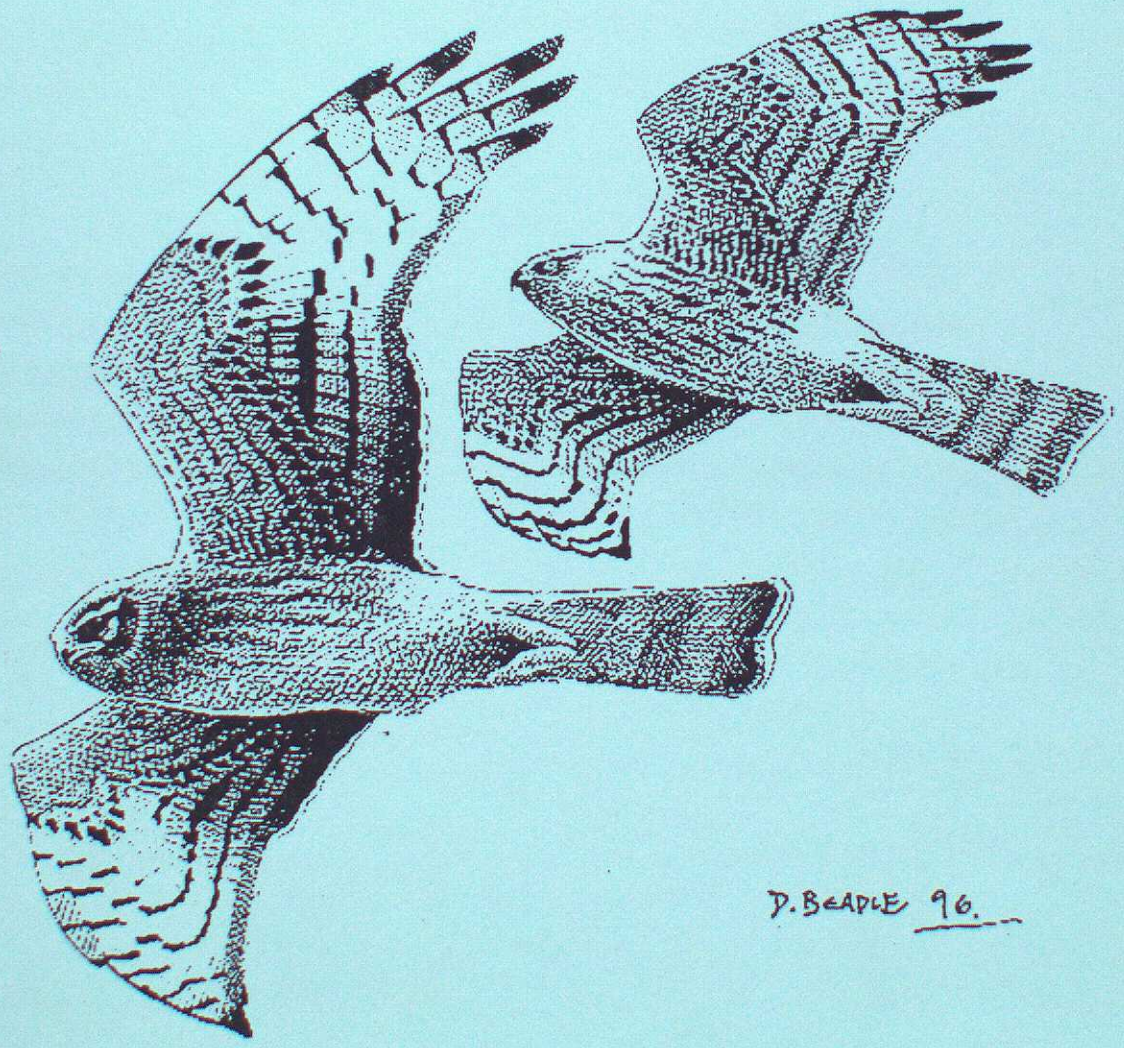
Greater Toronto Raptor Watch
FALL 1997



Greater Toronto Raptor Watch

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Subject: Greater Toronto Raptor Watch

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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 Southplatform. 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 averge 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 accessable 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 accessable 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 Runnyme de 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 southren 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 Queeenway keep going west if Colborne lodge Drive is open to car access go North to Hawk Hill if not follow instructions reguarding no car access.

HMANA Canadian Liaison
c/o John Barker

RAPTOR ABBREVIATIONS

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

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

Species	August / September CMRW	August / September HPRW	October CMRW	October HPRW	November CMRW	November HPRW	Total CMRW	Total HPRW
TV	207	330	1,222	1,459	5	14	1,434	1,803
OS	124	62	16	5	0	0	140	67
BE	13	11	9	9	8	0	30	20
NH	92	123	100	43	38	7	230	173
SS	3,133	3,611	714	775	58	29	3,905	4,415
CH	50	74	38	52	11	5	99	131
NG	0	3	5	8	8	7	13	18
RS	6	3	23	54	32	27	61	84
BW	3,004	5,034	0	17	0	0	3,004	5,051
RT	101	118	620	963	500	469	1,221	1,550
RL	0	0	9	12	51	9	60	21
GE	0	0	3	7	6	5	9	12
AK	855	543	187	82	8	2	1,050	627
ML	32	18	11	7	4	1	47	26
PG	15	11	9	4	0	0	24	15
UR	112	132	59	82	21	15	192	229
TOTAL	7,744	10,073	3,025	3,579	750	590	11,519	14,242
Days	32	32	31	30	30	17	93	79
Hours	154	207	159	182	102	91	415	479

