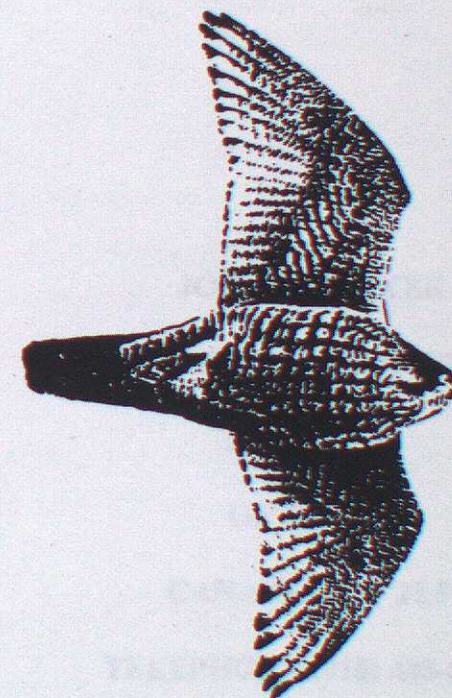


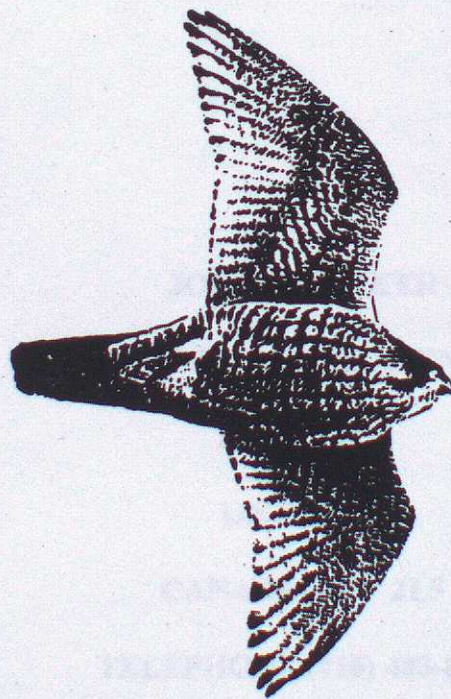


REPORT ON THE
GREATER METROPOLITAN TORONTO
RAPTOR WATCH



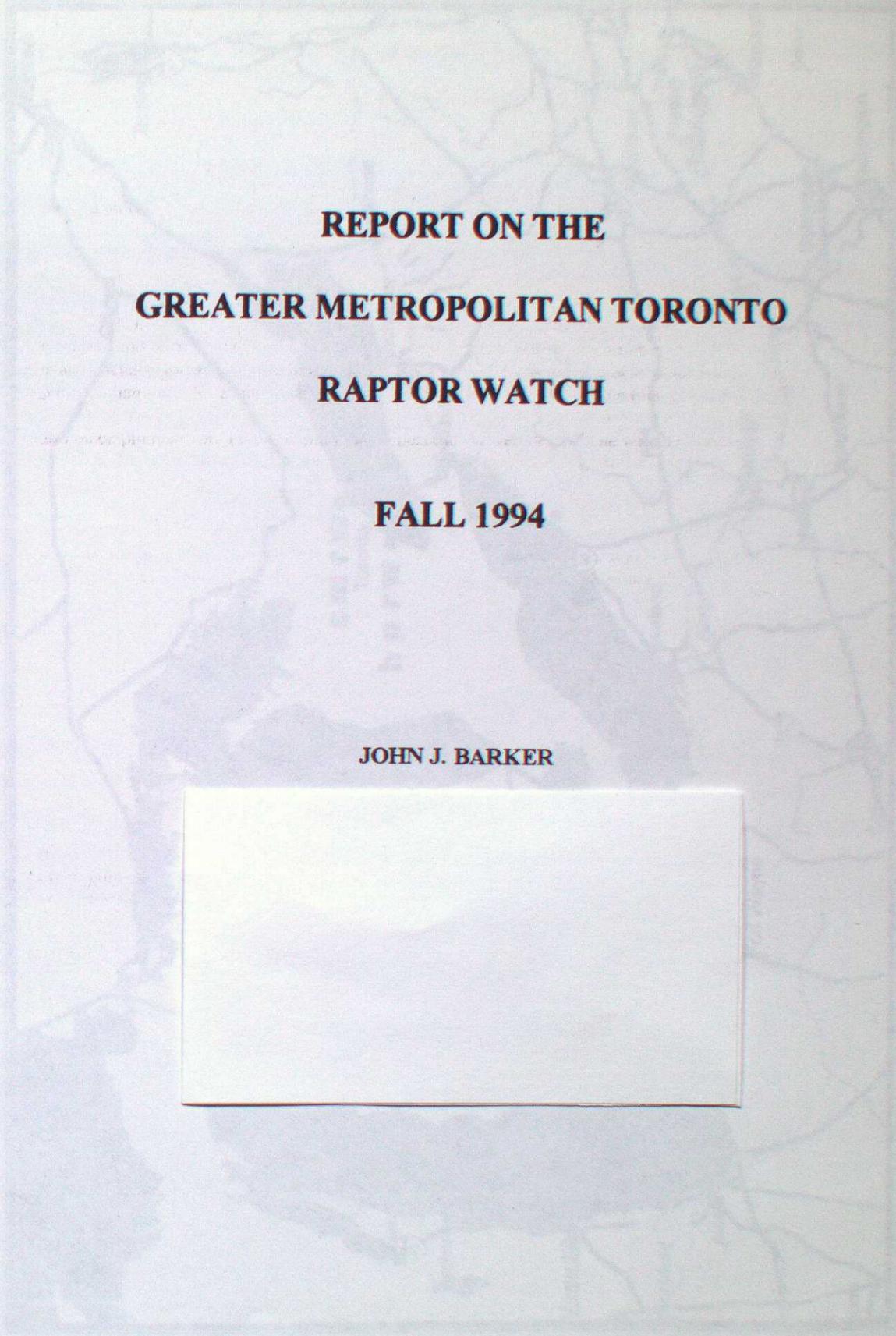
FALL 1994
JOHN J. BARKER

**REPORT ON THE
GREATER METROPOLITAN TORONTO
RAPTOR WATCH**



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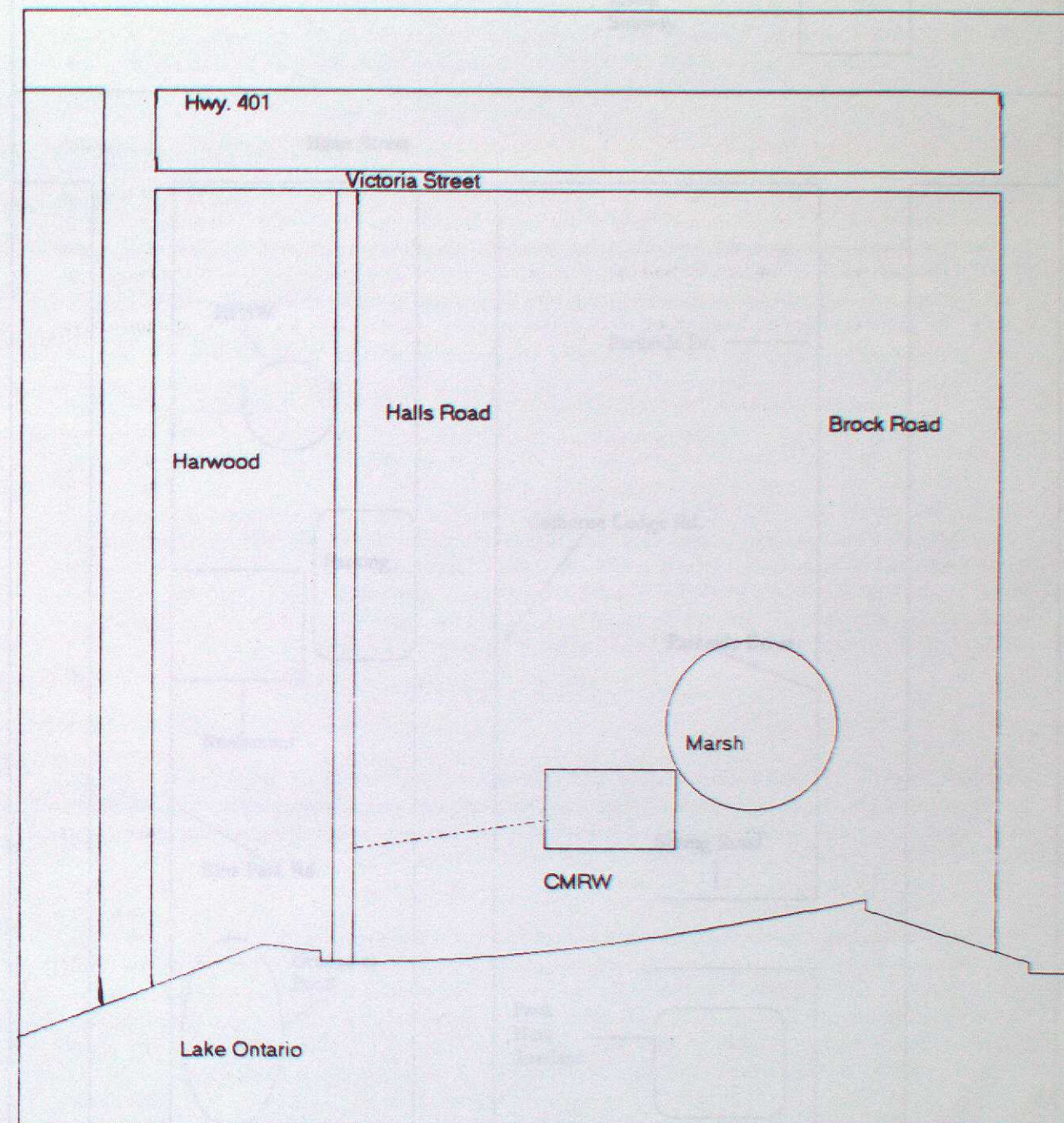
Map



