First Observed: 28 Au	ıg	Last C	bserved: 26 Se	p			Peak I	Date (s): 18 Sep)	#: 8	

Snow Bunting (Plectrophenax nivalis)

SPRING	April		May June								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL					
Mean # Birds / Day		0.4				0.09					
# Days Observed		2				2					
# Banded											
First Observed: 5 May	у	Last Observed: 7 May	,	Peak Date (s): 7 May	#: 2						

Red-winged Blackbird - (Agelaius phoeniceus)

SPRING	April			June	TOTAL		
	Week 1	Week 2	Week 3	Week 4	Week 5		IOIAL
Mean # Birds / Day		0.1	0.1				0.06
# Days Observed		1	1				2
# Banded							
First Observed: 7 May	У	Last Observed: 16 Ma	ny	Peak Date (s): both d	ays #: 1		

Rusty Blackbird (Euphagus carolinus)

SPRING	April		May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	
Mean # Birds / Day		28.6	1.1	0.6		6.2
# Days Observed		7	3	2		12
# Banded						
First Observed: 4 May	у	Last Observed: 20 Ma	ny	Peak Date (s): 7 May	#: 125	

FALL	August					September					
	Week 1	Week 2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day	0.1	0.1	1.7	11	.3	10	.0	7.1	4.3	3.0	4.8
# Days Observed	1	1	3	-	7	7	7	4	7	3	33
# Banded			1 (0-1-0)			3 (0-	3-0)	2 (0-2-0)		1 (0-1-0)	7
First Observed: 11 Au	ıg	Last C	bserved: 27 Se	р			Peak I	Date (s): 11 Sep	1	#: 38	

Brown-headed Cowbird (Molothrus ater)

SPRING	April	, ,	May								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL					
Mean # Birds / Day			0.1	0.3	0.1	0.1					
# Days Observed			1	2	1	4					
# Banded											
First Observed: 17 Ma	ay	Last Observed: 29 Ma	ay	Peak Date (s): all days	s #: 1						

Pine Grosbeak (Pinicola enucleator)

FALL		Augus	st		September					
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day							1.0	1.7	0.2	
# Days Observed							3	2	5	
# Banded										
First Observed: 18 Se	Ep Last Observed: 27 Sep			р	Peak Date (s): 19 Sep / 26 Sep #: 4					

Purple Finch (Carpodacus purpureus)

- '			<u>- </u>					
SPRING	April			J	une	OTAL		
	Week	1	Week 2	Week 3	Week 4	Week 5		TAL
Mean # Birds / Day			1.3	0.7	2.0	1.1	1	1.1
# Days Observed			5	4	6	4		19
# Banded						1 (1-0-0)		1
First Observed: 4 Ma	V		Last Observed: 1 Jun		Peak Date (s): 18 Mar	y / 31 May #: 4		

FALL		Augu	st		September					
	Week 1	Week 2	Week 3	Week 4	We	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day	0.1	0.1		0.1						0.1
# Days Observed	1	1		1						3
# Banded										
First Observed: 11 Au	g Last Observed: 2 Sep				Peak Date (s): all days #: 1					

Red Crossbill (Loxia curvirostra)

SPRING	April	,	May								
	Week 1	Week 2	Week 3	Week 4	Week 5	TOTAL					
Mean # Birds / Day		0.1				0.03					
# Days Observed		1				1					
# Banded											
First Observed: 10 Ma	ay	Last Observed: NA		Peak Date (s): 10 May	<i>y</i> #: 1						

FALL		August				September					
	Week 1	Week 2	Week 3	We	ek 4	Wee	ek 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day	0.4	0.3									0.1
# Days Observed	3	2									5
# Banded											
First Observed: 7 Aug			Last Observed: 20 Aug				Peak Date (s): all days #: 1				

White-winged Crossbill (Loxia leucoptera)

willie willigea c	10000	(20,000	Piciti								
FALL	August				September						
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	TOTAL		
Mean # Birds / Day	36.0	3.6	0.6	0.6	0.3	0.1	0.1		5.6		
# Days Observed	7	7	3	4	1	1	1		24		
# Banded			2 (0-2-0)								
First Observed: 7 Aug	7	Last (hserved: 19 Se	en.	Pr	eak Date (s): 9 Aug		#· 95	<u> </u>		

Common Redpoll (Cardeulis flammea)

