

# McIntyre Marsh Bird Banding Station Final Report 2011



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The 2011 operation of the McIntyre Marsh Bird Banding Demonstration Site was made possible due to support from the following organizations.



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Cover Photo: Song Sparrow banded April 30, 2011 (Photo – Ben Schonewille)

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## EXECUTIVE SUMMARY

The McIntyre Marsh Bird Banding Demonstration Site completed its third consecutive year of spring operation during 2011. The field station operated for a total of 20 days between April 22 and June 4. A primary objective of this project is to provide a setting for the public to visit and be exposed to the diversity of birds in the Yukon and the methods used to monitor them. The close proximity to downtown Whitehorse makes this possible and serves to attract more visitors than the Teslin Lake and Albert Creek bird observatories which require substantially more travel. The methods used for capturing birds at the site closely follow the protocols used at the other field stations; 13 mist nets are used. During 2011, mist netting resulted in the capture and banding of 439 birds of 28 species. The top 5 species banded during 2011 included the following (from greatest to least); Common Redpoll (97), Wilson's Warbler (57), Yellow-rumped 'Myrtle' Warbler (54), Violet-green Swallow (36) and Yellow Warbler (27). Species associated with wetland breeding habitats were very common during the latter portion of migration; such species include Common Yellowthroat and Lincoln's Sparrow. The data collected (banding and general observations) continued to reinforce that McIntyre Marsh provides valuable stopover and breeding habitat for birds in the Whitehorse area. In 2010, the station was operated completely by volunteers; 16 individuals totaled 222 volunteer hours. The station was successful in attracting high numbers of visitors; a total of 118 individuals visited the site, totaling over 190 visitor hours. Included in the visitor totals were 3 school groups from various schools in the Whitehorse area.

### ACKNOWLEDGEMENTS

The following list summarizes the individuals who played a role in the 2011 operation of the McIntyre Marsh Bird Banding Demonstration Site.

Ben Schonewille.....Bander In Charge, Station Advertising, Data Entry/Analysis/Reporting  
Ted Murphy-Kelly.....Secondary Bander In Charge  
Tami Hamilton.....Secondary Bander In Charge

Cameron Eckert (YG-Environment), Pam Sinclair (CWS) and Jukka Jantunen provided advice and assisted with project logistics. Board members of the Society of Yukon Bird Observatories helped administer the Yukon Bird Observatories. Yukon Electrical (Richard Kerr) provided access to the site where the station is located.

The following volunteers assisted with the operation of the observatory; over 5 days – Nick Guentte; less than 5 days – Jukka Jantunen, Shayla Hamilton, Hillary Cooke, Brad Bloemendal, Cameron Eckert, Julie Bauer, Todd Heakes, Terry Skjonsberg, Shyloh van Delft and Wendy Nixon.

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## 1.0 Introduction

The McIntyre Marsh Bird Banding Demonstration Site operated during the spring migration season in 2011. The station completed its third spring season of operation thanks to support from several government and non-government agencies. The station was initiated in the spring of 2009 to provide an easily accessible location for members of the public to receive exposure to migratory birds and the methods used to monitor them.

The goals of the McIntyre Marsh Bird Banding Demonstration Site are to:

- Provide a setting for the public (including school groups) to learn about the Yukon's avifauna and the methods used to monitor songbirds.
- Test the feasibility of operating a bird banding / migration monitoring station at McIntyre Marsh.
- Provide training opportunities for interested members of the public and students.

Bird banding 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 McIntyre Marsh 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 demonstration site also serves to continue gathering baseline data of birds (and their migration) in the southern Yukon. 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 learned regarding the bird life of the Yukon. Bird banding is a highly valuable research method and a form of monitoring which serves to better understand the distribution of many of the Yukon's bird species, many of which are considered uncommon or rare.

Due to the close proximity to downtown Whitehorse, the demonstration site 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 demonstration site 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 demonstration site have the ability to identify these species.

## 2.0 Methods

As the demonstration site is relatively new and the activities have not yet been standardized, a detailed bird monitoring protocol has not yet been prepared. The primary method of monitoring the movement of birds through the study site is the use of mist nets for the purpose of capturing and banding birds. In 2011, the station operated with 13 mist nets, all of which were constructed of 30 mm mesh. Eleven of the nets were 12 m in length and a single net was 18 m in length. Although mist netting did not always begin at sunrise (which is standard practice for other stations), efforts were made to open the station as early as possible. The number of nets used on a daily basis was determined by a number of factors including bird activity, weather and availability of qualified personnel. Mist nets were checked for birds every 15 to 30 minutes and all birds captured were extracted by qualified individuals. Individual birds were then placed in breathable cloth bags and transported to the central bird processing area.