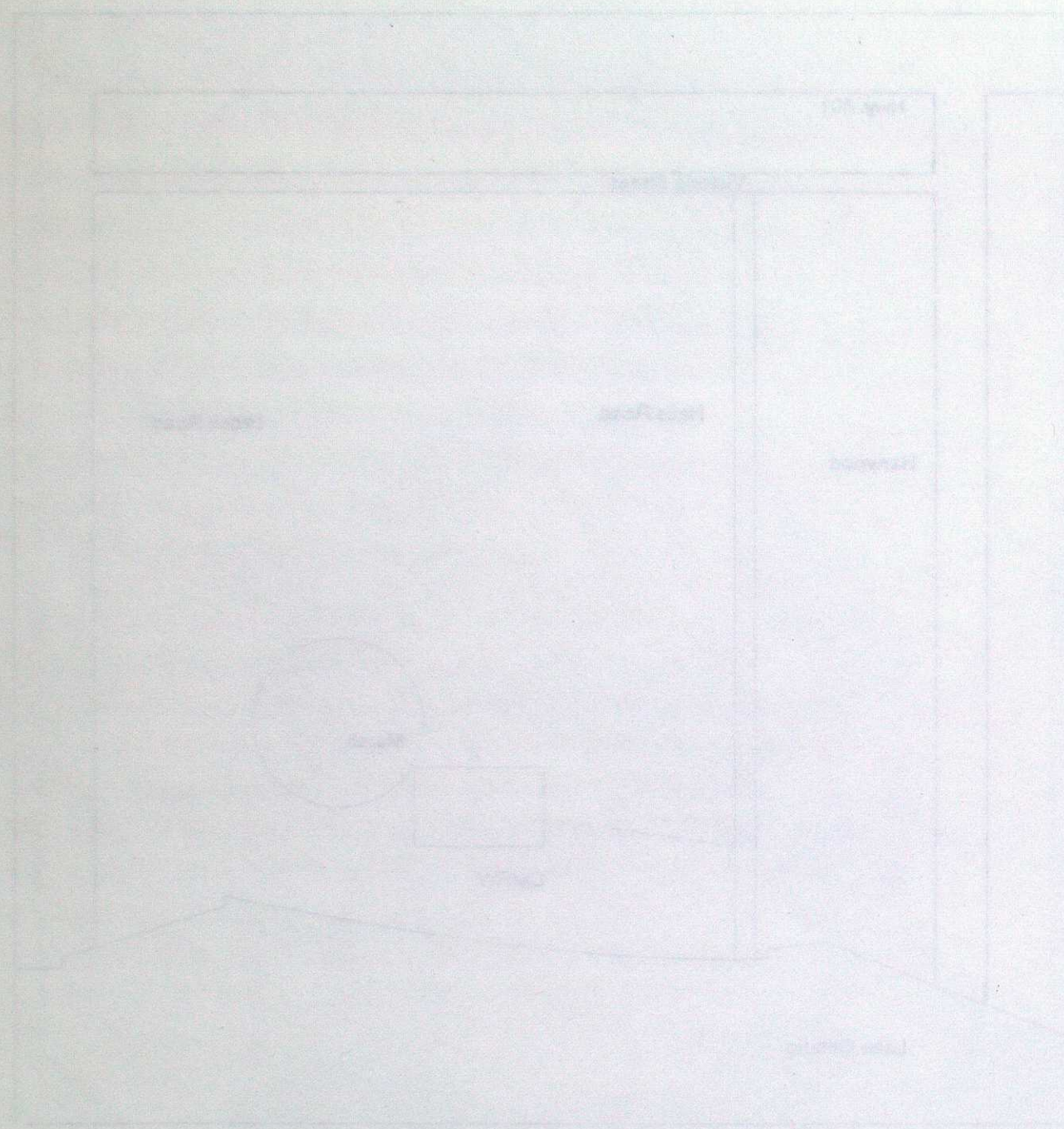


Directions to Cranberry Marsh

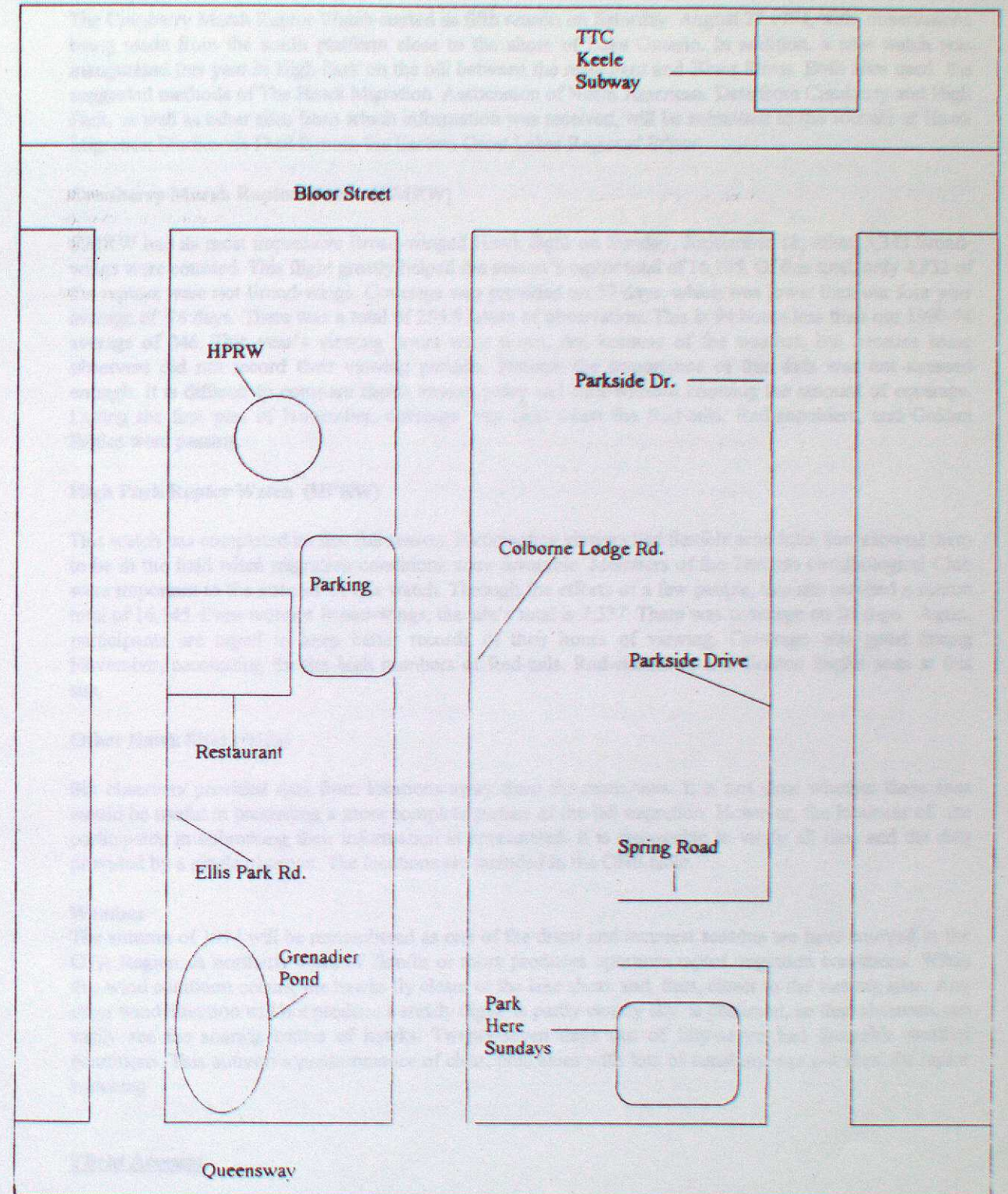
NORTH



Directions to Cherry Hill



Directions to High Park



Introduction

The Cranberry Marsh Raptor Watch started its fifth season on Saturday August 27 1994, with observations being made from the south platform close to the shore of Lake Ontario. In addition, a new watch was inaugurated this year in High Park on the hill between the restaurant and Bloor Street. Both sites used the suggested methods of The Hawk Migration Association of North America. Data from Cranberry and High Park, as well as other sites from which information was received, will be submitted to the Journal of Hawk Migration Studies via Dick Benoit, the Eastern Great Lakes Regional Editor.

