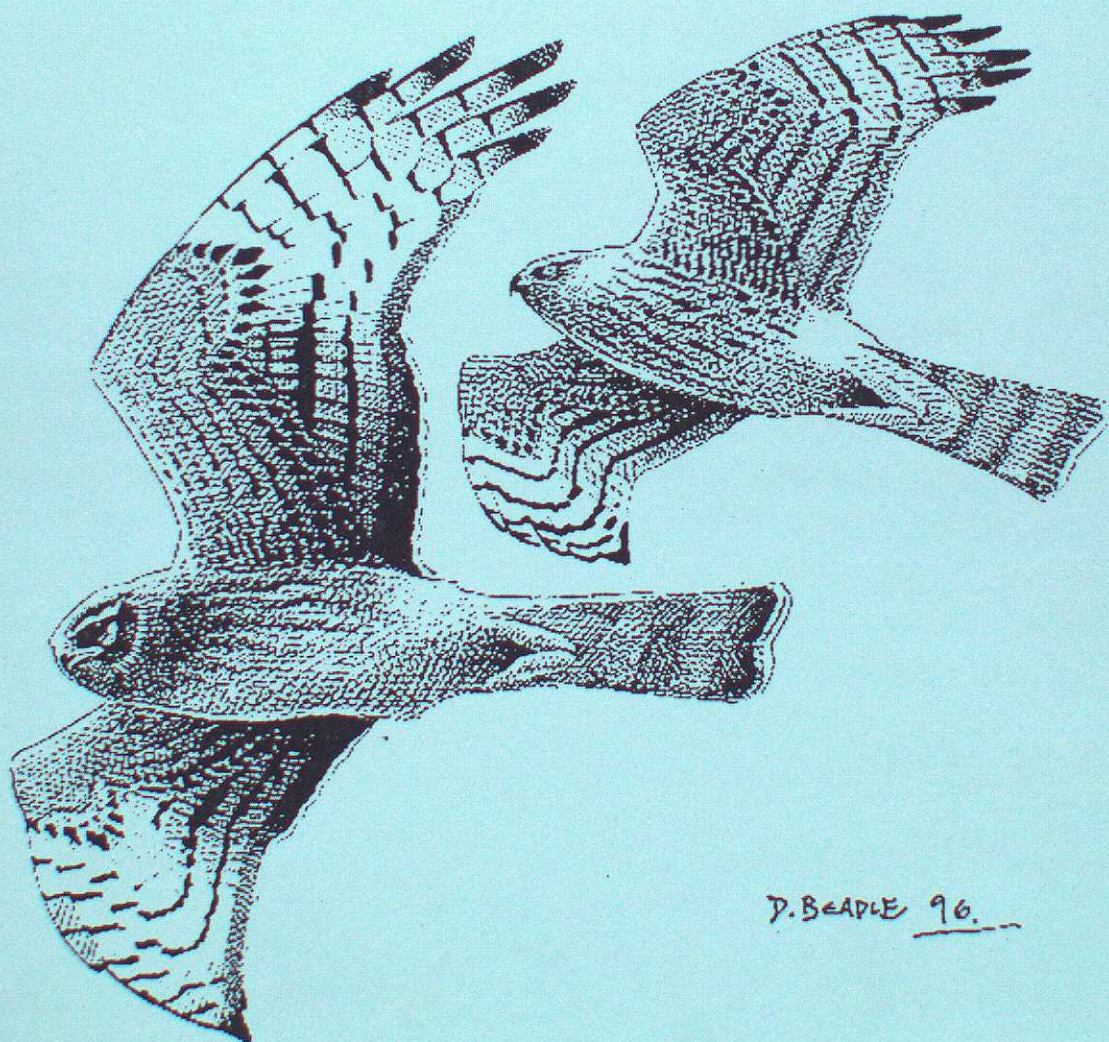


Greater Toronto Raptor
Watch
FALL 1997



D. BEADIE 96.

Greater Toronto Raptor Watch

Hawk Report

Index

Directions to Cranberry Marsh and High Park John Barker	3
Raptor Abbreviations John Barker	5
Ontario 1997 Hawkwatches Season Totals John Barker	6
1997 Comparison of Cranberry and High Park season totals John Barker	7
High Park map Norm Murr	8
HPRW - Impressions of the season Don Barnett	9
HPRW - 1994 to 1997 seasonal totals John Barker	10
HPRW - Averages and Birds Per Hour Don Barnett and John Barker	11
HPRW - Day peaks Don Barnett and John Barker	12
HPRW - Comparison of 1997 season totals and B.P.H. to the 1994-1996 average Don Barnett	13
HPRW - Comparison of 1996-1997 season totals and B.P.H. Don Barnett	14
HPRW - Time of day raptor movement Don Barnett	15
HPRW - Day by Day movement John Barker	16
HPRW - Graphs of selected raptor species John Barker	19

Hawk Report Index

HPRW - Hawk Hill, autumn bird migration
Leon Schlichter, Don Barnett, Alfred Adamo, and John Barker 24

CMRW - Map
Mike Boudreau 26

CMRW - Report
Doug Lockrey and Mike Boudreau 27

CMRW - Day by Day movement
Doug Lockrey and John Barker 32

CMRW - Day Peaks
Doug Lockrey and John Barker 35

CMRW - 1990 - 1997 seasonal totals
John Barker 36

CMRW - Averages and B.P.H.
John Barker 37

CMRW - Movements of Migrating raptors on selected days
Doug Lockrey and Mike Boudreau 38

CMRW - Graphed selected raptor species
John Barker 39

HPRW - Weather Data Analysis
Don Barnett 44

HPRW - Summary of weather elements
Don Barnett and John Barker 45

HPRW- Comparison of Raptor observations with weather conditions
Don Barnett and John Barker 46

People attending and helping count raptors at High Park and Cranberry Marsh sites
John Barker, Doug Lockrey, Mike Boudreau, Don Barnett, and Alfred Adamo 61

Cover drawn by Dave Beadle

Printing: Rose Leonard

Layout, Typing, and Binding: John Barker

Subject: Greater Toronto Raptor Watch

More information contact; John Barker,

Fall Watches, Period of watches Late August to Late November