Once at the processing area, all birds were identified to species and banded with a uniquely numbered leg band. A wide variety of other information was collected from each bird including; age, sex, wing length, fat score, breeding condition, bird status, banding date/time and the bander's initials. Representative photos were also taken from a portion of the birds processed. After all data was collected the bird was promptly released.

To supplement the banding data collection, incidental observations were also recorded for birds within and/or flying over the site. Using the number of birds banded, recaptured and observed, estimated totals were derived for all species observed on each of the station's operation.

As the primary goal of the study is to provide opportunities for the public to become involved, the public was able to partake where possible. Extracting and handling of birds requires extensive experience doing so and therefore the public was not able to handle the birds. However, small groups of people were regularly taken on net rounds to allow them to view up close how birds are captured in the mist nets and extracted. The public was also allowed to actively watch the bird processing procedure and frequently asked questions about the birds and the banding process. At times, members of the public also assisted the bander by scribing the data onto the data sheets.

### 2.1 Study Site

The station is located at the area known locally as McIntyre Marsh near the junction of the Copper Haul Road and the Fish Lake Road. McIntyre Creek flows through the marsh which has a wide braided channel with numerous areas of standing water. Vegetation in the area is primarily willow with open areas dominated by various grasses and sedges. Large trees are relatively sparse within the mist netting area and are primarily limited to a thin strip of large white spruce along the margin on the study site. A defining characteristic of the site is the presence of standing dead snags within the marsh; these are likely a result of the beaver dam impoundment of the area in the past.

### 3.0 Results & Discussion

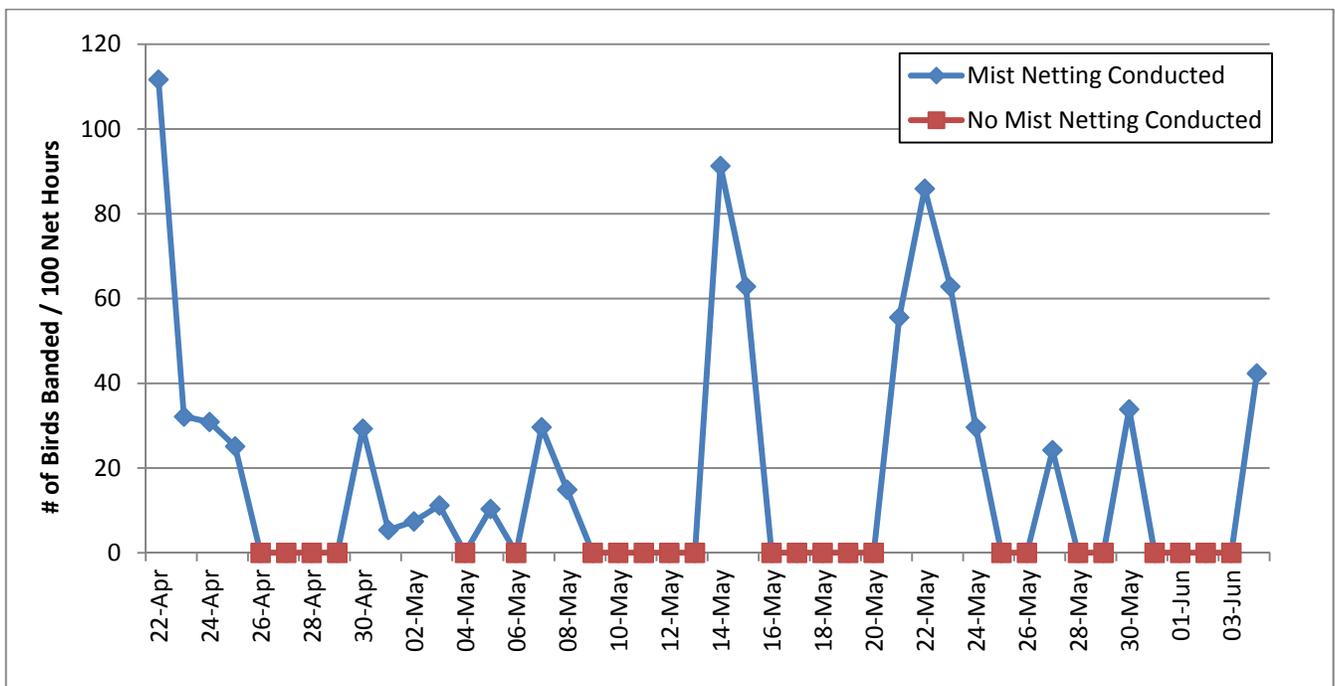
During 2010, 439 birds of 28 species were banded and 79 species were observed (Table 1, Table 2, Figure 1). The all time total number of birds banded at McIntyre Marsh is now 2,913 individuals of 48 species (Appendix 1). Each component of the 2011 data is summarized and presented in the following subsections; however, a detailed account of the 2011 estimated total data is shown in Appendix 2.