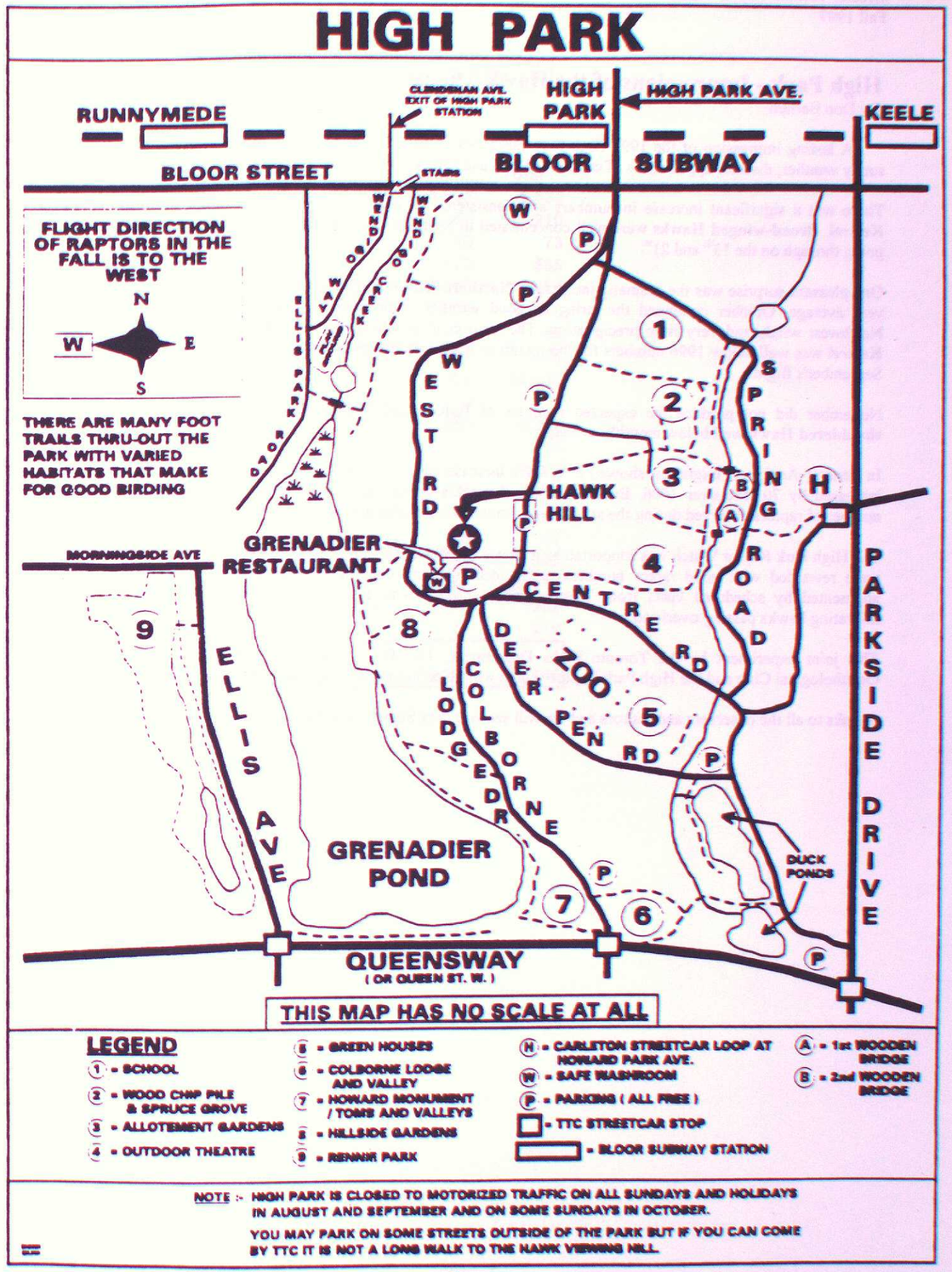
	CMRW	HPRW
Latitude	43d,50m,20s	43d,38m,46s N
Longitude	78d,57m,55s	79d,27m,55s W

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

	Totals			Birds Per Hour		
Species	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

	TOTALS			Birds Per Hour		
Species	**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	10	86	205	551	332	371	192	46	1803
OS			3	6	14	25	7	4	8			67
BE				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	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	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

DATE\ SPECIES — REGIONAL RECORD — STATION RECORD — AUTUMN 1997

	HRS	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**	**0**	**7**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**72**	
1-Sep	5					18				4	1			1								24	96
2-Sep	4		1			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		1				77	1,209
6-Sep	4					8				2												10	1,219
7-Sep	6		5	1		58					1			3				4			4	76	1,295
8-Sep	7.5		2			66				5	1			3	1	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				1	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		6	183	4			126	6			40			1		1		3	377	3,716
15-Sep	8		9			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				1	3								2								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		21	323	1			197	4			45			1				2	595	4,698
21-Sep	8.5	73	3	3	16	345	17	1		3,364	31			56	1	3	9	2			4	3928	8,626
22-Sep	7	13				14					1			4								32	8,658
23-Sep	5.5	17	3		5	204	8		1	201	7			30	1			4			6	487	9,145
24-Sep	6.5	3				39	2		1	7				4		2		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

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

DATE\ SPECIES — REGIONAL RECORD — STATION RECORD — AUTUMN 1997

	HRS	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UA	UB	UF	UE	UR	DAY TOTAL	SEASON
														1				1				6	9,897
29-Sep	4				1	3																	
30-Sep	9	6	3		3	127				3	5			22			3				4	176	10,073
Total	**184**	**330**	**60**	**10**	**123**	**3567**	**72**	**3**	**3**	**5031**	**112**	**0**	**0**	**536**	**18**	**11**	**24**	**31**	**1**	**0**	**69**	**10,001**	
1-Oct	11	461	3	2	16	320	16	1	10	13	56			47	2		12	12			6	977	11,050
2-Oct	3					3									1							4	11,054
3-Oct	4				1	27	2			2	1											33	11,087
4-Oct	7	1				17	1			1				1	1							22	11,109
5-Oct	6					45					1			2							1	49	11,158
6-Oct	7	54		1		87	4			4				10							3	163	11,321
7-Oct	3.5					8								2								10	11,331
8-Oct	6	24	1		1	21	2			1				1			1					52	11,383
9-Oct	3					5																5	11,388
10-Oct	8	205			8	112	4	2	4		23			10	1	2	3	5			2	381	11,769
11-Oct	6					2	3	1			6			1								13	11,782
12-Oct	9	10	1			18	1		8		20			1		1						60	11,842
13-Oct	6	20																				20	11,862
14-Oct	5					6					3											9	11,871
15-Oct	7	41		2	6	43	5	1	8		36	2	3		1		1	6		1	1	157	12,028
16-Oct	11	**552**			3	31	3		5		165		1	2	1	1	9				1	774	12,806
17-Oct	8	32				2	1				43	1					2	6				87	12,893
18-Oct	6.5	6				2	1				4										1	14	12,907
19-Oct	7			2	3	1			3		5	1										15	12,922
20-Oct	7.5	16			2	3					17		1	1								40	12,962
21-Oct	4																					0	12,962
22-Oct	7	5				1			1		28	3	1	1								40	13,002
23-Oct	3					2																2	13,004
25-Oct	8	29		1	1	12	5	2	**14**		**498**	**5**	1	1						2	2	573	13,577
26-Oct	6	3				1	2		1		29							3				39	13,616
27-Oct	2				1																	1	13,617