Favourable weather conditions for both sites are, WNW wind, moderate wind speed, no wet weather, partly cloudy sky.

Directions to Cranberry Marsh and High Park

Cranberry Marsh - South platform - Whitby - Durham RM - East of Toronto - Northshore Lake Ontario.

This Hawkwatch has been in operation since 1990 when structured Hawk migration counting took place.

Coming from Toronto

Travel East on Highway 401, exit South at Westney Road, Ajax. Travel South to Bayly Road turn East. While traveling on Bayly you will come to a Golf Driving Range sign turn right, this is Hall's Road. On Hall's Road go all the way to the Lake there is a loop take this so you are facing North. Go a short way until you come close to the pathway that you will walk to the South platform. The platform is a Ten by Ten foot wooden structure and fills up quickly on good migration days. If you own a birding spotting scope bring it with you.

Coming from Oshawa

Travel West on Highway 401, exit South at Brock Street, Whitby. Go South to Victoria Street turn West. On your left side you will come to a small store after this will be Hall's Road turn South, take the loop at the bottom and park facing north, then do a short walk to the platform.

High Park Raptor Watch

High Park - Hawk Hill - Toronto - Ontario - Canada

The Greater Toronto Raptor Watch in partnership with the Toronto Ornithological Club has done Hawk migration and non-raptor monitoring at this site since 1994. This site on average counts 14,000.00 plus Hawks and in the fall of 1997 counted 85 other species of birds passing by our only site. This site is very close to downtown Toronto it is accessible by our Toronto Transit Subway system. High Park is also the Subway station name. Hawk Hill is located on a small hill located beside the Grenadier Restaurant parking lot. Colborne Lodge Road is the main North to South access point to get to Hawk Hill. The park is also accessible by car with the exception of Sundays from early september to mid October. I will explain later what to do on these sundays. High Park has a number of walking trails to keep a visitor busy on slow Hawk days.