Bird captures were high during the first week of operation due to high captures of Common Redpolls. Due to the late spring migration, capture rates were relatively low during weeks 2 and 3. Beginning in week 4, bird captures increased due to the arrival of the neotropical migrants such as Wilson’s Warbler.

**Table 1.** Summary statistics of the 2010 spring season.

Week	Date	Days Operated	Birds Banded				Total Species Observed
			#	Species	Net Hours	#/100 Net Hours	
1	22 – 28 Apr	4	77	5	153.3	50.22	29
2	29 Apr – 5 May	5	31	8	232.4	13.34	44
3	6 – 12 May	2	30	7	121.3	24.73	NA <sup>A</sup>
4	13 – 19 May	2	129	15	167.6	76.99	50
5	20 – 26 May	4	145	16	219.4	66.09	50
6	27 May – 2 Jun	2	17	7	60.8	27.96	NA <sup>A</sup>
7	3 – 9 Jun	1	10	7	23.6	42.37	34
ALL		20	439	28	978	44.89	79

<sup>A</sup> No Estimated Totals (bird observations) were recorded during these periods.



**Figure 1.** Summary of birds banded per 100 net hours during the spring of 2011.

**Table 2.** Birds banded during the spring of 2011.

Common Name	Latin Name	Individuals Banded	
		#	# / 100 Net Hrs
Solitary Sandpiper	<i>Tringa solitaria</i>	6	0.61
Wilson’s Snipe	<i>Gallinago delicata</i>	2	0.20
Belted Kingfisher	<i>Ceryle alcyon</i>	1	0.10
Olive-sided Flycatcher	<i>Contopus cooperi</i>	2	0.20
Alder Flycatcher	<i>Empidonax alnorum</i>	3	0.31
Tree Swallow	<i>Tachycineta bicolor</i>	18	1.84
Violet-green Swallow	<i>Tachycineta thalassina</i>	36	3.68
Black-capped Chickadee	<i>Poecile atricapillus</i>	2	0.20
Boreal Chickadee	<i>Poecile hudsonicus</i>	9	0.92
Ruby-crowned Kinglet	<i>Regulus calendula</i>	15	1.53
Northern Waterthrush	<i>Parkesia noveboracensis</i>	7	0.72
Orange-crowned Warbler	<i>Oreothlypis celeata</i>	20	2.04
Common Yellowthroat	<i>Geothlypis trichas</i>	21	2.15
Yellow Warbler	<i>Setophaga petechia</i>	27	2.76
Blackpoll Warbler	<i>Setophaga striata</i>	14	1.43
Myrtle Warbler	<i>Setophaga coronate</i>	54	5.52
Wilson’s Warbler	<i>Cardellina pusilla</i>	57	5.83
American Tree Sparrow	<i>Spizella arborea</i>	3	0.31
Savannah Sparrow	<i>Passerculus sandwichensis</i>	10	1.02
Song Sparrow	<i>Melospiza melodia</i>	1	0.10
Lincoln’s Sparrow	<i>Melospiza lincolni</i>	12	1.23
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	4	0.41
Golden-crowned Sparrow	<i>Zonotrichia atricapilla</i>	1	0.10
Slate-colored Junco	<i>Junco hyemalis</i>	9	0.92
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	2	0.20
Rusty Blackbird	<i>Euphagus carolinus</i>	2	0.20
White-winged Crossbill	<i>Loxia leucoptera</i>	4	0.41
Common Redpoll	<i>Acanthis flammea</i>	97	9.92
TOTAL		439	44.89