Cranberry Marsh Raptor Watch (CMRW)

CMRW had its most impressive Broad-winged Hawk flight on Sunday, September 18, when 5,343 Broad-wings were counted. This flight greatly helped the season's raptor total of 16,135. Of this total, only 4,832 of the raptors were not Broad-wings. Coverage was provided on 57 days, which was lower than our four year average of 74 days. There was a total of 255.5 hours of observation. This is 94 hours less than our 1990-94 average of 346. This year's viewing hours were down, not because of the weather, but because some observers did not record their viewing periods. Perhaps the importance of this data was not stressed enough. It is difficult to compare flights among years and sites without knowing the amount of coverage. During the first part of November, coverage was light when the Red-tails, Red-shoulders, and Golden Eagles were passing.

High Park Raptor Watch (HPRW)

This watch has completed its first full season. Participating viewers had flexible schedules that allowed them to be in the field when migration conditions were favorable. Members of the Toronto Ornithological Club were important to the success of this watch. Through the efforts of a few people, this site reached a season total of 16,745. Even without Broad-wings, the site's total is 7,337. There was coverage on 36 days. Again, participants are urged to keep better records of their hours of viewing. Coverage was good during November, accounting for the high numbers of Red-tails, Red-shoulders and Golden Eagles seen at this site.

Other Hawk Sites (OHS)

Six observers provided data from locations away from the main sites. It is not clear whether these sites would be useful in presenting a more complete picture of the fall migration. However, the kindness of the participants in submitting their information is appreciated. It is impossible to verify all sites and the data provided by a single observer. The locations are included in the OHS table.

Weather

The autumn of 1994 will be remembered as one of the driest and sunniest seasons we have enjoyed in the GTA Region. A northerly wind of 7km/hr or more produces optimum raptor migration conditions. When this wind condition occurs, the hawks fly closer to the lake shore and, thus, closer to the viewing sites. Any other wind direction will not produce a steady flight. A partly cloudy sky is preferred, so that observers can easily see the soaring kettles of hawks. Twenty-seven days out of fifty-seven had favorable weather conditions. This autumn's predominance of clear, blue skies with lots of sunshine was not ideal for raptor watching.

Flight Account

Turkey Vulture, Northern Harrier and Broad-winged Hawk had their best flights since we started counting in 1990 at CMRW. High Park had a very good movement of Turkey Vulture, Bald Eagle, Sharp-shinned Hawk, Cooper's Hawk, Red-shouldered, Red-tailed Hawk and Golden Eagle. Cranberry Marsh had a fair

showing of Osprey, Sharp-shinned Hawk, Rough-legged Hawk, American Kestrel, Merlin and Peregrine Falcon. At CMRW we had **Poor** coverage during the week. We missed seven species at their peak movements, while HPRW had better fortune in observing these species. Their better coverage accounts for the differences in the total counts.

Viewing Periods for Hawk species

One may say with confidence that hawks are fairly consistent in migration dates from year to year. Comparing 1994 with previous years, the following "viewing windows" are crucial to a good count. Failure to ensure adequate coverage means that many hawks pass through our area unobserved; hence, the count is low. **TV:** October 1--10, **OS:** Sept. 5--11, **BE:** Sept. 16--29, **NH:** Sept. 9--23, **SS:** Sept. 11--Oct. 10, **CH:** Sept. 16--Oct. 10, **NG:** Oct. 16--Nov. 10, **RS:** Oct. 13--Nov. 10, **BW:** Sept. 11--20, **RT:** Oct. 26--Nov. 11, **RL:** Oct. 19--Nov. 11, **GE:** Oct. 26--Nov. 10, **AK:** Sept. 11--29, **ML:** Sept. 11--Oct. 20, **PG:** Aug. 31--Sept. 30.

Species Accounts

Turkey Vulture

CMRW - A season total of 1,869 was recorded eclipsing the old record of 1,721 from 1991. This total represents 12% of the total raptors counted during the season. The best day for Turkey Vulture was October 2 when 717 were counted in nine and a half hour. The average annual total is 1,482. Birds per hour increased to 7/hr, up from 3.7/hr in 1993. The first sighting was September 5; the last November 7.

HPRW - This site recorded 1,711 for the season, representing 10% of the total raptor count. The peak day was October 3 with 558. The first sighting was September 10; the last November 11.

OHS - R. Shillabeer counted 53 individuals at Kennedy / Danforth in Scarborough, September 29.

Osprey

CMRW - The season total of 52 ranks fourth since 1990. Clearly Osprey numbers were down. Their numbers represent only .003% of the total tally. The peak day was September 3 when 10 birds were counted. In past years the peak day fell between September 9 - September 29. The total is substantially below the annual average of 79. In past years, Ospreys traditionally used Cranberry Marsh as a feeding station en route south, but this behavior did not seem to occur this year. The earliest bird was seen August 28, the latest October 23.

HPRW - The season count was 39 for .002% of the total migration. The first bird was August 28 and the last October 10.

Bald Eagle

CMRW - A season total of 11 was recorded. No doubt this is due to the inadequate coverage at Cranberry Marsh during September when only 8 Bald Eagles were counted. High Park tallied 17 by comparison. In addition to the lack of observers at Cranberry Marsh, wind direction also accounts for part of the difference in totals between the two sites. Lake Ontario has wind conditions which are often quite different from those found inland. Cranberry Marsh is directly beside the lake, while High Park is a few kilometers north at a higher elevation.

The age breakdown from Cranberry Marsh is as follows: first year - 4, second year - 1, third year - 2, adult - 1, unknown - 3. The total Bald Eagle migration constitutes .001% of the total fall raptor count.

HPRW - The season total was 19, with 5 birds recorded September 19. The age breakdown at High Park is as follows: First year - 6, Second year - 3, Third Year - 1, Adult - 4, Unknown - 5. The percentage of the total migration is .001%.

OHS - Bob Yukich observed one Eagle that was either a First or Second year. The Eagle was seen flying over Lincoln Ave in the Town of York. Norm Murr spotted another Bald Eagle October 8 at the Leslie Street Spit.

Northern Harrier

CMRW - This species had a very successful breeding season resulting in great numbers of migrants at locations and at other hawk watches. When have you seen Harriers fly in groups of ten or more? That is exactly what happened at Cranberry Marsh September 18 when the daily total was 68, smashing the previous high total for a single day of 18 recorded September 11, 1991. The total count for the season, 322, also sets a new record, breaking our past record of 177 in 1991. I had hoped to see more males in their grey and black plumage, but only one put in an appearance November 24. The females and the first years birds made up the show this year. Northern Harrier represents 2% of the annual total. This year's excellent showing boosts our annual average to 213, up substantially from the previous figure of 132.

HPRW - The total count was 277, with a peak of 87 September 17. This is High Park's first year of full coverage; therefore, no previous comparative numbers are available. September 17 was marked by cloudy skies with WNW winds at speeds between 9 to 30 Km/hr. There was no moisture before and after this date for ten days. No doubt this is at least a partial explanation for the superlative migration in our area.