What to do on closed car access days:

- 1) Take the subway, exit at High Park, Keele or Runnymede subway stations and walk to Colborne Lodge Road towards the Grenadier Restaurant.
- 2) Park your car on Bloor Street, walk to Colborne Lodge Road.
- 3) On the east boundary there is Parkside Drive where this road connects with the Queensway which is the southern boundary there is a small parking lot. Walk to Colborne Lodge Road and up to the restaurant area. This is a long walk.

Coming from the West end of Toronto:

Queen Elizabeth Way (QEW) east to Gardiner expwy exit North onto the Kingsway travel north to Bloor street go east to Colborne Road then south to Hawk Hill.

Coming from the East End of Toronto:

401 Highway exit south on the Don Valley Parkway, travel south to the Gardiner Expwy go west to Jameson Avenue travel North to King Street, go West to the Queenway keep going west if Colborne lodge Drive is open to car access go North to Hawk Hill if not follow instructions regarding no car access.

HMANA Canadian Liaison
c/o John Barker

RAPTOR ABBREVIATIONS

Abbreviations	Species	Latin Name
BV	Black Vulture	<i>Coragyps atratus</i>
TV	Turkey Vulture	<i>Cathartes aura</i>
OS	Osprey	<i>Pandion haliaetus</i>
HK	Hook-billed Kite	<i>Chondrohierax unicinatus</i>
ST	Swallow-tailed Kite	<i>Elanoides forficatus</i>
WK	White-tailed Kite	<i>Elanus leucurus</i>
SK	Snail Kite	<i>Rostrhamus sociabilis</i>
MK	Mississippi Kite	<i>Ictinia mississippiensi</i>
BE	Bald Eagle	<i>Haliaeetus leucocephalus</i>
NH	Northern Harrier	<i>Circus cyaneus</i>
SS	Sharp-shinned Hawk	<i>Accipiter striatus</i>
CH	Cooper's Hawk	<i>Accipiter cooperii</i>
NG	Northern Goshawk	<i>Accipiter gentilis</i>
BH	Common Black Hawk	<i>Buteogallus anthracinus</i>
HH	Harris Hawk	<i>Parabuteo unicinctus</i>
GH	Gray Hawk	<i>Buteo nitidus</i>
RH	Roadside Hawk	<i>Buteo magnirostris</i>
RS	Red-shouldered Hawk	<i>Buteo lineatus</i>
BW	Broad-winged Hawk	<i>Buteo platypterus</i>
SH	Short-tailed Hawk	<i>Buteo brachyurus</i>
SW	Swainson's Hawk	<i>Buteo swainsoni</i>
WT	White-tailed Hawk	<i>Buteo albicaudatus</i>
ZT	Zone-tailed Hawk	<i>Buteo albonotus</i>
RT	Red-tailed Hawk	<i>Buteo jamaicensis</i>
FH	Ferruginous Hawk	<i>Buteo regalis</i>
RL	Rough-legged Hawk	<i>Buteo lagopus</i>
GE	Golden Eagle	<i>Aquila chrysaetos</i>
CC	Creasted Caracara	<i>Caracara plancus</i>
AK	American Kestrel	<i>Falco sparverius</i>
ML	Merlin	<i>Falco columbarius</i>
AF	Aplomado Falcon	<i>Falco femoralis</i>
PG	Peregrine Falcon	<i>Falco peregrinus</i>
GY	Gyr Falcon	<i>Falco rusticolus</i>
PF	Prairie Falcon	<i>Falco mexicanus</i>
UA	Unidentified Accipiter	
UB	Unidentified Buteo	
UF	Unidentified Falcon	
UE	Unidentified Eagle	
UR	Unidentified Raptor	