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

DATE\ SPECIES — REGIONAL RECORD — STATION RECORD — AUTUMN 1997

	HRS	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UA	UB	UF	UE	UR	DAY TOTAL	SEASON
28-Oct	7.5			1	1	4	1				15			1				1			1	25	13,642
29-Oct	5						1				4											5	13,647
30-Oct	6					2		1			1			1								5	13,652
Total	**182**	**1,459**	**5**	**9**	**43**	**775**	**52**	**8**	**54**	**17**	**963**	**12**	**7**	**82**	**7**	**4**	**19**	**42**	**0**	**3**	**18**	**3,579**	
3-Nov	3.5																					0	13,652
4-Nov	5					2			1		15							1				19	13,671
5-Nov	4																					0	13,671
6-Nov	7					7	1		1		23	1										33	13,704
7-Nov	6				5	2		2	4		23	4			1			3			2	46	13,750
8-Nov	6.5	7			2	3	1	2	12		132	2	3				3	1				168	13,918
9-Nov	6					3	1		4		68	1	1									78	13,996
10-Nov	6					1					1											2	13,998
11-Nov	6					2		1	2		23											28	14,026
12-Nov	8					1					25							1				27	14,053
13-Nov	5	7				2					1											10	14,063
15-Nov	4										1											1	14,064
16-Nov	7.5					4	1		1		130	1		2			1	3				143	14,207
18-Nov	2.5										1											1	14,208
19-Nov	6																					0	14,208
20-Nov	6										4											4	14,212
24-Nov	4.5					2	1	2	1		19											25	14,237
27-Nov	3								1		3		1									5	14,242
Total	**91**	**14**	**0**	**0**	**7**	**29**	**5**	**7**	**27**	**0**	**469**	**9**	**5**	**2**	**1**	**0**	**4**	**9**	**0**	**0**	**2**	**590**	
79	479	1,803	67	20	173	4,415	131	18	84	5,051	1,550	21	12	627	26	15	47	89	1	3	89		