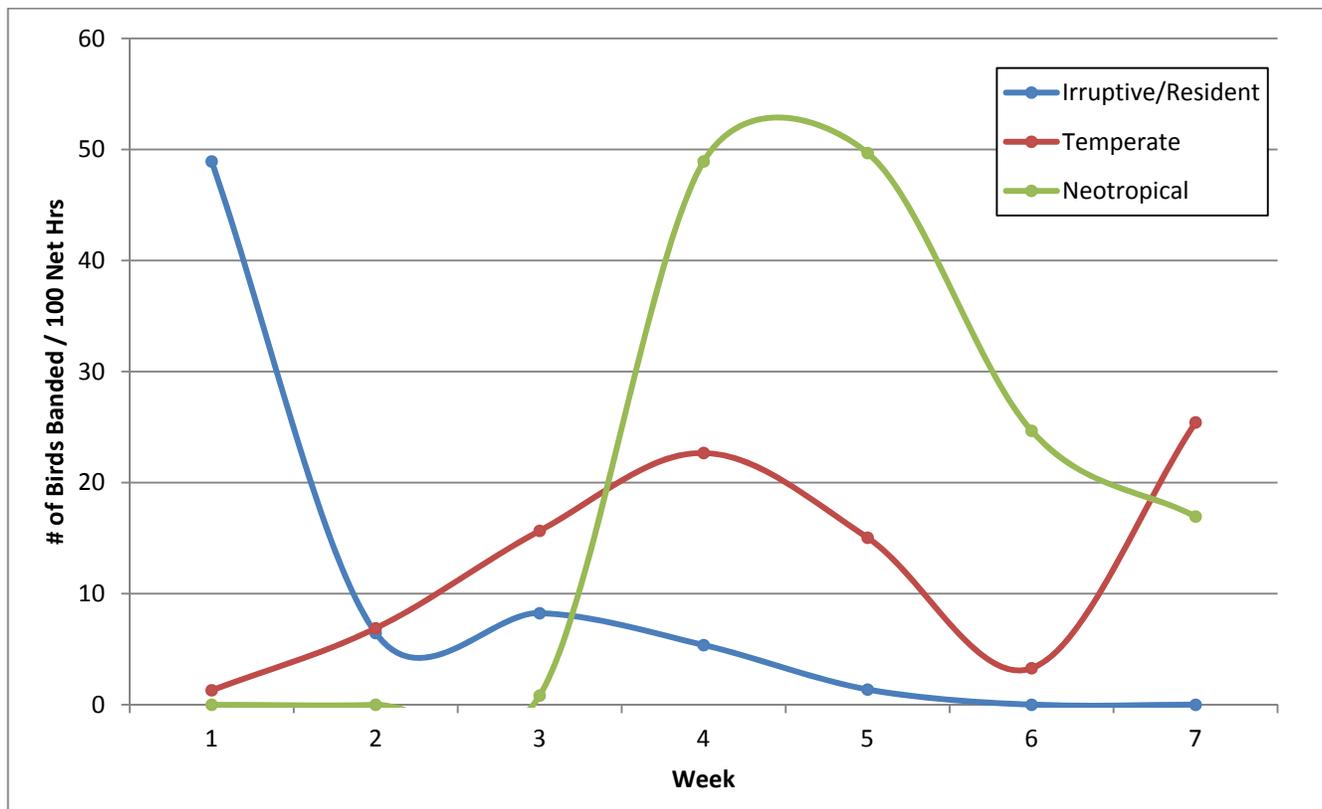
The total number of birds banded during 2011 was the lowest to date since the station began operation in 2009. However, the number of days operated in 2011 was also substantially lower due to insufficient personnel to operate the station. In previous years, the sparrows and other early season migrants dominated the birds banded. However, the spring migration of these species was later than average during 2011 and it appeared as though many individuals passed directly over the Whitehorse area. White-crowned Sparrow provides a good example of this trend; 113 banded in 2009, 342 banded in 2010 and 4 banded in 2011. Other species such as Dark-eyed Junco, Fox Sparrow, American Tree Sparrow and Golden-crowned Sparrow followed a similar trend. Table 2 shows a summary of the top 10 species banded in 2011 as compared to 2010 and 2009.

**Table 2.** Comparison of top 10 species banded during 2011 as compared to 2010 and 2009.

Species	# of Birds Banded (# - #/100 net hours – annual rank)		
	2011	2010	2009
Common Redpoll	97 – 9.92 – 1	33 – 1.91 – 10	31 – 2.21 – 10
Wilson’s Warbler	57 – 5.83 – 2	144 – 8.35 – 4	57 – 4.07 – 8
Myrtle Warbler	54 – 5.52 – 3	212 – 12.29 – 3	71 – 5.07 – 5
Violet-green Swallow	36 – 3.68 – 4	22 – 1.28 – 12	103 – 7.35 – 2
Yellow Warbler	27 – 2.76 – 5	8 – 0.46 – 19	3 – 0.21 – 28
Common Yellowthroat	21 – 2.15 – 6	53 – 3.07 – 8	26 – 1.86 – 11
Orange-crowned Warbler	20 – 2.04 – 7	16 – 0.93 – T 13	9 – 0.64 – T 14
Tree Swallow	18 – 1.84 – 8	1 – 0.06 – 38	89 – 6.35 – 3
Ruby-crowned Kinglet	15 – 1.53 – 9	25 – 0.93 – T 13	5 – 0.36 – T 18
Blackpoll Warbler	14 – 1.43 – 10	5 – 0.29 – 23	0 – 0.00 – NA

### 3.1 Migration Timing

Generalized migration timing for temperate, neotropical and irruptive migrants/residents during the spring of 2011 is presented in Figure 2.<sup>1</sup> In spring, there is a notable difference in migration timing between temperate and neotropical migrants, with the latter typically arriving later in the season.