GREATER TORONTO RAPTOR WATCH

Fall 1997

1997 Autumn Hawkwatches in Ontario Season Totals

Stations Species	CMRW Whitby	HPRW Toronto	HCHW Pt. Stanley	HBMO Malden	Species Total
TV	1,434	1,803	4,056	17,845	25,138
OS	140	67	114	154	475
BE	30	20	62	85	197
NH	230	173	967	1,038	2408
SS	3,905	4,415	6,095	15,478	29,893
CH	99	131	434	352	1016
NG	13	18	50	48	129
RS	61	84	162	1,030	1337
BW	3,004	5,051	3,999	31,356	43,410
RT	1,221	1,550	2,654	7,103	12,528
RL	60	21	17	96	194
GE	9	12	52	50	123
AK	1,050	627	3,109	2,868	7,654
ML	47	26	86	93	252
PG	24	15	51	51	141
UR	192	229	18	181	620
Total	11,519	14,242	21,927	77,828	

Lake Hawkwatch is located near	Location	Site Abbreviation
Lake Ontario		
Cranberry Marsh	Whitby	CMRW
High Park	Toronto	HPRW
Lake Erie		
Hawk Cliff	Pt. Stanley	HCHW
Holiday Beach	Malden	HBMO

Greater Toronto Raptor Watch
Fall 1997

1997 Comparison of CMRW with HPRW

Species	August / September CMRW	HPRW
TV	207	330
OS	124	62
BE	13	11
NH	92	123
SS	3,133	3,611
CH	50	74
NG	0	3
RS	6	3
BW	3,004	5,034
RT	101	118
RL	0	0
GE	0	0
AK	855	543
ML	32	18
PG	15	11
UR	112	132
TOTAL	7,744	10,073
Days	32	32
Hours	154	207

Viewing Periods: CMRW- Aug.28 to Nov.30 HPRW- Aug. 28 To Nov.27

October	CMRW	HPRW
	1,222	1,459
	16	5
	9	9
	100	43
	714	775
	38	52
	5	8
	23	54
	0	17
	620	963
	9	12
	3	7
	187	82
	11	7
	9	4
	59	82
	3,025	3,579
	31	30
	159	182

November	CMRW	HPRW
	5	14
	0	0
	8	0
	38	7
	58	29
	11	5
	8	7
	32	27
	0	0
	500	469
	51	9
	6	5
	8	2
	4	1
	0	0
	21	15
	750	590
	30	17
	102	91

Total	CMRW	HPRW
	1,434	1,803
	140	67
	30	20
	230	173
	3,905	4,415
	99	131
	13	18
	61	84
	3,004	5,051
	1,221	1,550
	60	21
	9	12
	1,050	627
	47	26
	24	15
	192	229
	11,519	14,242
	93	79
	415	479