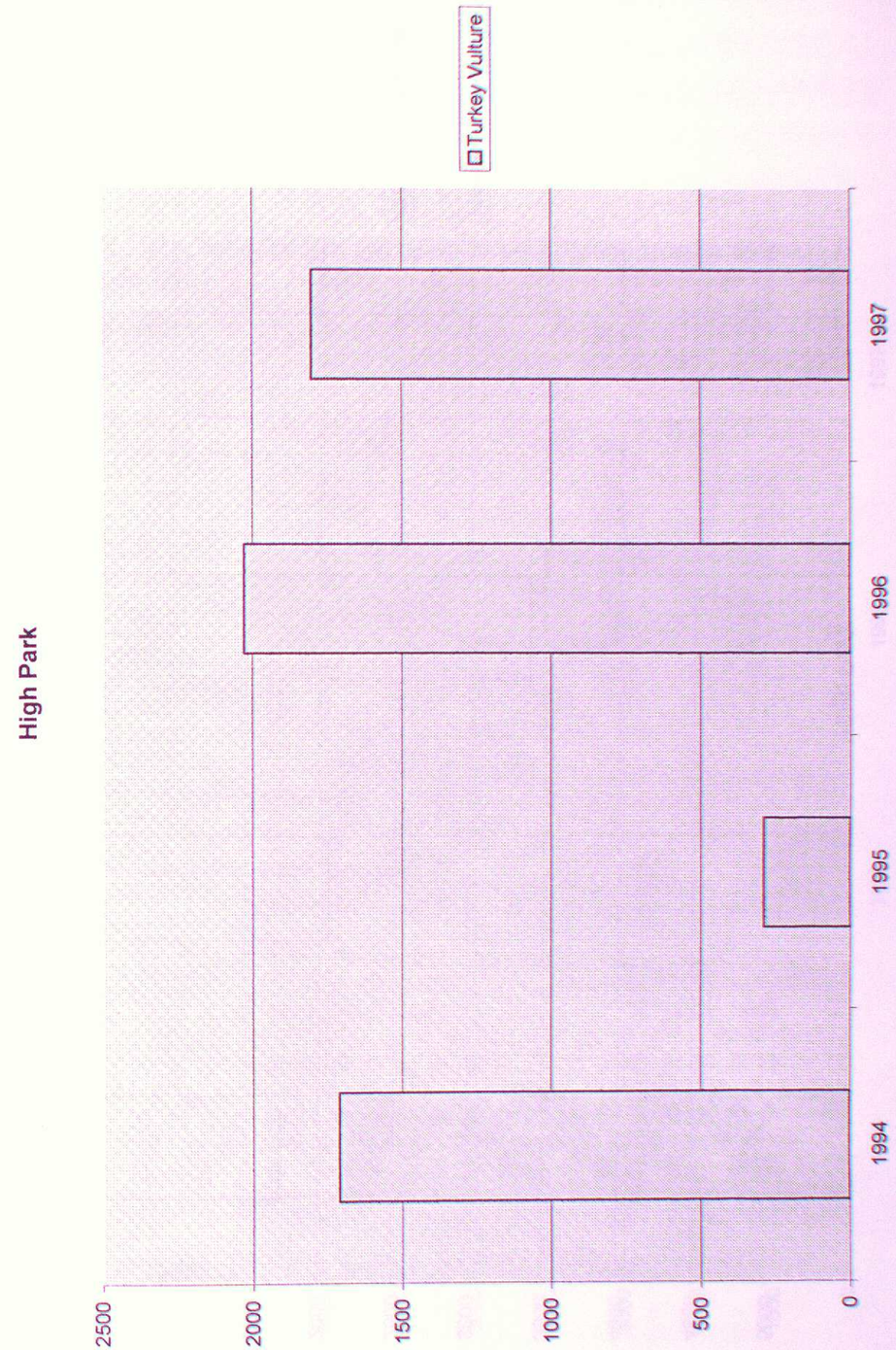
Greater Toronto Raptor Watch

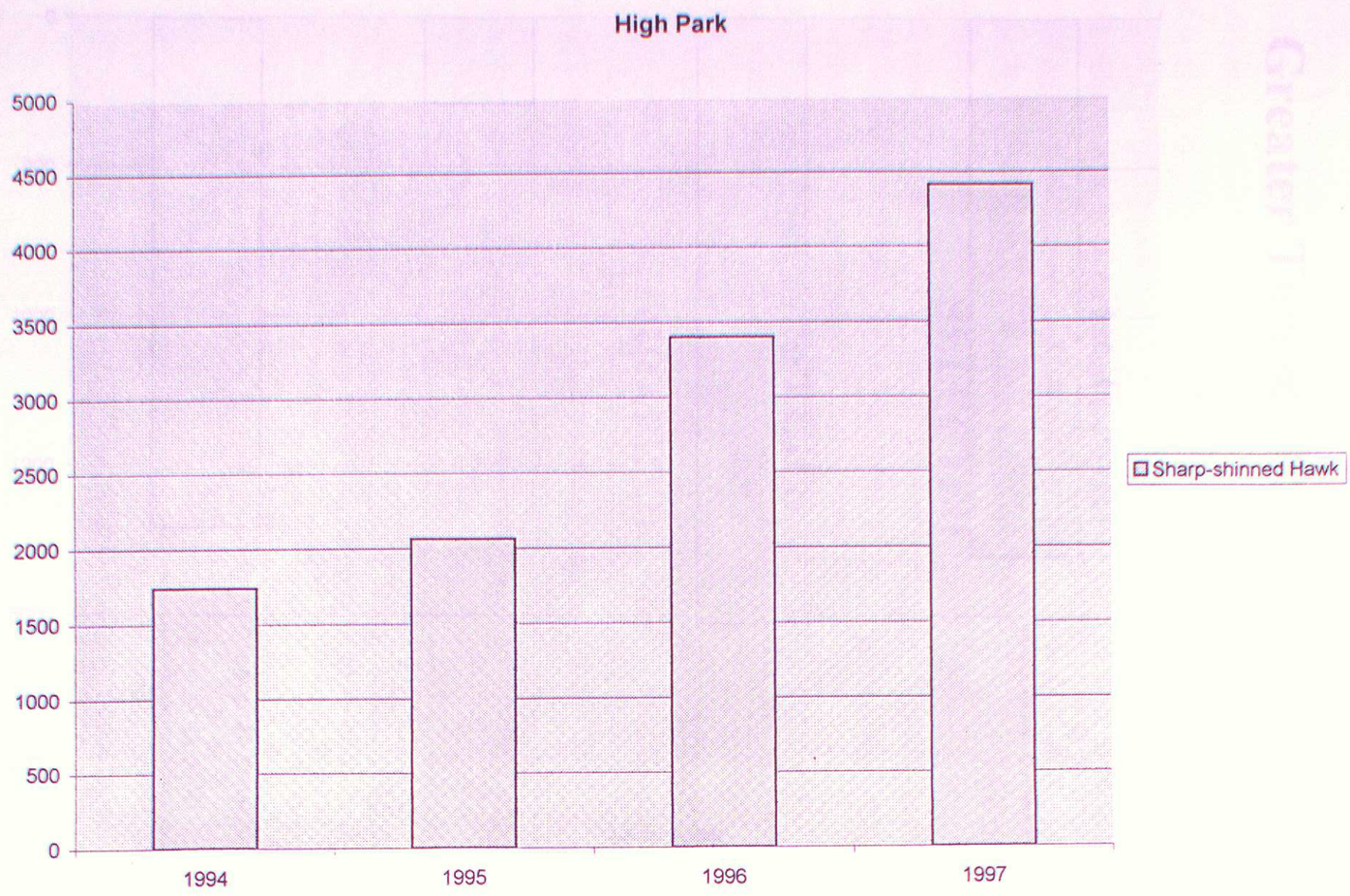
HIGH PARK

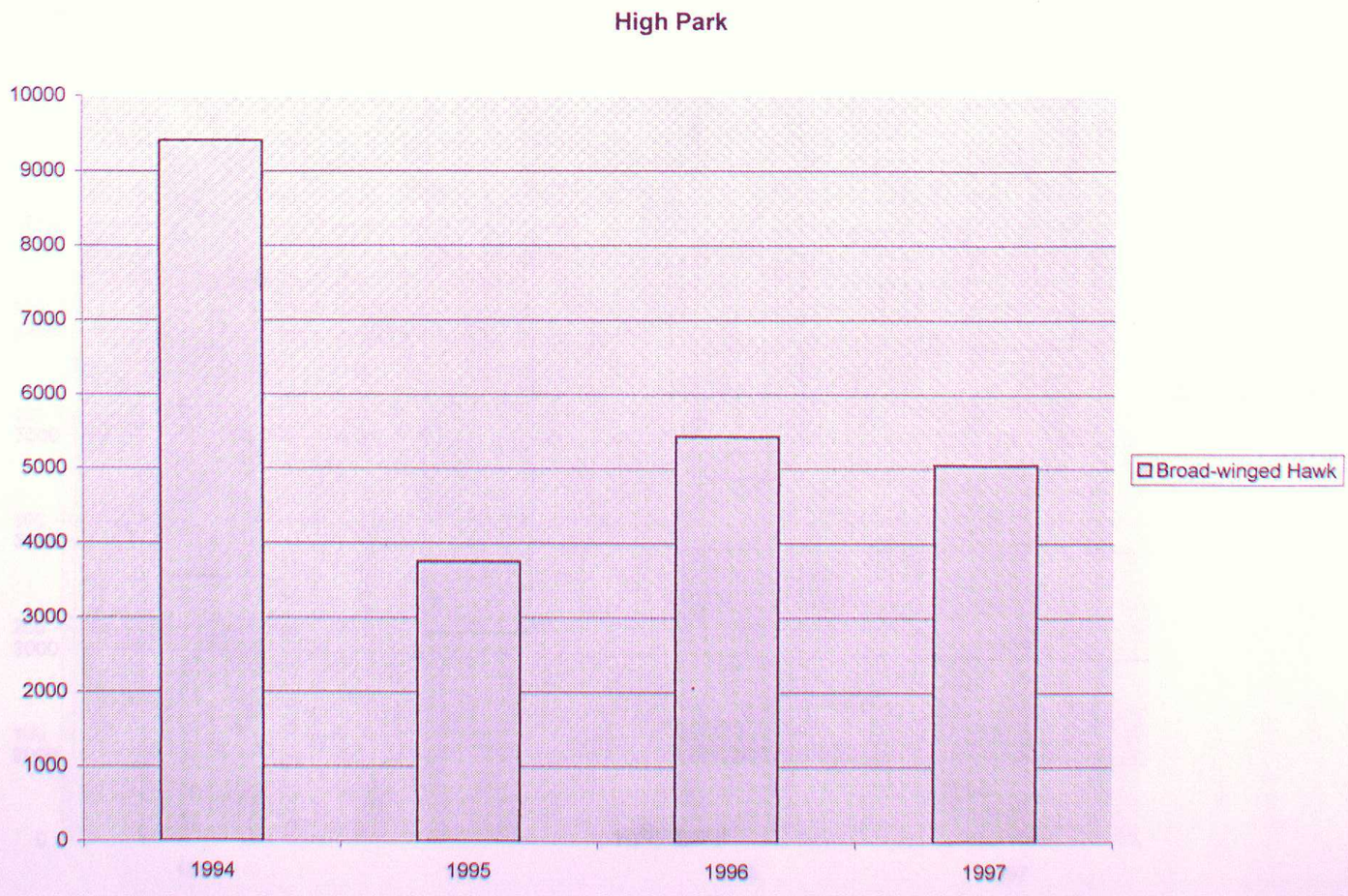
SELECTED

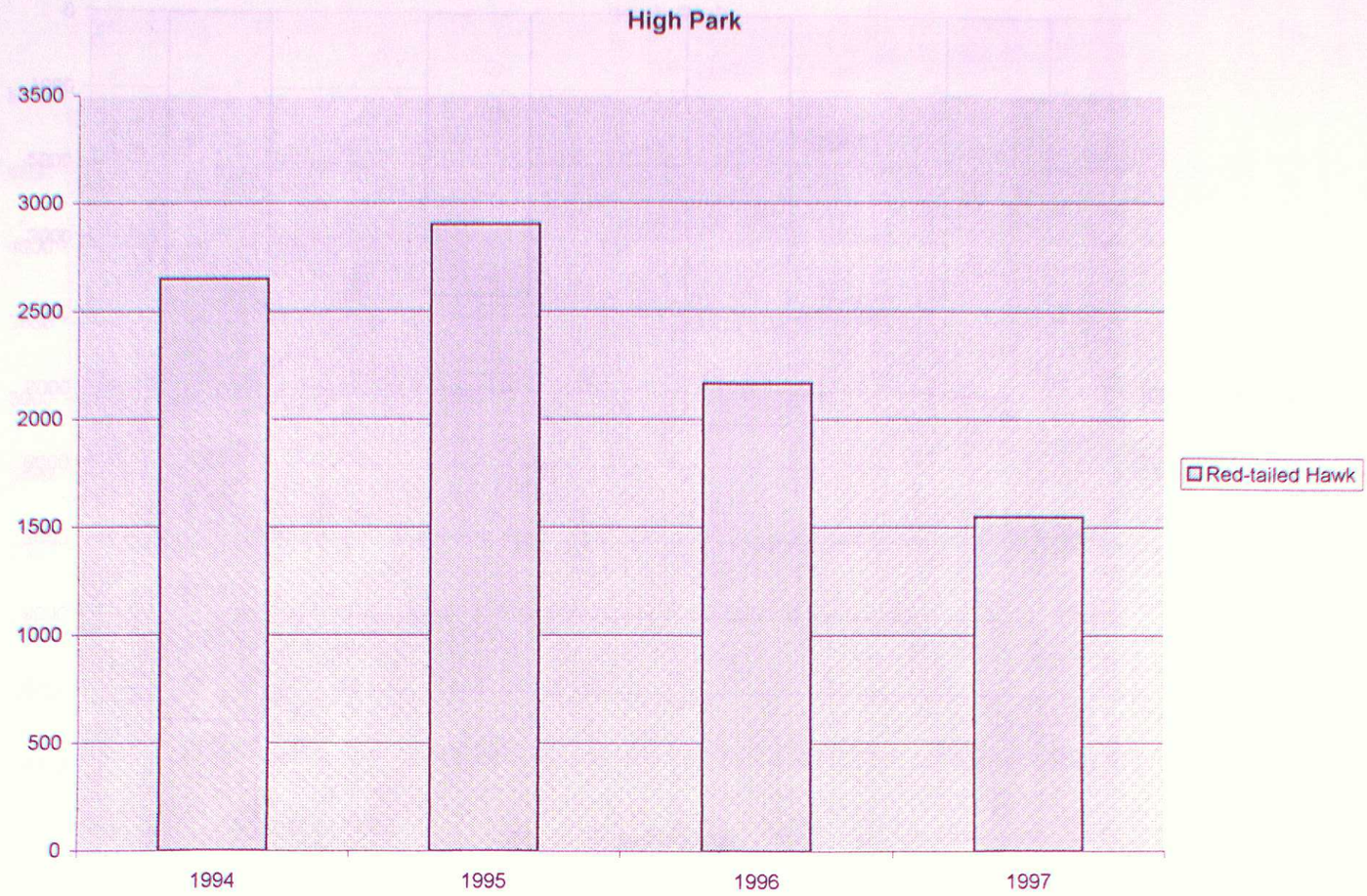
SPECIES

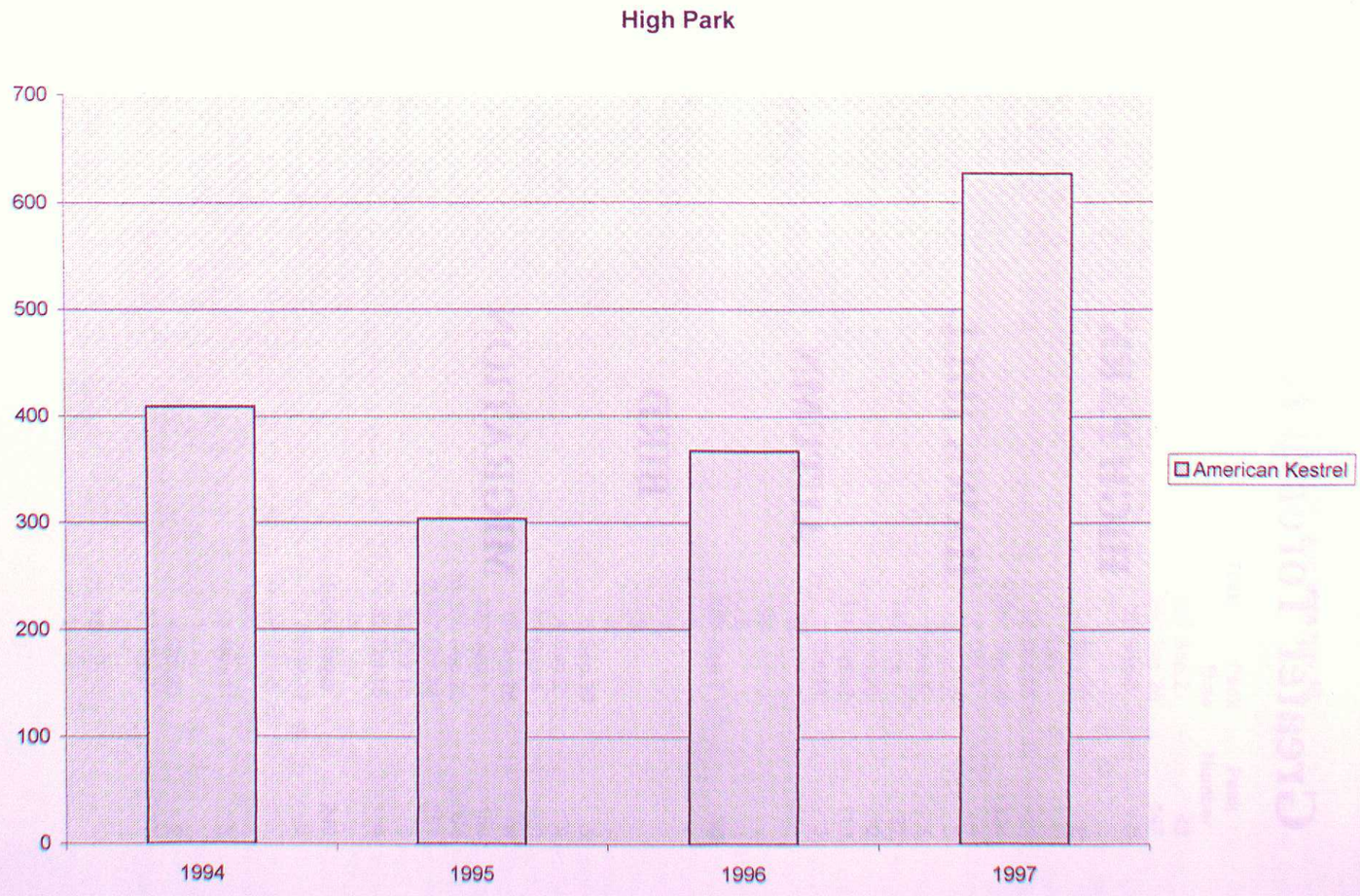
GRAPHED




High Park
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1994
1995
1996
1997
Sharp-shinned Hawk


High Park
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
1994
1995
1996
1997
Broad-winged Hawk


High Park
3500
3000
2500
2000
1500
1000
500
0
1994
1995
1996
1997
Red-tailed Hawk


High Park
700
600
500
400
300
200
100
0
1994
1995
1996
1997
American Kestrel

Greater Toronto Raptor Watch

HIGH PARK