Sharp-shinned Hawk

There has been an abundance of discussion regarding the reasons for the decline of this species in the north-eastern United States. I will not attempt to explain the various theories postulated by the established and respected observatories; these hypotheses have been well -covered in birding journals. I wish to state, however, that the Holiday Beach Migration Observatory, near Windsor, Ontario experienced only 10,375 Sharp-shins compared with their 21 year average of 13,507 during the 1994 fall migration.*

CMRW - The season's total was 1,296, down from our five year average of 1,845. The peak day occurred September 10 with only 132 birds. This total is the lowest recorded since 1990. On September 11, 1993 304, Sharp-shins were viewed flying west over Cranberry Marsh. Calculating the birds per hour, it remains unchanged from 1990 at 5. This species represents 8% of the seasonal total.

HPRW - This site had better numbers; no doubt their superior coverage being a factor. The total was 1,742, with a high count of 313 September 18. Perhaps we missed this movement at Cranberry Marsh where we concentrated on the dramatic migration of Broad-wings. High Park's count represented 10% of their total.

OHS - Norm Murr reported seeing 76 Sharp-shins at the foot of Leslie Street September 3.

Cooper's Hawk

CMRW - Our total this year was only 31; 1993, by comparison recorded 59. Our best peak day was September 23, 1992 which saw 26 Cooper's Hawks pass through. I would like to make a point regarding the identification of this species. The leading edge of the wing is more reliable than the tail shape. Do not ignore the tail just make a note on both. Use this method when Male Cooper's and Female Sharp-shins are flying by you at the same time. The Cooper's Hawk will show the head protruding past the edge of the wing and the overall wing is larger and straighter than the Sharp-shinned Hawk. We were very conservative in our identification practices and this may explain the large difference in the Cranberry and High Park counts.

HPRW - The season's total was 50, with a peak of 11 October 10. It is possible that we are dealing with two different flight paths, or there may be other factors to explain the dramatic difference between Cranberry and High Park. If anyone has thoughts on this matter, I would appreciate their input.

OHS - Don Peuramaki observed 3 individuals at the Bloor Viaduct November 10.

Northern Goshawk

CMRW - Unfortunately, it was a dismal year for this most impressive of accipiters. Our total was a mere 9 birds with only singles going through on any given day. Our seasonal average is 31. It is believed that this species experiences a ten-year cyclical fluctuation; the most recent high point being reached in 1991. The first individual was observed August 30; the last was November 25.

HPRW - The total recorded was 11 birds, with two seen on each of three dates between October 27 and November 10. The first migrant was seen August 27 and the last November 15.

OHS - Don Peuramaki recorded one Goshawk at the Bloor Viaduct November 10.

Red-shouldered Hawk

CMRW - There is no ready explanation as to why more of this species was not tallied. Our season's total was a disappointing 20, with a peak of 5 on September 19. Our Five-year average is 118 so the decline is precipitous. Bob Beerworth recorded the early arrival, a first-year bird, on August 27.

HPRW - The number of Red-shoulders was substantially higher than Cranberry. The season's total was 161, with a significant movement of 41 observed November 7.

OHS - Don Peuramaki counted 17 at the Bloor Viaduct November 11.

Broad-winged Hawk

CMRW - This species represents the success story of the year! A new record of 11,303 was established. Our annual average for this species is 6,277, so this was truly the year of the Broad-wing.

However, when viewed from a historical perspective, this year's total constitutes an average flight. This topic is covered by Clive Goodwin in The Toronto Ornithological Club Newsletter # 51. In relating to our peak of 5,343 on September 18, Goodwin points out that on a TOC field day on September 14, 1975, in a two-hour period, some field observers tallied close to 10,000 birds. On the same day 14,000 Broad-wings were counted in Hamilton. (Thank-you Clive for sharing this information).

Birds per hour increased from 4 in 1993 to 45 in 1994! In 1990 28/hr was the closest ratio to this season's excellent showing.

Lake Erie Metropark in Michigan, Holiday Beach and Hawk Cliff along the north shore of Lake Erie, all reported very high totals, making 1994 a significant year for Broad-winged Hawk.

At Cranberry Marsh, Broad-winged Hawks comprised 70% of the 1994 raptor migration.

I wish to illustrate our method of counting this species. Most frequently, we notice this species kettling from a south-east direction from Thickson's Point, heading in a broad front between Whitby Harbour in the east and Hall's Road in the west. Estimated altitude is 650 metres and up. Cranberry Marsh is 100 metres above Lake Ontario. It is sometimes difficult tracking each flock as it goes by, so it is important to carefully observe where one flock begins and another ends. We are very conservative in our approach to counting

and if there is any question of flocks overlapping we scrupulously avoid the possibility of double - counting. If anything, our numbers may be a little lower than the actual flight, but, I am a firm believer in conservatism in these matters and, in any event, the numbers should present realistic comparisons from year - to - year, since the counting technique does not change.

HPRW - This watch recorded an impressive 9,408 birds, with a peak day of 3,741 September 18. Other high count days were September 10 with 1,394 and September 17 with 3,224. This species accounts for 56% of the season's total migration.

OHS - On September 18 Sherwood Park in north Toronto recorded 1,291 and over at Lincoln Avenue in northwest York, 3,554 were observed.

Red-tailed Hawk

CMRW - Observers at Cranberry Marsh did a very poor job of recording the flight of Red-tails; consequently, our count was very low. This is to be greatly regretted, particularly so when one extrapolates from the High Park count that this would almost certainly have been a banner year for this species. In any event, the total for the season was 283 with a peak day of 50 on October 26. On November 24 a Western dark Morph Red-tail was seen.

HPRW - What a difference it makes when a group of observers are conscientiously counting. High Park ended the season with 2,650 Red-tailed Hawks. The peak day was November 10, when 1,139 were tallied. On this date Bob Yukich commented: " Fabulous day! Biggest Red-tail count I've ever noted here." This species represented 16% of High Park's total count. Other days to note were November 7 with 489 and November 11 with 488. Unusual sightings featured a partly albino bird on November 7 and a Western dark Morph specimen on November 11.

OHS - Don Peuramaki recorded 381 individuals November 10 and 328 November 11. Among the birds sighted November 10 was a Western dark Morph.

Rough-legged Hawk

CMRW - The unseasonably warm fall weather was a major factor in the low count of Rough-legs, since many birds simply stayed on their breeding territories longer than usual. Only 17 birds were counted at Cranberry Marsh, which compares with an historical average of 94. As a percentage of the total migration, Rough-legs represented .006%. Holiday Beach also experienced a decrease. They recorded only 80, whereas their average per season is 144*. Many Rough-legs did not appear this far south until after Christmas.

HPRW - The season's count was 10 individuals, with two birds seen on October 17, 26 and November 11.

OHS - Don Peuramaki viewed 3 Rough-legged Hawks November 10 and 1 on November 11 from his vantage point at the Bloor Viaduct.

Golden Eagle

CMRW - Our total for the season was 4, with 2 seen on October 2. An immature Golden Eagle was seen at 10:10am flying at about 100 metres in a south-westerly direction. Just in front and to the left of the viewing platform stands a 15 metre tree, above which the Eagle started to hover and circle. As all enraptured counters were watching this performance, it was joined by a another first year Eagle, and the two birds continued their migration together. Our four year average for Golden Eagle is 12. No adult birds were recorded this year.

HPRW - The season's total was 15 with a peak of 4 on October 26. The first sighting was September 17, the last was November 10. On each of the following days 3 Golden Eagles were spotted: November 2, 7, and 10.

OHS - Don Peuramaki reported 3 individuals on November 2 and one on November 11 from the Bloor Viaduct.

American Kestrel

CMRW - 1994 provided our third highest count since 1990 with 661 birds tallied. The average is 796. The peak day was September 9 with 258 birds, which constitutes a new site record, eclipsing our previous record of 229 set September 11, 1991. Kestrels represented 4% of the Total migration at this site. The ratio of birds per hour was 3 compared with 1.5 in 1993.

HPRW - 409 birds were recorded with a peak of 130 on September 9.

OHS - At Lincoln Avenue in the City of York, 27 were seen September 18.

Merlin

CMRW - We finished the season with 31 Merlin's, Having a peak day of 5 on September 9. On September 11 a Black Merlin flew by at eye level; possibly a Western Merlin or a darker - than - normal Eastern specimen. Merlin's tended to stay longer than normal this year, due to the mild weather. No doubt, this factor explains the late bird observed November 22.

HPRW - The total for the watch period was 15. On September 17 and 18 four individuals were counted each day.

OHS - Norm Murr reported single birds on August 27 and September 3 at the foot of the Leslie Street Spit.

Peregrine Falcon

CMRW - Our season's total was 19, with 5 being viewed on a very early peak date of August 31. It has been difficult to classify the two main races, anatum and tundrius, because the release program has caused mixing of the recognizable subspecies.