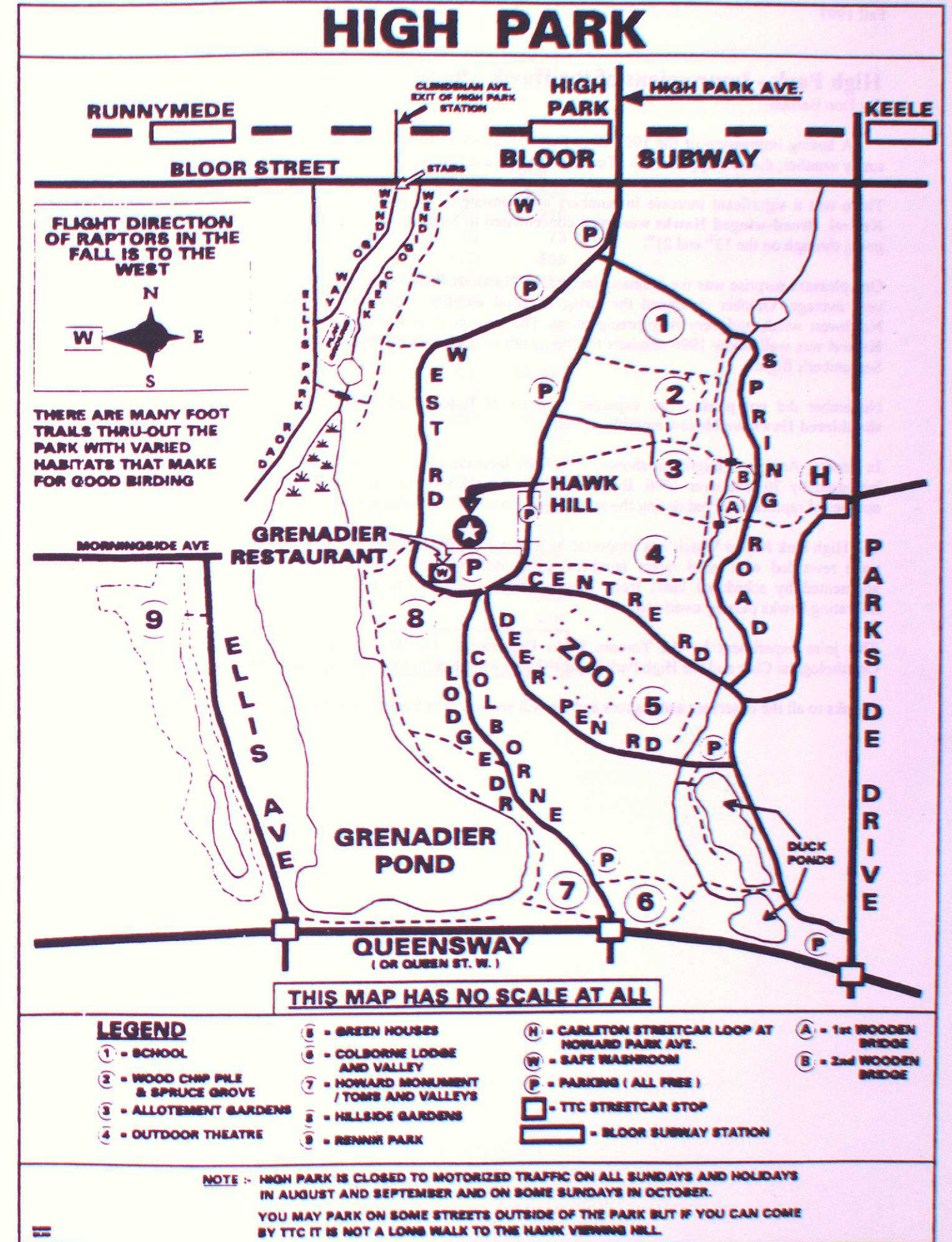
	CMRW	HPRW
Latitude	43d,50m,20s	43d,38m,46s N
Longitude	78d,57m,55s	79d,27m,55s W

Greater Toronto Raptor Watch

HIGH PARK

HAWK HILL

TORONTO



High Park - Impressions of the Hawk Migration through an urban area

By Don Barnett

A lasting impression of the 1997 High Park raptor watch includes a beautiful September with warm sunny weather, discrete appearances of cumulus clouds and little or no day time precipitation.

There was a significant increase in numbers and consistency of **Sharp-shinned Hawk** and **American Kestrel**. **Broad-winged Hawks** were well concentrated in September with about 83% of the season total going through on the 13th and 21st.

One pleasant surprise was the dramatic increase in **Northern Harrier** from 1996 and even from the four-year average. October continued the string of good weather, with what should have been favorable Northwest winds and very little precipitation. The movement of **Sharp-shinned Hawk** and **American Kestrel** was well below 1996 numbers for the month so it appears that both species had bunched up in the September's flights.

November did not produce the expected numbers of Buteos with both **Red-tailed Hawk** and **Red-shouldered Hawk** well below monthly averages.

In general Accipiter, migration showed a 27.74% increase over 1996 and **American Kestrel** numbers increased by 70.85% over 1996. Buteo numbers showed a decline of 15.41% from 1996 totals. Total number of raptors observed during the season was virtually identical to 1996.

The High Park Raptor Watch was supported by a record number of observers and visitors this year and they were rewarded with good raptor numbers under ideal viewing conditions. The regular visitors were augmented by scheduled visits from Toronto school groups who experienced the thrill of watching migrating hawks passing overhead.

This joint experiment by the Toronto Parks Department, The Toronto Board of Education, Toronto Ornithological Club and the High Park Raptor Watch will be continued and expanded in 1998.