HAWK HILL

AUTUMN

BIRD

MIGRATION

Greater Toronto Raptor Watch **Fall 1997 Aug.28 to Nov.30**
High Park, Hawk Hill, Seasonal Migrational Totals
By Leon Schlichter,Don Barnett,& Alfred Adamo

Species	Total	Peak Date	Peak Number
Common Loon	257	Sep.21	42
Double-creasted Cormorant	290	Sep.26	147
Great Blue Heron	20	Sep.21	3
Black-crowned Night Heron	1		
Snow Goose	4	Sep.24	2
		Oct.1	
Brant	12	Oct.26	12
Canada Goose	1,434	Sep.26	324
Wood Duck	7	Oct.6	4
Green-winged Teal	3	Oct.25	3
American Black Duck	1	Nov.7	1
Mallard	145	Nov.7	32
Gadwall	15	Oct.20	10
Oldsquaw	110	Oct.22	110
Common Merganser	3	Oct.11	3
Yellow-bellied Sapsucker	2		
Downy Woodpecker	32		
Hairy Woodpecker	6		
Northern Flicker	158	Sep.7	30
Eastern Wood Pewee	3		
Eastern Phoebe	7		
Great Crested Flycatcher	6		
Eastern Kingbird	2		
Horned Lark	6	Sep.30	5
Purple Martin	4	Sep.2	2
Tree Swallow	20	Sep.4	10
Bank Swallow	10	Aug.28	6
Barn Swallow	280	Sep.1	159
Blue Jay	16,325	Sep.26	3,564
American Crow	2,147	Oct.25	251
Black-caped Chickadee	32	Oct.15	6
Red-breasted Nuthatch	32	Oct.15	6
White-breasted Nuthatch	38		
American Robin	1,955	Nov.5	249
Catbird	3	Nov.11	3
American Pipit	3		
Cedar Waxwing	1,006		
Bohemian Waxwing	3	Nov.11	3
Swainson's Thrush	1		
Hermit Thrush	4	Oct.20	2
Eastern Bluebird	461	Nov.5	77
Ruby-crowned Kinglet	8		
Golden -crowned Kinglet	18		
Red-headed Woodpecker	2		