HPRW - Only two individuals were seen at High Park on September 30 and October 10.

OHS - On September 25 at a house on Moray Avenue in Oak Ridges (York Region) a Peregrine Falcon was found dead after flying into a window. This bird had been banded in Washington, DC This event was reported to the Richmond Hill Naturalists Club by the finder, Donna McGann, and the bird was turned over to the appropriate authorities. Norm Murr tallied a single bird on the Leslie Street Spit on October 15.

Unidentified Buteo - On September 10 at Cranberry Marsh, We noticed Two very large Buteos almost the size of eagles. In fact, I called the first bird an eagle sp. but soon changed my opinion. The first bird was seen in the morning; the second in the afternoon. I am firmly of the opinion that what we saw were two immature Ferruginous Hawks (*Buteo regalis*). Having carefully reviewed numerous references, I have nothing to change this opinion. However, since no one in our area has claimed to have seen this species before, I am leaving this sightings in the UB column.

Counters

CMRW:

B.Beerworth, R.Pye, R.G. Shillibeer, B.Evans, J. Barker, E.Wellman, D.Lockrey, D.Wiens, T.Hoar, M.Bain, D. Shannon, G.Frechette, J. Fairchild, D.&W.Mohr, D.Calvert, D.Gascoigne, J. Iron, R.Pittaway, G. Furlong, E.Machell

HPRW:

L.Schlichter, B.Yukich, N.Murr, H.Currie

Observers

CMRW: M.Bain, R. Baker, J. Barker, E.Beagan, R.Beerworth, A.Blewett, D.Calvert, E.Coes, G.Doakes, D.Doakes, L.Fazio, J. Fairchild, G. Gallant, D.Gascoigne, B.Henshaw, T.Hoar, P. Holder, J. Iron, H.Kerr, M. King, J.Kuramoto, A.Lisk, D.Lockrey, W.&D. Mohrs, D.O'Brien, D.Peuramaki, R.Pittaway, R.Pye, K. Ridge, G.Sadowski, R.G.Shillabeer, J.Silverberg, J.M.Speirs, T.Talevi, D.Wiens, S. Woods, D. Worthington

HPRW: A.Adamo, J. Barker, J. Guild, H.Currie, M. King, D. Perks, P.S. Scanlon, T.Talevi, D. Beadle, D.Wiens, N.Murr, B.Yukich, L. Schlichter, D.Duckworth, R.Geras, H.Kerr

Tommy Thompson Park (Leslie Street Spit)

N.Murr

Sherwood Park

G.&J. Fairchild

Lincoln Ave.

B.Yukich, M. King

Oak Ridges

D. McGann

Kennedy Rd. and Danforth Ave.

R.G.Shillabeer

Bloor Viaduct

D.Peurimaki

References:

*Benoit, Dick. Raptor Totals for 1994 and the 21 year average, "The Northwind", Winter 1994-95, Holiday Beach Migration Observatory.

Acknowledgments

I wish to express my appreciation to Dave Gascoigne for his invaluable assistance in putting this report together. I would further like to acknowledge the contributions of the Birds on migration table. Norm Murr, Dave Gascoigne and Bob Yukich in particular and the other sources noted at the end of the Birds on Migration section.

<u>Table index</u>	<u>Page</u>
Counters and Number of Observers	9
Greater Toronto Weather	10 - 11
1990 to 1994 Cranberry Marsh Annual Raptor totals	12
Cranberry Marsh Raptor Watch, 1994, season	13
High Park Raptor Watch, 1994, season	14
Greater Toronto Hawk sightings, 1994	15
Cranberry Marsh and High Park , Species percentage from season total	16
1991 to 1994, Bald and Golden Eagles	17
Age breakdown of Bald and Golden Eagles	18 - 21
Cranberry Marsh, 1990 to 1994, Hawks per Hour	22
Cranberry Marsh, Seasonal counts with-out Broad-winged Hawk	23
Birds on Migration, Fall 1994, seen from Cranberry Marsh and High Park	24 - 26

GREATER TORONTO RAPTOR WATCH, AUTUMN 1994												COUNTERS, NUMBER OF OBSERVERS, TOTAL SPECIES PER DAY											
SITE		CHRW		# OF OBS S WATCHING		SPECIES TOTAL OUT OF 15		SITE		HPRW		# OF OBS S WATCHING		SPECIES TOTAL OUT OF 15		OTHER SITES		# OF OBS S WATCHING		SPECIES TOTAL OUT OF 15			
DATE	MDY	COUNTERS NAME								COUNTERS NAME						COUNTERS NAME							
8/27/94		BOB BEERNORTH			1		4			LEON SCHLICHTER			1		2	NORM MURR			1				
8/28/94		MAT PYE			1		5			LEON SCHLICHTER			1		3								
8/29/94										LEON SCHLICHTER					4								
8/30/94		R G SCHLUBER			1		6																
8/31/94		DANNY EVANS			1		5																
9/1/94																							
9/2/94		JOHN BARKER			5		9			BOB YUKICH			1		6								
9/3/94		JOHN BARKER			12		8			NORM MURR			2		5	NORM MURR			1				
9/4/94		JOHN BARKER			11		6			LEON SCHLICHTER			1		1								
9/5/94		ELENDOR WELLMAN			1		3			LEON SCHLICHTER			1		6								
9/6/94		DOUG LOCKREY			1		3			LEON SCHLICHTER			1		9								
9/7/94		D WENS J HOAR			2		9			BOB YUKICH			16		11								
9/8/94		JOHN BARKER			4		10			NORM MURR			6		12								
9/9/94		JOHN BARKER			10		12			NORM MURR			11		10								
9/10/94		JOHN BARKER			16		10			LEON SCHLICHTER			6		12	G FAIRCHILD B YUKICH			2				
9/11/94		J BARKER / R PYE			9		10			NORM MURR			11		11								
9/12/94		JOHN BARKER			1		2																
9/13/94		BOB BEERNORTH			1		3																
9/14/94		BOB BEERNORTH			1		6																
9/15/94		JOHN BARKER			4		3																
9/16/94		JOHN BARKER			3		1																
9/17/94		JOHN BARKER			1		1																
9/18/94		JOHN BARKER			2		7			LEON SCHLICHTER			1		6								
9/19/94		J BARKER / D LOCKREY			4		11			NORM MURR			11		8								
9/20/94		JOHN BARKER			15		10			LEON SCHLICHTER			1		7								
10/1/94		MARGARET BAIN			3		3			NORM MURR			1		4								
10/2/94		J BARKER / R PYE			2		13																
10/3/94		D SHANNON E MULLMAN & FURLONG			3		10																
10/4/94																							
10/5/94		DOUG LOCKREY			1		1																
10/6/94		JOHN BARKER			13		6						4		11								
10/7/94		JOHN BARKER			1		8			NORM MURR			1		6								
10/8/94		GERALD FRECHETTE			3		5			LEON SCHLICHTER			1		3								
10/9/94		JOHN BARKER			1		2			LEON SCHLICHTER			1		4								
10/10/94		JOHN BARKER			2		4																
10/11/94		JIM FAIRCHILD			1		2			LEON SCHLICHTER			1		1								
10/12/94		JOHN BARKER			2		3			NORM MURR			1		1								
10/13/94		JOHN BARKER			2		2			LEON SCHLICHTER			1		5								
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10/30/94		JOHN BARKER			2		1																
11/2/94		DAYFIELD PYE			1		4			BOB YUKICH			3		10	DON PEURNAKI			1				
11/3/94					2		4			NORM MURR			5		8								
11/4/94		JIM FAIRCHILD			2		4			LEON SCHLICHTER			1		1								
11/5/94		JOHN BARKER			2		2			BOB YUKICH			6		8	DON PEURNAKI			1				
11/6/94		JOHN BARKER			2		1			LEON SCHLICHTER			1		7	DON PEURNAKI			1				
11/7/94		JOHN BARKER			2		3																
11/8/94		JOHN BARKER			2		1																
11/9/94		DOERCHEN MOHR			4		0																
11/10/94		JOHN BARKER			3		2																
11/11/94		JOHN BARKER			1		1																
11/12/94		DAVE CALVERT			3		2																
11/13/94		DAVE CALVERT			2		2																
11/14/94		D&W MOHR / D CALVERT			3		2																
11/15/94		E MACHELL / M BAIN			2		2																
11/16/94		JOHN BARKER			2		0																
11/17/94		JOHN BARKER			2		2																

GREATER TORONTO WEATHER DURING THE AUTUMN HAWK MIGRATION, 1994

Weather data taken from Pearson Airport

Source : "Toronto Daily Star Forecast" Prepared by MTI inc.