Thanks to all the observers and visitors and we will see you next September on Hawk Hill.

GREATER TORONTO RAPTOR WATCH

High Park , 1994 to 1997 Seasonal Totals

	1994	1995	1996	1997	Total
TV	1,711	290	2,029	1,803	5,833
OS	39	28	76	67	210
BE	19	10	24	20	73
NH	277	88	47	173	585
SS	1,742	2,064	3,403	4,415	11,624
CH	50	83	155	131	419
NG	11	22	15	18	66
RS	161	301	303	84	849
BW	9,408	3,751	5,439	5,051	23,649
SW	0	1	0	0	1
RT	2,650	2,902	2,165	1,550	9,267
RL	10	22	21	21	74
GE	15	22	13	12	62
AK	409	304	367	627	1707
ML	15	30	36	26	107
PG	2	5	5	15	27
UR	226	170	10	89	495
Total	16,745	10,087	14,220	14,242	55,294
Hours	100	239	464	479	1282
Days	36	39	65	79	219
Year Total					
Minus BW	7,337	6,336	8,781	9,191	31,645

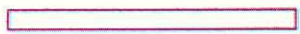
GREATER TORONTO RAPTOR WATCH


High Park, Fall 1997, Averages and Birds per Hour


Species	1994-96 Averages	1995 Total	BPH 1995	1996 Total	BPH 1996	1997 Total	BPH 1997	1994-97 Averages	1994-97 B.P.H.
TV	1,343	290	1.213	2,029	4.373	1,803	3.764	1,458	4.550
OS	48	28	0.117	76	0.164	67	0.140	53	0.164
BE	18	10	0.042	24	0.052	20	0.042	18	0.057
NH	130	88	0.368	47	0.101	173	0.361	146	0.456
SS	2,394	2,064	8.636	3,403	7.334	4,415	9.217	2,899	9.067
CH	96	83	0.347	155	0.334	131	0.273	104	0.327
NG	16	22	0.092	15	0.032	18	0.038	16	0.051
RS	255	301	1.259	303	0.653	84	0.175	212	0.662
SW	1	1	0.004	0	0	0	0	1	0.004
BW	6,205	3,751	15.695	5,439	11.722	5,051	10.545	5,917	18.477
RT	2,572	2,902	12.142	2,165	4.666	1,550	3.236	2,315	7.229
RL	18	22	0.092	21	0.045	21	0.044	19	0.058
GE	17	22	0.092	13	0.028	12	0.025	16	0.048
AK	360	304	1.272	367	0.791	627	1.309	427	1.332
ML	27	30	0.126	36	0.078	26	0.054	27	0.083
PG	4	5	0.021	5	0.011	15	0.031	7	0.021
UA	0	0	0	35	0.075	47	0.098	21	0.064
UB	0	0	0	87	0.188	89	0.186	44	0.137
UF	0	0	0	0	0	1	0.002	1	0.001
UE	0	0	0	0	0	3	0.006	1	0.002
UR	189	170	0.711	10	0.022	89	0.186	164	0.386
Total	13,700	10,087	42.255	14,220	30.646	14,242	29.733	13,865	43.137
Hours		239		464		479			

High Park Raptor Watch
One Day Peaks for Migrating Raptors

Species	September	October	November	Day Peaks 1997	3 yrs Range of Peaks
TV			Sep.26-Oct.16	552 - Oct.16	54 - 930
OS			Sep.3 - 23	9 - Sep.13,15	06 - 15
BE			Sep. 5 - Oct.19	3 - Sep.21	03 -08
NH			Sep.3 - Oct.1	30 - Sep.13	08 - 87
SS			Sep.3 - Oct.1	701 * Sep.13	313 - 701
CH			Sep.3 - Oct.12	19 - Sep.26	11 - 19
NG				2 - Oct.10,25 Nov.7,8,24	02 - 03
RS			Oct.10 - Nov.9	14 - Oct.25	41 - 68
BW			Sep.13 - 21	3,364 - Sep.21	3,056 - 3,741
RT			Oct.16 - Nov.16	498 - Oct.25	371 - 1,268
RL	Oct.22 - Nov.9			5 - Oct.25	02 -05
GE	Oct.15 - Nov.8			3 - Oct.15 Nov.8	04 -10
AK		Sep.13 - Oct.1		178 ! - Sep.13	70 - 178
ML			Sep.13 - Oct.4	5 - Sep. 26	04 - 07
PG			Sep. 5 - Oct.12	3 - Sep.21	01 - 03