**Figure 2.** Migration timing for temperate, neotropical and irruptive migrants/residents banded during the spring of 2011.

<sup>1</sup> Temperate migrants are species which primarily overwinter in the temperate zone of North America (i.e., north of Mexico). Neotropical migrants include species which overwinter in the tropics (i.e., south of the USA). Irruptive migrants/residents are those species which migrate irregularly or may be year round residents in the Yukon.

For species which are encountered regularly during spring migration, it is possible to investigate arrival dates between years through a combination of available banding and general observation data (Table). Most species show a high degree of consistency in arrival dates between years. However, there is a small degree of variation between years which is likely a result of varying weather conditions between years. For example, many of the species which typically arrive early in the season (Hammond’s Flycatcher, Orange-crowned Warbler, Wilson’s Warbler) arrived later than average in 2011. Additional data collection in future years will allow for a more detailed analysis of arrival dates at the study site. It is also important to note that the station does not operate on a daily basis and this must be taken into account when considering these data.

**Table 3.** Summary of spring arrival dates for select species at McIntyre Marsh in 2009 and 2011.

Species	Spring Arrival Dates		
	2011	2010	2009
Station Opening Date	22 April	18 April	18 April
Solitary Sandpiper	14 May	10 May	9 May
Lesser Yellowlegs	5 May	28 April	3 May
Hammond’s Flycatcher	5 May	24 April	2 May
Swainson’s Thrush	24 May	21 May	27 May
Orange-crowned Warbler	14 May	1 May	12 May
Yellow Warbler	22 May	18 May	24 May
Yellow-rumped Warbler	30 Apr	24 April	2 May
Blackpoll Warbler	22 May	20 May	27 May
Northern Waterthrush	15 May	18 May	13 May
Common Yellowthroat	22 May	18 May	23 May
Wilson’s Warbler	14 May	8 May	3 May
Savannah Sparrow	14 May	28 April	2 May
Fox Sparrow	15 May	23 April	3 May
Lincoln’s Sparrow	1 May	24 April	2 May
White-crowned Sparrow	2 May	23 April	2 May
Golden-crowned Sparrow	14 May	24 April	2 May
Lapland Longspur	14 May	1 May	18 April
Red-winged Blackbird	1 May	2 May	2 May
Rusty Blackbird	1 May	23 April	2 May

### 3.2 Band Returns & Recoveries

Band returns (individuals banded at the site in previous years) typically represent individuals which breed within the study site as the likelihood of re-trapping migrants is relatively low. During 2011, the station had 13 band returns representing 6 species (Table 5). As the station is relatively new, all band returns were of birds banded at the site during 2009 and 2010. Species very well represented in the band returns provide an indication of the breeding birds at McIntyre Marsh; Common Yellowthroat, and Lincoln’s Sparrow are likely among the most common breeding bird species within and adjacent to the study site. Black-capped Chickadees are year round residents and therefore the recapture of four previously banded individuals is not unexpected.

**Table 3.** Summary of band returns during the 2011 season.

Species	Band Number	Banded		Recaptured
		Date	Age – Sex	Date
Solitary Sandpiper	2231-29627	24 May 2010	AHY - U	22 May
Black-capped Chickadee	2580-39894	25 April 2009	ASY – U	22 April
Black-capped Chickadee	2580-39836	18 April 2009	SY – U	22 April
Black-capped Chickadee	2610-64012	21 March 2010	SY – U	23 April
Black-capped Chickadee	2610-64196	27 April 2010	AHY – U	25 April
American Robin	1232-58716	1 May 2010	AHY – M	21 May
Common Yellowthroat	2610-64513	29 May 2010	ASY – M	22 May
Common Yellowthroat	2610-64451	21 May 2010	AHY – F	22 May
Common Yellowthroat	2610-64500	29 May 2010	AHY – M	23 May
Lincoln’s Sparrow	2311-81826	23 May 2009	AHY – M	22 May
Lincoln’s Sparrow	2311-84932	24 May 2010	AHY – U	23 May
Lincoln’s Sparrow	2311-84940	29 May 2010	AHY – M	23 May
Red-winged Blackbird	1232-58730	24 May 2010	ASY – F	22 May

Foreign band recoveries are a very infrequent event; to date there has been one foreign band recovery at the station. A Yellow-rumped “Myrtle” Warbler banded in Portland, Oregon in March 2008 was recaptured at McIntyre Marsh on May 4, 2009 and subsequently released alive. Furthermore, an American Green-winged Teal banded at the site on May 14, 2009 was shot near Los Banos, California on October 28, 2009. Although not a foreign band recovery, a SY male Rusty Blackbird banded by Pam Sinclair at the Whitehorse Landfill in the fall of 2009 was recaptured at McIntyre Marsh on May 10, 2010.