Greater Toronto Raptor Watch **Fall 1997 Aug.28 to Nov.30**
High Park, Hawk Hill, Seasonal Migrational Totals
By Leon Schlichter,Don Barnett,& Alfred Adamo

Species	**Total**	**Peak Date**	**Peak Number**
Red-bellied Woodpecker	1	Nov.9	
Ruby-throated Hummingbird	72	Sep.8,13	11
Common Nighthawk	32	Oct.6	last date
Chimney Swift	1,262	Aug.28	183
		Oct.6	last date
Mourning Dove	101		
Great Black-backed Gull	8	Oct.18	5
Killdeer	2		
Common Snipe	1	Sep.13	
Dunlin	1	Oct.11	
Greater Yellowlegs	2	Oct.11,23	
Lesser Yellowlegs	2	Aug.30	2
Belted Kingfisher	2		
Warbling Vireo	2	Sep.1	2
Black & White Warbler	1		
Nashville Warbler	3		
Yellow-rumped Warbler	164	Oct.6	27
Palm Warbler	36	Oct.9	15
Black-throated Blue Warbler	1	Sep.28	
Northern Cardinal	2		
American Tree Sparrow	5	Oct.28	4
Chipping Sparrow	49	Oct.9	11
Field Sparrow	1	Oct.21	
Song Sparrow	1	Oct.9	
White-throated Sparrow	16	Oct.9	15
White-crowned Sparrow	4	Oct.25	2
Dark-eyed Junco	276	Nov.7	54
Lapland Longspur	5	Nov.4	5
Snow Bunting	57	Nov.9	48
Red-winged Blackbird	3,453	Nov.5	683
Rusty Blackbird	24	Oct.26	6
Eastern Meadowlark	1	Sep.22	
Common Grackle	2,538	Oct.6	347
Brown-headed Cowbird	19	Oct.11	14
Orchard Oriole	1	Oct.4	
Baltimore Oriole	5	Sep.16	last date
Purple Finch	32	Oct.15	10
House Finch	818	Oct.1	102
Fox Sparrow	10	Oct.18	
		Oct.29	
Common Redpoll	119	Nov.11	51
Pine Siskin	27	Oct.22	11
American Goldfinch	1,013	Sep.30	142
Evening Grosbeak	24	Nov.6	12
85 species were counted	**35,096**		

Greater Toronto Raptor Watch

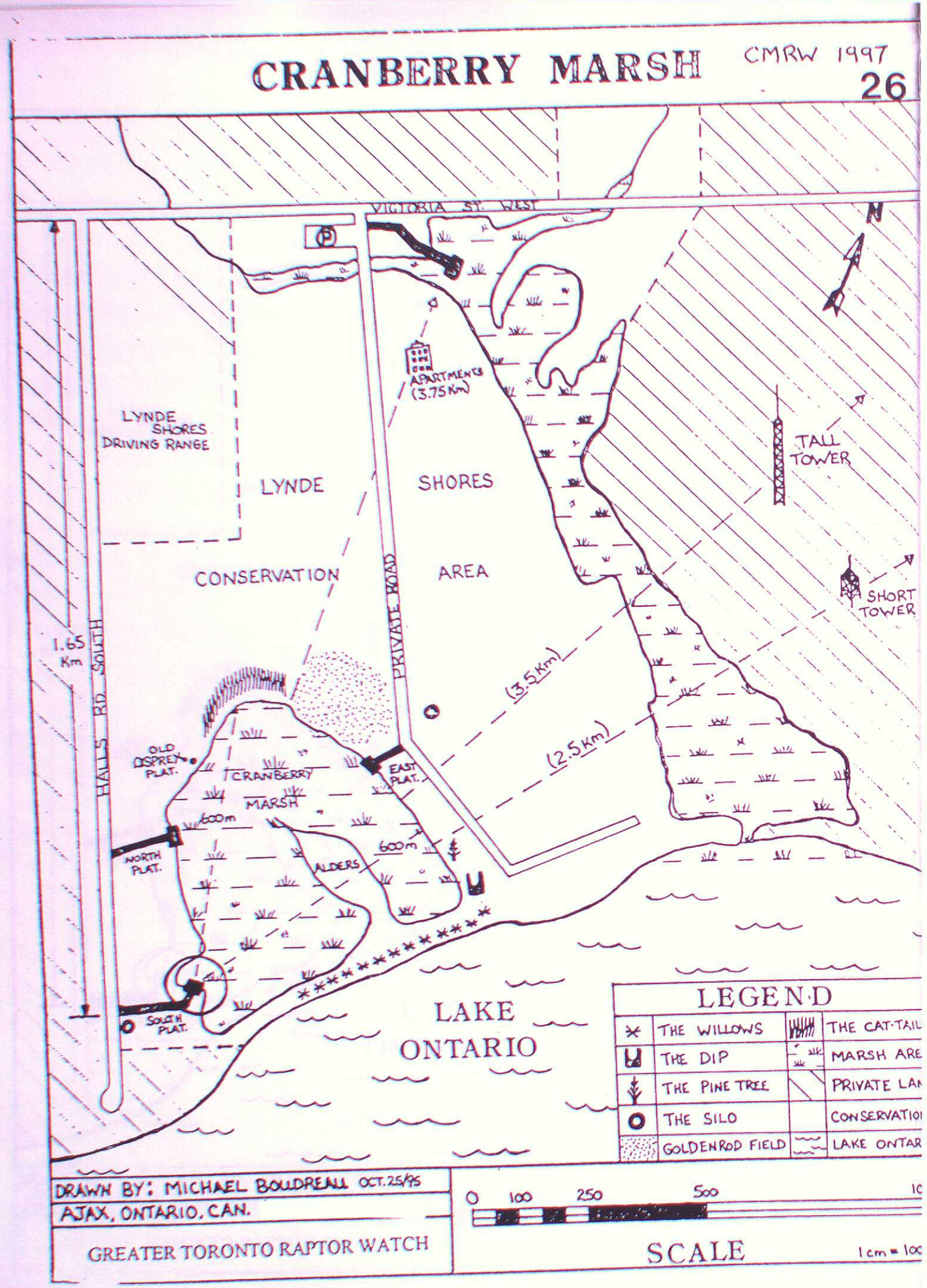
CRANBERRY

MARSH

SOUTH-PLATFORM

WHITBY

DURHAM R.M.