1997 Peak Period 

1994 - 1996 Peak Period 

Range of Migration 

Regional and Station Day Record *

Station Day Record !

80% of the Flight **Sep.26 - Oct.16**

GREATER TORONTO RAPTOR WATCH

High Park, Toronto

Comparison of 1997 season totals and birds per hour to the 1994-1996 average

Species	Totals			Birds Per Hour		
	Average 1994-1996	1997	% Change	Average 1994-1996	1997	% Change
Turkey Vulture	1,343	1,803	34.25	5.011	3.764	-24.885
Osprey	48	67	39.58	0.179	0.14	-21.79
Bald Eagle	18	20	11.11	0.067	0.042	-37.31
Northern Harrier	130	173	33.07	0.485	0.361	-25.57
Sharp-shinned Hawk	2,394	4,415	84.42	8.933	9.217	3.18
Cooper's Hawk	96	131	36.46	0.358	0.273	-23.74
Northern Goshawk	16	18	12.5	0.06	0.038	-36.67
Total Accipiter's	2,506	4,564	82.12	9.357	9.528	1.89
Red-shouldered Hawk	255	84	-67.06	0.951	0.175	-81.6
Broad-winged Hawk	6,205	5,051	-18.6	23.153	10.545	-54.46
Red-tailed Hawk	2,572	1,550	-39.7	9.597	3.236	-66.28
Rough-legged Hawk	18	21	16.67	0.067	0.044	-34.33
Total Buteo's	9,050	6,706	-25.9	33.76	14	-58.53
Golden Eagle	17	12	-29.41	0.063	0.025	-60.32
American Kestrel	360	627	74.17	1.343	1.309	-2.53
Merlin	27	26	-3.7	0.101	0.054	-46.54
Peregrine Falcon	4	15	375	0.015	0.031	206.67
Total Falcons	391	668	70.84	1.459	1.395	-4.39
Unidentified Raptors	189	229	21.16	0.705	0.478	-32.2
Total Raptors	13,700	14,242	3.96	51.119	29.733	-41.84
Observer Hours	268	479	78.73			

GREATER TORONTO RAPTOR WATCH

High Park, Toronto

Comparison of 1996 - 1997 season totals and Birds per hour

Species	TOTALS			Birds Per Hour		
	1996	1997	% Change	1996	1997	% Change
Turkey Vulture	2,029	1,803	-11.14	4.373	3.764	-13.926
Osprey	76	67	-11.84	0.164	0.14	-14.64
Bald Eagle	24	20	-16.67	0.052	0.042	-19.23
Northern Harrier	47	173	368.09	0.101	0.361	357.43
Sharp-shinned Hawk	3,403	4,415	29.74	7.334	9.217	25.68
Cooper's Hawk	155	131	-15.48	0.334	0.273	-18.26
Northern Goshawk	15	18	20	0.032	0.038	18.75
Total Accipiter	3,573	4,564	27.74	7.7	9.528	23.74
Red-shouldered Hawk	303	84	-72.28	0.653	0.175	-73.2
Broad-winged Hawk	5,439	5,051	-7.13	11.722	10.545	-10.04
Red-tailed Hawk	2,165	1,550	-28.41	4.067	3.236	-20.43
Rough-legged Hawk	21	21	0	0.045	0.044	-2.22
Total Buteos	7,928	6,706	-15.41	17.086	14	-18.06
Golden Eagle	13	12	-7.69	0.028	0.025	-10.71
American Kestrel	367	627	70.85	0.791	1.309	65.49
Merlin	36	26	-27.78	0.084	0.054	-35.71
Peregrine Falcon	5	15	300	0.011	0.031	281.82
Total Falcons	408	668	63.73	0.879	1.395	58.7
Unidentified Raptors	132	229	73.49	0.284	0.478	68.31
Total Raptors	14,220	14,242	0.16	30.646	29.733	-2.98
Observer Hours	464	479	3.23			