### 3.3 Visitors and Volunteers

The demonstration site was very successful in attracting visitors during 2011, in total 118 different individuals visited the site and totaled over 190 visitor hours (Table 4). Included in the visitor totals were 3 school groups from the Whitehorse area who visited the site. These visitor numbers are lower than previous years at the station; however, this is directly related to the decreased number of days the station was operated as compared to previous years. Overall, these visitor rates are very high as compared to the Teslin Lake and Albert Creek bird observatories which typically total 100 to 150 visitor hours per year. Through the demonstration site, it is possible to increase the public awareness of migratory birds and why it is important to conserve them and their habitats.

During 2011, the operation of the demonstration site was completed solely by volunteers. Aside from providing visitor opportunities, the station also provides an opportunity for volunteer involvement. Individuals willing to attend the station on a number of occasions have the opportunity to receive training in the techniques used to capture and band birds (under the supervision of permitted/qualified individuals).

**Table 4.** Summary of volunteer and visitor hours at McIntyre Marsh in 2010.

Volunteers		Visitors	
# of Individuals	Hours	# of Individuals	Hours
16	222	118	193

## **4.0 Conclusion & Recommendations**

The bird monitoring data collected at the demonstration site have continued to reinforce that McIntyre Marsh is an important stopover and breeding habitat for migratory birds within the City of Whitehorse. The productive marsh habitat and diversity of nearby habitats provide suitable habitat for a high diversity of birds. Although the total number of birds banded is less than that of the Teslin Lake and Albert Creek bird observatories, these results are not directly comparable. The demonstration site operates with far fewer mist nets and is not open on a daily basis. If these protocols were to be mimicked at McIntyre Marsh, the number and diversity of birds banded would likely increase substantially.

The number of visitors and total visit hours totaled at the site in 2011 are representative of the value of the demonstration site as a public education opportunity. Individuals who visit the site leave with an increased understanding of the Yukon's bird life and a level of environmental stewardship which has a positive effect well beyond the conservation of birds. For children who visit the site, having the opportunity to see songbirds "up close and personal" often has a lasting effect and may lead to a future appreciation of our natural surroundings.

### **4.1 Recommendations**

For 2012, it is hoped that adequate personnel and resources can be made available for the operation of the demonstration site during the spring migration season. If possible, it would be advantageous to operate the station on more days during the migration period to boost the number of visitors and school groups which may visit the site. More extensive coverage would also increase the utility of the bird monitoring data collected. If possible, efforts should also be made to include some sort of standardized monitoring protocol for the station. This may include the collection of observations outside of the immediate mist netting area through methods such as a fixed duration census route or point count locations.

**APPENDIX 1 – SPECIES LIST AND ALL TIME BANDING TOTALS**

McIntyre Marsh Bird Banding Demonstration Site – Final Report 2011

Species	Banded / Observed			TOTAL BANDED (2009 - 2011)
	2009	2010	2011	
Horned Grebe		✓		
Greater White-fronted Goose	✓			
Canada Goose	✓	✓	✓	
Trumpeter Swan	✓		✓	
Tundra Swan	✓		✓	
American Wigeon	✓	✓	✓	
Mallard	✓	1	✓	1
Gadwall	✓			
Northern Shoveler		✓	✓	
Northern Pintail	✓	✓		
American Green-winged Teal	4	✓	✓	4
Blue-winged Teal			✓	
Bufflehead	✓		✓	
Common Goldeneye	✓	✓		
Barrow's Goldeneye	✓	✓	✓	
Osprey	✓			
Bald Eagle	✓	✓	✓	
Northern Harrier	✓	✓	✓	
Sharp-shinned Hawk	1	3	✓	4
Northern Goshawk	✓		✓	
Red-tailed Hawk	✓	✓	✓	
Rough-legged Hawk	✓		✓	
Golden Eagle			✓	
American Kestrel		✓		
Merlin	✓		✓	
Ruffed Grouse		✓		
Semi-palmated Plover	✓		✓	
Lesser Yellowlegs	1	✓	✓	1
Solitary Sandpiper	7	7	6	20
Spotted Sandpiper		1	✓	1
Semi-palmated Sandpiper	✓			
Pectoral Sandpiper	✓		✓	
Wilson's Snipe	5	8	2	15
Bonaparte's Gull	✓		✓	
Mew Gull	✓	✓	✓	
Herring Gull	✓	✓	✓	
Great Horned Owl	✓			
Boreal Owl			✓	
Belted Kingfisher	1	1	1	3
Hairy Woodpecker	✓	✓		