SPRING	April	,	May		June	TOTAL
	Week 1	Week 2	Week 3	Week 4	Week 5	IOIAL
Mean # Birds / Day	126.4	114.3	0.9	2.3	0.3	42.8
# Days Observed	4	7	3	3	1	18
# Banded		22 (9-4-9)				22
First Observed: 29 Ap	or	Last Observed: 29 Ma	ау	Peak Date (s): 6 May	#: 340	

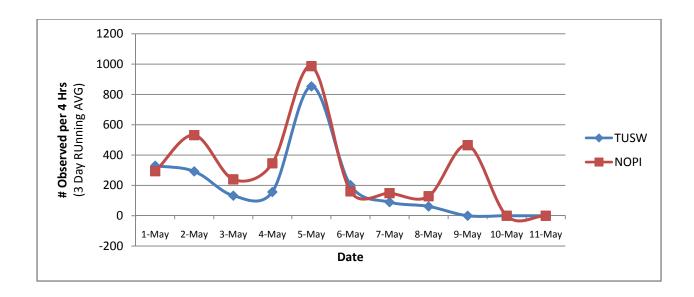
FALL	August					September					
	Week 1	Week 2	Week 3	We	ek 4	Wee	k 5	Week 6	Week 7	Week 8	TOTAL
Mean # Birds / Day		0.3		0	.7				0.4	0.7	0.2
# Days Observed		1		(3				2	1	7
# Banded											
First Observed: 16 Aug Last Observed: 25 Sep			p			Peak I	Date (s): many	days	#: 2		

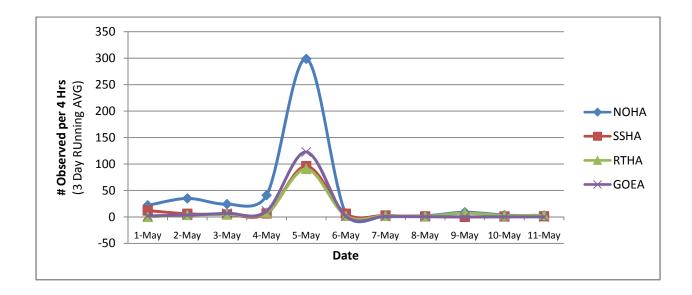
Pine Siskin (Cardeulis pinus)

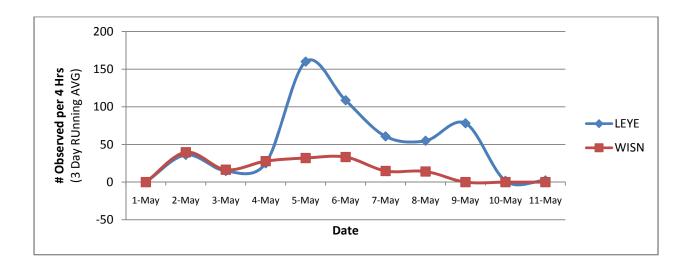
SPRING	April				June	TAI	
	Week 1	Week 2	Week 3	Week 4	Week 5		ΛL
Mean # Birds / Day	0.6	0.3		0.4	0.3	0.	.3
# Days Observed	2	2		1	1	6	ò
# Banded							
First Observed: 1 May	у	Last Observed: 1 Jun		Peak Date (s): 24 May	/ #: 3		

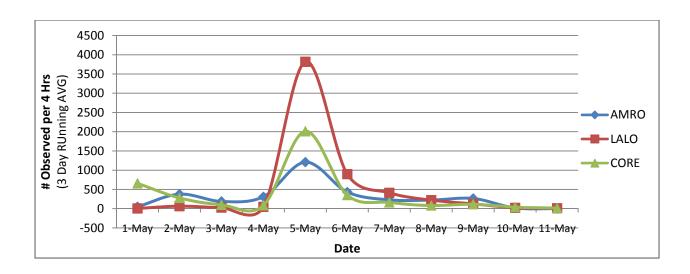
FALL	August				September						
	Week 1	Week 2	Week 3	Wee	k 4	Week 5	Week 6	Week 7	Week 8	TOTAL	
Mean # Birds / Day	3.1	3.9	1.3	2.	9	2.0	9.3	2.0		3.3	
# Days Observed	7	5	3	7		6	4	5		37	
# Banded			1 (0-1-0)								
First Observed: 7 Aug	7	Last C	Observed: 24 Se	p		Peal	k Date (s): 15 Au	9	#: 15		

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APPENDIX 3 – SPRING VISUAL MIGRATION DATA FOR SELECT SPI	ECIES









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APPENDIX 4 – FALL VISUAL MIGRATION DATA FOR SELECT SPECIE	S