GREATER TORONTO RAPTOR WATCH

Unidentified Not Included

High Park - Time of Day Distribution - All times are Eastern Standard Time - Aug.28 to Nov.30 1997

Species\ Hours	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	Total
TV	7	3	3	10	86	205	551	332	371	192	46	1803
OS	3	3	6	14	25	7	4	8				67
BE			3	3	3	7	3	4				20
NH	2	6	11	20	25	30	32	28	14	5		173
SS	79	133	424	827	908	771	548	428	263	34		4415
CH	3	5	4	13	36	26	19	15	9	1		131
NG			1	5	3	3	5	1				18
RS	3	3	1	6	12	31	15	11	5			84
BW	2	48	256	1,233	1,341	638	391	649	298	195		5051
RT	1	4	20	182	329	358	323	242	88	3		1550
RL			5	10	1	3	2					21
GE			1	3	3	5						12
AK	12	20	46	76	109	82	116	99	65	2		627
ML	2	5	2	2	7	5	3	2				26
PG	1	2	1	1	5	2	1	1	1			15
Hourly Total	1	108	232	783	2463	3009	2526	1798	1868	939	286	14013

GREATER TORONTO RAPTOR WATCH HIGH PARK, TORONTO, ONTARIO, CANADA

AUTUMN 1997

STATION RECORD

DATE\ SPECIES	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UA	UB	UF	UE	UR	DAY TOTAL	SEASON
28-Aug	6	1			4				1	3	3					1					13	13
29-Aug	6		1		15	1			2	3	4							6			32	45
30-Aug	4.5	1			25	1															27	72
31-Aug	6																				0	72
Total	23	0	2	1	0	44	2	0	0	3	6	0	7	0	0	0	7	0	0	0	0	72
1-Sep	5				18				4	1						1					24	96
2-Sep	4				3											1				2	7	103
3-Sep	9	2	5	17	370	10			135	12			47				5			16	619	722
4-Sep	8	1	1	2	319				67	2			16			1				1	410	1,132
5-Sep	5	6	2	53	1				8	4			1			1					77	1,209
6-Sep	4				8				2												10	1,219
7-Sep	6		5	1	58				1	1			3			4				4	76	1,295
8-Sep	7.5		2		66				5	1			3	1		1				2	82	1,377
9-Sep	6.5	1	1	1	130				27	3			7							2	172	1,549
11-Sep	4				6				1	1											8	1,557
12-Sep	4				7				1	1			2								12	1,569
13-Sep	10	1	9	30	701	7			815	7			178	3	1	5	1			12	1770	3,339
14-Sep	6	7	7	6	183	4			126	6			40			1				3	377	3,716
15-Sep	8	9	9	6	62				16	1			20	3						2	113	3,829
16-Sep	9	1	2	2	95				6	1			6								113	3,942
17-Sep	4				3								2							3	6	3,948
18-Sep	8.5				6	122	1						14	1			3			3	150	4,098
19-Sep	3				3								1				1				5	4,103
20-Sep	9	1	3	21	323	1			197	4			45			1				2	595	4,698
21-Sep	8.5	3	3	16	345	17	1		3,364	31			56	1	3	9	2			4	3928	8,626
22-Sep	7	13			14				1	1			4							6	32	8,658
23-Sep	5.5	17	3	5	204	8			1	7			30	1			4			2	487	9,145
24-Sep	6.5	3	3	39	2	1			7				4		2					2	62	9,207
26-Sep	9	197	3	1	11	278	19	1	1	45	22		33	5	2	3	6			4	631	9,838
27-Sep	7				2	16			1	1			1								21	9,859
28-Sep	7	15			11	1	1	1	1	1			1								32	9,891