McIntyre Marsh Bird Banding Demonstration Site – Final Report 2011

Species	Banded / Observed			TOTAL BANDED (2009 - 2011)
	2009	2010	2011	
American Three-toed Woodpecker		✓	✓	
Northern Flicker	✓	✓	✓	
Olive-sided Flycatcher	✓	1	2	3
Western Wood-Pewee	✓			
Alder Flycatcher		✓	3	3
Hammond's Flycatcher	✓	6	✓	6
Say's Phoebe	✓		✓	
Northern Shrike	1			1
Gray Jay	✓	✓	✓	
Black-billed Magpie	✓	✓	✓	
Common Raven	✓	✓	✓	
Tree Swallow	89	1	18	108
Violet-green Swallow	103	22	36	161
Bank Swallow	✓	✓	✓	
Cliff Swallow	✓	✓	✓	
Barn Swallow	✓	✓		
Black-capped Chickadee	8	4	2	14
Mountain Chickadee	2			2
Boreal Chickadee	9	1	9	19
Red-breasted Nuthatch			✓	
Golden-crowned Kinglet		✓	✓	
Ruby-crowned Kinglet	5	25	15	45
Townsend's Solitaire				
Gray-cheeked Thrush		✓	1	1
Swainson's Thrush	1	3		4
American Robin	6	15	✓	21
Varied Thrush	✓	2	✓	2
American Pipit	4	6	✓	10
Bohemian Waxwing	✓	✓	✓	
Tennessee Warbler		2	✓	2
Orange-crowned Warbler	9	16	20	45
Yellow Warbler	3	8	27	38
Yellow-rumped 'Myrtle' Warbler	70	212	54	336
Yellow -rumper 'Integrade' Warbler	2			2
Townsend's Warbler			✓	
Blackpoll Warbler		5	14	19
Northern Waterthrush	8	16	7	31
Common Yellowthroat	26	53	21	100
Wilson's Warbler	57	144	57	258
Song Sparrow			1	1

McIntyre Marsh Bird Banding Demonstration Site – Final Report 2011

Species	Banded / Observed			TOTAL BANDED (2009 - 2011)
	2009	2010	2011	
Lapland Longspur	39	1	✓	40
American Tree Sparrow	63	75	3	141
Chipping Sparrow		5	✓	5
Savannah Sparrow	58	83	10	151
Fox Sparrow	6	109	✓	115
Lincoln's Sparrow	25	75	12	112
White-crowned Sparrow	113	342	4	459
Golden-crowned Sparrow	18	34	1	53
Dark-eyed 'Slate-colored' Junco	77	247	9	333
Rusty Blackbird	25	11	2	38
Red-winged Blackbird	5	3	2	10
Brown-headed Cowbird			✓	
Purple Finch	1			1
Red Crossbill	✓		✓	
White-winged Crossbill	✓		4	4
Common Redpoll	31	33	97	161
Hoary Redpoll		1		1
Pine Siskin	3	✓	✓	3
TOTAL BIRDS BANDED	886	1582	440	2908
TOTAL SPECIES BANDED	36	38	29	49
TOTAL SPECIES BANDED & OBSERVED	77	68	78	98

**APPENDIX 2 – 2011 ESTIMATED TOTAL SUMMARY**

McIntyre Marsh Bird Banding Demonstration Site – Final Report 2011

Species	ALL OBS		First Date	Last Date	HIGH COUNT	
	# of Days	Bird Days			#	Date
Canada Goose	2	18	25-Apr	14-May	14	25-Apr
Trumpeter Swan	5	105	22-Apr	01-May	49	25-Apr
Tundra Swan	8	280	23-Apr	15-May	110	25-Apr
American Wigeon	9	16	22-Apr	24-May	3	many days
Mallard	15	365	22-Apr	04-Jun	54	25-Apr
Northern Shoveler	2	3	25-Apr	14-May	2	14-May
American Green-winged Teal	11	100	30-Apr	04-Jun	25	30-Apr
Blue-winged Teal	1	2	24-May	-	2	-
Bufflehead	2	6	25-Apr	30-Apr	4	30-Apr
Barrow's Goldeneye	10	34	25-Apr	04-Jun	12	30-Apr
Unidentified Goldeneye	3	40	23-Apr	14-May	38	03-May
Bald Eagle	14	54	22-Apr	24-May	12	25-Apr
Northern Harrier	11	28	22-Apr	15-May	7	30-Apr
Sharp-shinned Hawk	3	6	25-Apr	15-May	4	25-Apr
Northern Goshawk	2	2	30-Apr	05-May	1	both days
Red-tailed Hawk	2	8	25-Apr	30-Apr	7	25-Apr
Rough-legged Hawk	1	1	25-Apr	-	1	-
Golden Eagle	2	2	25-Apr	30-Apr	1	both days
Merlin	2	2	14-May	04-Jun	1	both days
Unidentified Buteo	1	9	25-Apr	-	9	-
Semi-palmated Plover	1	2	14-May	-	2	-
Lesser Yellowlegs	6	16	05-May	24-May	5	05-May
Solitary Sandpiper	6	28	14-May	04-Jun	7	14-May
Spotted Sandpiper	2	3	22-May	23-May	2	22-May
Pectoral Sandpiper	1	1	22-May	-	1	-
Wilson's Snipe	8	24	30-Apr	04-Jun	5	15-May
Bonaparte's Gull	1	2	14-May	-	2	-
Mew Gull	9	27	30-Apr	04-Jun	6	30-Apr
Herring Gull	12	92	23-Apr	24-May	18	15-May
Boreal Owl	2	2	30-Apr	01-May	1	both days
Belted Kingfisher	10	15	25-Apr	04-Jun	3	14-May
American Three-toed Woodpecker	2	2	22-Apr	01-May	1	both days
Northern Flicker	3	6	14-May	23-May	3	14-May
Unidentified Woodpecker	1	1	22-May	-	1	-
Olive-sided Flycatcher	2	3	14-May	22-May	2	22-May
Alder Flycatcher	2	3	22-May	04-Jun	2	04-Jun
Hammond's Flycatcher	5	6	05-May	04-Jun	2	15-May
Say's Phoebe	1	1	22-May	-	1	-
Gray Jay	3	3	14-May	23-May	1	all days
Black-billed Magpie	1	1	15-May	-	1	-