DATE	WEATHER	TEMP. C	HUMIDITY	WIND	WIND SPEED	PRECIP.	DAY
mm / dd	8am to 5pm	L / H	am / pm	from	km/h	mm	covered
AUG.27	SUNNY	20 TO 25		NW	00 TO 07	0	Y
AUG.28	CLOUDY	22 TO 28	80 - 59 %	SW	28 TO 50	0	Y
AUG.29	SUNNY	14 TO 21	73 - 43	W	07 TO 35	0	X
AUG.30	SUNNY	11 TO 23	87 - 44	W	06 TO 19	0	Y
AUG.31	SHOWERS	15 TO 17	97 - 84	VAR.	04 TO 15	6.2	Y
SEP.01	P.CLOUDY	13 TO 17	78 - 55	NNW	13 TO 33	0	X
SEP.02	P.CLOUDY	08 TO 17	88 - 47	NNW	07 TO 15	0	X
SEP.03	FEW CLOUDS	09 TO 20	89 - 51	N	06 TO 19	0	Y
SEP.04	VAR.	09 TO 19	92 - 51	SE	02 TO 17	0	Y
SEP.05	FEW CLOUDS	08 TO 18	87 - 48	SE	09 TO 19	0	Y
SEP.06	VAR.	09 TO 15	86 - 85	WSW	04 TO 09	1	X
SEP.07	SUNNY	14 TO 21	87 - 39	NW	19 TO 52	1.2	Y
SEP.08	P.CLOUDY	16 TO 25	81 - 46	W	19 TO 39	0.2	Y
SEP.09	P.CLOUDY	13 TO 22	81 - 53	NW	04 TO 39	4.4	Y
SEP.10	SUNNY	08 TO 18	90 - 44	NNW	09 TO 24	0	Y
SEP.11	SUNNY	08 TO 20	87 - 51	N	09 TO 19	0	Y
SEP.12	P.CLOUDY	10 TO 26	84 - 47	W	13 TO 32	0	X
SEP.13	CLOUDY	18 TO 25	85 - 59	W	07 TO 17	TRACE	X
SEP.14	CLOUDY	19 TO 21	93 - 76	N	09 TO 13	22.2	X
SEP.15	CLOUDY	17 TO 19	88 - 75	E	17 TO 22	TRACE	X
SEP.16	SUNNY	16 TO 29	100 - 49	WSW	22 TO 43	0	X
SEP.17	CLOUDY	20 TO 23	91 - 75	WNW	09 TO 30	0	Y
SEP.18	CLOUDY	11 TO 21	87 - 44	WNW	06 TO 41	0	Y
SEP.19	SUNNY	09 TO 22	87 - 41	NW	04 TO 33	0	Y
SEP.20	SUNNY	12 TO 26	78 - 39	WSW	09 TO 17	0	Y
SEP.21	SUNNY	12 TO 23	94 - 43	SE	09 TO 17	0	Y
SEP.22	P.CLOUDY	15 TO 22	93 - 52	SE	07 TO 26	0	X
SEP.23	CLOUDY	10 TO 21	96 - 68	ESE	17 TO 22	0	Y
SEP.24	CLOUDY	16 TO 18	87 - 78	ESE	07 TO 13	0	Y
SEP.25	CLOUDY	16 TO 20	90 - 76	E	07 TO 09	0	Y
SEP.26	CLOUDY	16 TO 20	96 - 71	SE	04 TO 13	13.4	Y
SEP.27	CLOUDY	15 TO 20	98 - 66	WSW	07 TO 22	2.8	Y
SEP.28	SHOWERS	12 TO 14	91 - 79	SSW	13 TO 19	5.4	X
SEP.29	P.CLOUDY	11 TO 16	77 - 48	WNW	26 TO 53	0.6	Y
SEP.30	CLOUDY	10 TO 15	71 - 67	WNW	04 TO 19	0.4	Y
OCT.01	RAIN						Y
OCT.02	SUNNY	03 TO 14	85 - 36	VAR.	13 TO 28	0	Y
OCT.03	SUNNY	01 TO 12	84 - 53	NNW	13 TO 22	0	Y
OCT.04	CLOUDY	04 TO 11	91 - 76	N	11 TO 26	TRACE	X
OCT.05	CLOUDY	04 TO 13	75 - 45	WSW	09 TO 11	0	X
OCT.06	SUNNY	06 TO 18	82 - 47	W	06 TO 19	0	Y
OCT.07	SUNNY	09 TO 19	85 - 52	SE	15 TO 20	0	X

OCT.08	SUNNY	14 TO 22	89 - 64	S	13 TO 26	0	Y
OCT.09	CLOUDY	12 TO 14	84 - 47	WSW	20 TO 45	0.4	X
OCT.10	SUNNY	02 TO 12	94 - 45	WNW	17 TO 26	TRACE	Y
OCT.11	SUNNY	M1 TO 11	85 - 35	CALM	06 TO 09	0	X
OCT.12	SUNNY	01 TO 15	87 - 44	SE	07 TO 13	0	X
OCT.13	CLOUDY	02 TO 15	95 - 56	SE	04 TO 07	0	X
OCT.14	SUNNY	06 TO 15	86 - 61	E	11 TO 30	0	Y
OCT.15	SUNNY	01 TO 13	80 - 48	ENE	06 TO 15	0	Y
OCT.16	SUNNY	00 TO 15	81 - 27	VAR.	06 TO 07	0	Y
OCT.17	SUNNY	01 TO 16	73 - 37	SE	09 TO 15	0	X
OCT.18	SHOWERS	11 TO 16	93 - 67	SE	06 TO 15	1.6	X
OCT.19	VAR.	12 TO 20	99 - 74	VAR.	07 TO 15	1.4	X
OCT.20	VAR.	12 TO 16	96 - 67	W	07 TO 22	TRACE	Y
OCT.21	CLOUDY	12 TO 15	78 - 66	NW	11 TO 15	0	Y
OCT.22	CLOUDY	11 TO 14	90 - 63	SE	07 TO 13	0	Y
OCT.23	VAR.	04 TO 16	100 - 40	VAR.	06 TO 19	1	Y
OCT.24	CLOUDY	06 TO 12	83 - 57	SW	09 TO 41	TRACE	Y
OCT.25	CLOUDY	04 TO 08	80 - 56	W	17 TO 37	0.2	Y
OCT.26	VAR.	01 TO 10	90 - 62	V.N.WINDS	06 TO 13	0	Y
OCT.27	CLOUDY	03 TO 11	95 - 56	VAR.	00 TO 15	0	Y
OCT.28	SUNNY	04 TO 15	84 - 47	SSW	07 TO 37	0	X
OCT.29	CLOUDY	12 TO 17	64 - 52	SW	20 TO 45	0	Y
OCT.30	SUNNY	06 TO 16	98 - 30	W	09 TO 24	0	Y
OCT.31	CLOUDY	08 TO 19	68 - 36	NW	04 TO 09	TRACE	X
NOV.01	RAIN	07 TO 08	97 - 95	V.N. WINDS	22 TO 11	21.4	X
NOV.02	SUNNY	06 TO 11	72 - 50	WNW	19 TO 41	0	Y
NOV.03	CLOUDY	03 TO 14	91 - 60	VAR.	04 TO 13	0	X
NOV.04	CLOUDY	14 TO 18	94 - 90	SSW	07 TO 35	8.6	X
NOV.05	SHOWERS	15 TO 12	96 - 94	N	11 TO 15	8.6	X
NOV.06	SHOWERS	12 TO 10	99 - 73	VAR.	19 TO 56	8.2	X
NOV.07	CLOUDY	01 TO 10	75 - 54	W	09 TO 20	TRACE	Y
NOV.08	CLOUDY	07 TO 12	78 - 63	WSW	06 TO 19	TRACE	X
NOV.09	CLOUDY	08 TO 10	88 - 51	N	07 TO 19	4.6	Y
NOV.10	SUNNY	02 TO 07	83 - 54	N	13 TO 37	TRACE	Y
NOV.11	SUNNY	M3 TO 07	83 - 46	NNW	04 TO 07	0	Y
NOV.12	VAR.	M3 TO 11	81 - 63	VAR.	11 TO 28	0	Y
NOV.13	CLOUDY	08 TO 10	85 - 84	ESE	09 TO 15	0	Y
NOV.14	CLOUDY	06 TO 16	100 - 85	WSW	19 TO 37	0	X
NOV.15	CLOUDY	07 TO 09	84 - 52	N	17 TO 30	0	Y
NOV.16	FEW CLOUDS	M1 TO 08	95 - 44	VAR.	13 TO 15	0	X
NOV.17	SUNNY	M2 TO 09	94 - 55	VAR.	04 TO 17	0	X
NOV.18	VAR.	08 TO 15	87 - 78	SSE	06 TO 37	1.4	X
NOV.19	SUNNY	06 TO 10	67 - 55	W	13 TO 33	0	Y
NOV.20	P.CLOUDY	M3 TO 06	88 - 71	ESE	06 TO 19	0	Y
NOV.21	T.STROM	08 TO 12	85 - 45	VAR.	22 TO 60	19	X
NOV.22	CLOUDY	03 TO 01	62 - 60	W	30 TO 61	0.2	Y
NOV.23	SUNNY	M1 TO M4	92 - 46	NW	19 TO 41	TRACE	Y
NOV.24	CLOUDY	M4 TO 05	76 - 65	S	15 TO 45	0	Y
NOV.25	SUNNY	01 TO 06	88 - 50	W	11 TO 45	0	Y
NOV.26	SUNNY	M5 TO M2	83 - 53	NNW	15 TO 07	0	Y
NOV.27	CLOUDY	M4 TO 01	77 - 63	E	17 TO 67	TRACE	Y

CRANBERRY MARSH SOUTH PLATFORM, AUTUMN RAPTOR TOTALS

YEAR	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	GY	UR	SEASON
1990	886	76	15	129	1037	66	36	81	5631	1269	101	19	410	21	21	0	81	9879
1991	1721	94	20	177	1846	164	37	186	6357	1858	222	13	1086	74	38	1	466	14360
1992	772	61	12	129	2117	132	33	168	1118	1483	30	8	758	40	29	0	352	7242
1993	681	33	13	93	1084	59	11	16	700	496	5	5	269	17	13	0	84	3579
1994	1869	52	11	322	1296	31	9	20	11303	283	17	4	661	31	19	0	208	16135
TOTAL	5929	316	71	850	7380	452	126	471	25109	5389	375	49	3184	183	120	1	1191	51195

HIGH PARK RAPTOR WATCH - HILL NUMBER NINE - CITY OF TORONTO, ONTARIO, CANADA																		COMMENTS
DATE	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UR	TOTAL	
AUG 27/94	0	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	6	
AUG 28/94	0	1	0	0	10	0	0	0	0	0	0	0	0	4	0	0	15	
AUG 29/94	0	2	0	0	4	0	0	0	0	0	0	0	0	3	0	0	11	
TOTAL	0	3	0	0	19	0	1	0	0	2	0	0	7	0	0	0	32	
SEP 01/94	0	6	1	0	94	0	0	0	18	3	0	0	28	0	0	2	152	BE 1ST YR.
SEP 02/94	0	0	0	0	33	0	0	0	0	0	0	0	2	0	0	0	35	
SEP 03/94	0	2	0	0	47	3	0	0	1	0	0	0	4	0	0	0	57	
SEP 04/94	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	
SEP 05/94	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	
SEP 06/94	0	0	0	0	23	1	0	0	10	2	0	0	8	1	0	0	45	
SEP 07/94	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	787 BE 1ST YEAR
SEP 08/94	0	1	12	213	1	0	0	0	401	6	0	0	130	2	0	0	1884	BE 1ST YR.
SEP 09/94	1	7	2	27	184	2	0	1	1,384	3	0	0	42	1	0	0	131	BE 2ND YR. 12:28PM
SEP 10/94	0	0	0	0	31	0	0	0	91	4	0	0	2	0	0	2	3888	GE 1ST YEAR
SEP 11/94	4	7	3	87	220	10	0	1	3,224	15	0	1	80	4	0	30	4197	BE 1-IMM 1-AD, 12:19/2:08PM
SEP 12/94	4	7	2	81	313	2	0	0	3,741	5	0	0	38	4	0	0	587	BE 3-AD 1-2ND YR
SEP 13/94	11	2	6	30	65	4	0	1	457	1	0	0	10	1	0	0	90	BE 12:24PM
SEP 14/94	37	2	1	1	28	0	0	0	7	2	0	0	12	0	0	0	234	BE 1-IMM.
SEP 15/94	82	0	1	3	107	7	0	3	23	6	0	0	20	1	1	0	11632	
TOTAL	119	34	17	241	1385	30	6	6	9367	47	0	1	398	14	1	34	844	
OCT 02/94	521	0	0	2	71	3	0	3	29	3	0	0	12	0	0	0	644	
OCT 03/94	668	0	0	1	17	3	0	0	5	14	0	0	4	0	0	10	612	
OCT 04/94	35	0	0	0	30	0	0	1	3	7	0	0	4	0	0	2	82	
OCT 05/94	5	0	0	1	19	0	0	0	1	0	0	0	0	0	0	0	26	
OCT 06/94	295	2	0	6	157	11	0	5	2	17	0	0	18	1	1	0	515	
OCT 07/94	1	0	0	0	4	1	0	1	1	3	0	0	0	0	0	0	11	
OCT 08/94	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	4	
OCT 09/94	28	0	0	0	4	0	0	1	0	7	1	0	0	0	0	0	42	
OCT 10/94	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
OCT 11/94	18	0	0	0	1	9	0	1	0	2	0	0	0	0	0	0	31	
OCT 12/94	23	0	0	0	17	15	0	1	0	58	2	4	2	0	0	19	148	GE 12:20 & 12:34PM - 2 APIECE
OCT 13/94	56	0	1	1	10	0	2	18	0	101	1	1	0	0	0	14	205	BE 2ND YR. /GE 1ST YR. 2:50PM
TOTAL	1641	2	1	29	339	18	4	37	41	213	6	5	40	1	1	45	2323	
NOV 02/94	3	0	1	2	2	0	1	27	0	143	1	3	3	0	0	38	224	RT. WESTERN DARK MORPH. BE 1:55 PM, 3RD YR. GE 1ST YR. 11:15, 11:21, 11:28AM
NOV 03/94	22	0	0	0	2	8	1	2	41	0	489	0	3	0	0	0	588	NG. 8:49AM & 12:20PM, GE 12:04PM, 12:08PM, & 2:37PM, RT. PARTLY ALBINO
NOV 04/94	0	0	0	0	0	0	0	0	0	0	96	0	0	0	0	38	134	
NOV 05/94	0	0	0	0	0	0	0	0	0	0	1139	1	3	0	0	80	1244	FABULOUS DAY!! BIGGEST RED-TAILED HAWK COUNT I'VE EVER NOTED HERE (BY)
NOV 06/94	3	0	0	2	3	0	2	31	0	488	2	0	1	0	0	10	544	SHORT-E OWL - 1- 12:01PM
NOV 07/94	23	0	0	0	3	1	0	16	0	33	0	0	2	0	0	0	42	NG. 8:28AM
NOV 08/94	0	0	0	0	1	2	0	1	3	0	0	0	0	0	0	0	2767	
TOTAL	61	0	1	7	19	2	6	118	0	2368	4	9	6	0	0	148	18745	
SEASON	1711	38	19	277	1742	50	11	161	9408	2650	10	15	409	15	2	228	18745	

HAWK SIGHTINGS IN THE GREATER TORONTO AREA, ONTARIO, CANADA																			
DATE	LOCATION	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UR	TOTAL	COMMENTS
AUG 27/94	LESLIE STREET -PIT	0	0	0	2	13	0	0	0	0	0	0	0	0	1	0	0	16	
SEP 03/94	LESLIE STREET -PIT	0	0	0	0	76	1	0	0	0	0	0	0	0	1	0	0	78	
SEP 18/94	SHERWOOD PARK, N.CITY OF TORONTO	0	0	0	0	15	1	0	1	1,291	3	0	0	14	0	0	1	1335	
SEP 18/94	LINCOLN AVE., NW, TOWN OF YORK	5	0	1	12	19	0	0	0	3,554	0	0	0	27	0	0	7	3625	
SEP 25/94	61 MORAY AVE., WAK RIDGES, YORK RM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	PG, HIT WINDOW-DEAD - BANDED N WASHINGTON D.C
SEP 29/94	KENNEDY RD & LANFORTH AVE, SCARB	53	0	0	11	5	0	0	0	4	0	0	0	17	0	0	0	90	
OCT 08/94	LESLIE STREET -PIT	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
OCT 15/94	LESLIE STREET -PIT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
NOV 02/94	BLOOR VIADUCT	0	0	0	0	0	0	0	6	0	62	0	3	0	0	0	0	71	GE 10:45AM - 2 - 11AM - 1 - 1ST YR
NOV 10/94	BLOOR VIADUCT	0	0	0	0	0	3	1	16	0	381	3	1	0	0	1	0	406	GE 1ST YR /RT 1 -WESTERN MELANISTIC
NOV 11/94	BLOOR VIADUCT	0	0	0	0	0	0	0	17	0	328	1	0	0	0	0	0	346	