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Species	ALL OBS		First Date	Last Date	HIGH COUNT	
	# of Days	Bird Days			#	Date
Common Raven	12	43	22-Apr	24-May	6	many days
Tree Swallow	6	257	30-Apr	04-Jun	115	14-May
Violet-green Swallow	11	390	30-Apr	04-Jun	150	14-May
Bank Swallow	3	34	22-May	04-Jun	25	23-May
Cliff Swallow	3	16	22-May	04-Jun	8	23-May
Unidentified Swallow	2	225	22-May	23-May	150	23-May
Black-capped Chickadee	14	25	22-Apr	24-May	3	many days
Boreal Chickadee	14	30	22-Apr	04-Jun	6	25-Apr
Red-breasted Nuthatch	3	3	24-Apr	30-Apr	1	all days
Golden-crowned Kinglet	3	4	22-Apr	25-Apr	2	25-Apr
Ruby-crowned Kinglet	11	43	25-Apr	04-Jun	10	23-May
Gray-cheeked Thrush	1	1	22-May	-	1	-
Swainson's Thrush	2	3	24-May	04-Jun	2	04-Jun
American Robin	11	52	30-Apr	04-Jun	6	many days
Varied Thrush	14	27	22-Apr	23-May	6	02-May
American Pipit	6	61	30-Apr	15-May	40	30-Apr
Bohemian Waxwing	5	11	23-Apr	15-May	4	15-May
Tennessee Warbler	1	1	04-Jun	-	1	-
Orange-crowned Warbler	4	22	14-May	23-May	8	22-May
Yellow Warbler	4	45	22-May	04-Jun	21	22-May
Myrtle Warbler	11	106	30-Apr	04-Jun	42	15-May
Blackpoll Warbler	4	30	22-May	04-Jun	20	23-May
Northern Waterthrush	5	16	15-May	04-Jun	5	15/22 May
Townsend's Warbler	1	1	23-May	-	1	-
Common Yellowthroat	4	42	22-May	04-Jun	13	04-Jun
Wilson's Warbler	6	70	14-May	04-Jun	24	23-May
Lapland Longspur	1	6	14-May	-	6	-
American Tree Sparrow	3	7	01-May	03-May	3	01-May
Chipping Sparrow	3	4	22-May	04-Jun	2	04-Jun
Savannah Sparrow	4	13	14-May	23-May	6	22-May
Fox Sparrow	3	3	15-May	04-Jun	1	all days
Lincoln's Sparrow	8	22	01-May	04-Jun	7	22-May
Song Sparrow	6	6	30-Apr	23-May	1	all days
White-crowned Sparrow	4	11	02-May	22-May	5	14-May
Golden-crowned Sparrow	1	1	14-May	-	1	-
Slate-colored Junco	13	34	23-Apr	04-Jun	6	22-May
Rusty Blackbird	10	34	01-May	04-Jun	10	03-May
Red-winged Blackbird	7	29	01-May	04-Jun	7	22-May
Brown-headed Cowbird	1	1	04-Jun	-	1	-
Red Crossbill	2	3	25-Apr	30-Apr	2	25-Apr

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Species	ALL OBS		First Date	Last Date	HIGH COUNT	
	# of Days	Bird Days			#	Date
White-winged Crossbill	11	53	22-Apr	15-May	8	24-Apr
Common Redpoll	14	204	22-Apr	04-Jun	52	22-Apr
Pine Siskin	1	2	01-May	-	2	-