Cranberry Marsh and High Park

Species Percentages from season total

Sites	Cranberry Marsh	High Park
Season Total	16,135	16,745
Species		
Turkey Vulture	12%	10%
Osprey	.003%	.002%
Bald Eagle	.001%	.001%
Northern Harrier	2%	.02%
Sharp-shinned Hawk	8%	10%
Cooper's Hawk	.002%	.003%
Northern Goshawk	.001%	.001%
Red-shouldered Hawk	.001%	.01%
Broard-winged Hawk	70%	56%
Red-tailed Hawk	2%	16%
Rough-legged Hawk	.006%	.001%
Golden Eagle	0%	.001%
American Kestrel	4%	.02%
Merlin	.002%	.001%
Peregrine Falcon	.001%	0%

THE TOTAL OF BALD AND GOLDEN EAGLES SEEN FROM 1991 TO 1994 AT CRANBERRY MARSH, WHITBY AND HIGH PARK, TORONTO

BALD EAGLE

YEAR	1ST YR.	2ND YR.	3RD. YR.	ADULT	UNKNOWN	TOTAL
1991	0	0	0	0	20	20
1992	4	2	3	2	3	14
1993	3	4	1	3	5	16
1994	10	4	3	5	8	30
GRAND TOTAL	17	10	7	10	36	80

GOLDEN EAGLE

YEAR	1ST YR.	ADULT	UNKNOWN	TOTAL
1991	4	1	8	13
1992	5	3	2	10
1993	4	5	0	9
1994	19	0	0	19
GRAND TOTAL	32	9	10	51

AGE BREAKDOWN OF BALD EAGLE AND GOLDEN EAGLE AT CRANBERRY MARSH AND HIGH PARK

1991 TO 1994

BALD EAGLE

CMRW

HPRW

DATE	1ST YR.	2ND YR.	3RD YR.	ADULT	UNK.	DATE	1ST YR.	2ND YR.	3RD YR.	ADULT	UNK.
SEP. 1/91											
SEP. 29/91					1						
OCT. 6/91					4						
OCT. 12/91					1						
OCT. 13/91					2						
OCT. 18/91					1						
OCT. 22/91					1						
OCT. 27/91					1						
OCT. 28/91					4						
OCT. 29/91					2						
NOV. 8/91					1						
NOV. 16/91					1						
TOTAL	0	0	0	0	20						
AUG. 29/92				1							
SEP. 11/92	1					SEP. 11/92			1		
SEP. 12/92											
SEP. 23/92	1	1	1	1	2	SEP. 23/92			1		
SEP. 24/92											
OCT. 5/92		1	1	1	1						
NOV. 16/92			1								
TOTAL	2	2	3	2	3	TOTAL			2		

<u>GOLDEN EAGLE</u>				<u>HPRW</u>				
<u>CMRW</u>	DATE	1ST YR	ADULT	UNK.	DATE	1ST.YR	ADULT	UNK.
	SEP. 11/91		1					
	SEP. 20/91	1		1				
	OCT. 10/91							
	OCT. 13/91	1						
	OCT. 20/91	1						
	OCT. 22/91	1						
	OCT. 27/91			2				
	OCT. 28/91			1				
	OCT. 30/91			2				
	NOV. 16/91			1				
	NOV. 18/91			1				
	TOTAL	4	1	8	SEP. 11/92			1
					SEP. 19/92			1
					TOTAL		2	
	OCT. 19/92	2	1	2				
	OCT. 31/92	3						
	TOTAL	5	1	2				
	SEP. 30/93		1		OCT. 18/93	1		
	OCT. 24/93	1	1					
	OCT. 26/93	1			NOV. 1/93			1
	NOV. 2/93		1					
					NOV. 6/93	1		1
	TOTAL	2	3		TOTAL	2	2	

<u>CMRW</u>		<u>HPRW</u>	UNK.		ADULT	1ST.YR		ADULT	UNK.	
DATE	1ST YR	DATE	1ST.YR	ADULT	ADULT	DATE	1ST.YR	ADULT	ADULT	UNK.
OCT 2/94	2	SEP 17/94	1							
OCT 20/94	1									
		OCT 26/94	4							
		OCT 27/94	1							
		NOV 2/94	3							
		NOV 7/94	3							
NOV 10/94	1	NOV 10/94	3							
TOTAL	4	TOTAL	15							
SUM	15		17	5				4		
CMRW TOTAL	30	HPRW	21							

1990 TO 1994 HAWKS PER HOUR																			
SITE / SPECIES																			
YEAR																			
SEASON																			
CMRW	HOURS	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	SEASON	MEAN	SEASON
																			TOTAL
1990	200	4	0.4	0.1	0.6	5	0	0.2	0.4	28	6	0.5	0.1	0.1	0.1	0.1	49		9879
1991	426	4	0.2	0.1	0.4	4	0	0.1	0.4	15	4	0.5	0	3	0.2	0.1	34		14360
1992	320.5	2	0.2	0.1	0.4	7	0	0.1	0.5	3	7	0.1	0	2	0.1	0.1	23		7242
1993	182	4	0.2	0.1	0.5	6	0	0.1	0.1	4	3	0	0	1	0.1	0.1	20		3579
1994	255.5	7	0.2	0	1	5	0	0	0.1	45	1	0.1	0	3	0.1	0.1	63		16135

SEASONAL COUNTS WITHOUT BROAD-WINGED HAWK									
SITE	YEAR	WITH	WITHOUT	SITE	YEAR	WITH	WITHOUT		
CMRW	1990	9879	4248	HPRW	1993	2338	2077		
	1991	14360	8003		1994	16745	7337		
	1992	7242	6124						
	1993	3579	2879						
	1994	16135	4832						

Hooded Merganser	3	27	Black Tern	1	0
Common Merganser	5	0	Rock Dove	836	395
SPECIES	CRANBERRY	HIGH PARK	SPECIES	CRANBERRY	HIGH PARK
Mourning Dove	7	83	Swainson's Thrush	0	12
Black-billed Cuckoo	1	0	Am. Robin	0	1273
Yellow-billed Cuckoo	2	0	Gray Catbird	0	7
Short-eared Owl	1	1	Am. Pipit	0	5
Northern Saw-whet Owl	0	1	Cedar Waxwing	50	501
Common Nighthawk	1	1	Northern Shrike	1	0
Chimney Swift	0	373	European Starling	2	425
Ruby-throated Hummingbird	3	28	Solitary Vireo	3	1
Belted Kingfisher	2	0	Philadelphia Vireo	1	8
Red-headed Woodpecker	1	0	Red-eyed Vireo	0	25
Yellow-bellied Sapsucker	0	3	Orange-crowned Warbler	1	0
Downy Woodpecker	2	13	Nashville Warbler	0	62
Northern Flicker	0	84	Northern Parula	1	3
Eastern Wood-Pewee	0	3	Yellow Warbler	2	0
Yellow-bellied Flycatcher	0	3	Chestnut-sided Warbler	0	8
Least Flycatcher	1	0	Magnolia Warbler	0	50
Eastern Phoebe	4	1	Black-throated Blue Warbler	0	8
Great Crested Flycatcher	0	5	Yellow-rumped Warbler	3	319
Eastern Kingbird	0	10	Black-throated Green Warbler	0	28
Tree Swallow	1426	0	Blackburnian Warbler	0	10
Cliff Swallow	0	1	Palm Warbler	2	8
Barn Swallow	102	17	Black-and-White Warbler	0	15
Blue Jay	577	1806	Am. Redstart	0	35
Am. Crow	375	457	Northern Waterthrush	1	2
Common Raven	0	2	Common Yellowthroat	0	10
Black-capped Chickadee	41	75	Wilson's Warbler	0	9
White-breasted Nuthatch	0	2	Canada Warbler	1	0
Carolina Wren	1	0	Northern Cardinal	0	3
Winter Wren	1	0	Rose-breasted Grosbeak	0	3
Golden-crowned Kinglet	0	18	Rufous-sided Towhee	1	0
Ruby-crowned Kinglet	1	28	Am. Tree Sparrow	6	23
Blue-gray Gnatcatcher	3	2	Chipping Sparrow	0	19