Greater Toronto Raptor Watch
Fall 1997

Cranberry Marsh, Whitby
Hawk Migration on the northern shore of Lake Ontario

By: Doug Lockrey and Mike Boudreau

The Cranberry Marsh Raptor Watch (CMRW) started its eighth season on August 30, 1997. We completed the watch on November 30, having covered all 93 days. Indeed we experienced 17 days of rain, fog, heavy haze or snow, at least between 8am and 2pm (EST); the average coverage on these days was 2.3 hrs, the range being from 0.5 hrs. (On 2 days) to 5 hrs. (On 1 day), and 0 raptors were recorded on 9 of these days.

From August 30 to September 30 the watch was covered on 32 days (for 154 hrs.); on 31 days during October (for 159 hrs), and on 30 days during November (for 102 hrs). All monitoring of migrating raptors was done from the platform at the southwest corner of the shallow marsh. Of the 74 individuals who volunteered their time to observe/ identify/ count the migrating raptors from the platform 27 found time to do so on a consistent basis (at least on weekends) during 1/2/3 of the months. Many thanks go out to everyone for their help to ensure accurate recording of the hour-by- hour data.

Table A

A = no. of days; **B** = average no. of counters, observers: **C** = average no. of hours

Weekday Coverage

Month	A	B	C
September	21	4.4	2.2
October	22	5.3	2.2
November	20	3.3	1.6

Weekend / holiday coverage

Month	A	B	C
September	11	8.5	2.7
October	9	11	2.0
November	10	8	1.4

It must be realized that CMRW for 1997 relied very heavily on only 3 primary observers, namely Martin Bence, Mike Boudreau and Doug Lockrey. Table B speaks for itself. It is included here simply to stress the fact if the aforementioned can not give as munch time in years to follow several very willing volunteers are urgently needed, particularly on weekdays.

Table B

X = no. of days; Y = average no. of hours

	Martin		Mike		Doug		All others	
Month	X	Y	X	Y	X	Y	Number of Observers	Y
September	18	3.0	22	3.9	23	3.8	56	2.1
October	28	2.6	19	3.4	30	3.2	43	2.2
November	21	2.0	20	2.8	27	2.5	33	1.6

Number of days not covered by Martin/ Mike / Doug : Sept. -1, Oct. - 0, Nov. - 0
Number of days covered only by Martin / Mike / Doug: Sept. - 6 , Oct. - 0, Nov. - 10

Cranberry Marsh is a very popular "must visit" site for birders, schools and club field trippers and the public. To this end the CMRW made it a point to take the time to update/enhance/educate, by means of informing about recent sightings, sharing identification info by way of talking and having hand-out pages available, posting a constantly-updated daily and overall sightings board, and allowing visitors to use the spotting scopes.

CMRW's "third-best" year can be, in part, attributed to the number of days with suitable north/northwesterly winds. Compared with the 4 "ideal" days during the 1996 count the CMRW was "blessed" with as many as 21 "good flight-days" in 1997. Only 25% of the 1997 total were Broad-winged Hawks, compared with 40% and 75% in the two "bigger" years, 1991 and 1994 respectively. Of note is that there were 4 raptors species with greater individual numbers in 1997 than in 1991 and 12 with greater numbers in 1997 than in 1994.

Three count records are noted in the 1997 recordings:

140 **Ospreys** (94) in 1991, 30 **Bald Eagles** (27) in 1995, and 3,905 **Sharp-shinned Hawks** (2,117) in 1992. Also the 1,050 **American Kestrels** far exceeded any number since the 1,086 in 1991.

The following were observed in fewer numbers than the previous 7-year averages: **Northern Goshawk, Red-shouldered Hawks, Rough-legged Hawks** and **Golden Eagles**.

Big Days

At least 200 migrating raptors were observed on 16 of the 93 days; another 4 days brought 100-199 migrants. The following is derived from these 20 and 10 other relatively good days, arbitrarily selected as 30 big days. Indeed, some were of 2 consecutive days, and some were of 3 days in a row; therefore, what is presented here is based on 17 periods (7 being one day, 7 being two consecutive days, and 3 being three days in a row).

Our daily weather data included the barometric pressure (BP) recording from Buttonville Airport at 7am. We elected to pay close attention to whether the BP was rising, falling or steady. Well into September we became aware of a tread which possibly dictated a large migration right up to October 22.

Our data suggests the following on 9 of the first 11 aforementioned periods, between August 30 and October 22:

Expect a big flight on a day(s) with N/NW winds and a rising BP if preceded by a day with any wind and a falling/steady BP, and if followed by a day with any wind and a falling/steady BP (or if rainy).

The two exceptions to this hypothesis were September 16 and October 11. Indeed, 174 of the 198 raptors counted on September 16 were **Sharp-shinned Hawks**, 672 of which had passed through on the three preceding days; in spite of SW winds on September 16, perhaps the rising BP dictated that 174 remaining to the immediate east should continue on. October 11 was the second day of a selected big day-period and it should be noted that the winds at the beginning of the day were NW; this in combination with a rising BP may have contributed to 135 more birds passing through on October 11. September 28, a day in which 114 birds were counted in spite of SE winds, was the last of a three day period. The remaining six periods, all after October 22, did not follow this trend; perhaps the birds yet to come hung in until lowered temperature/ insufficient food dictated migration.

Table C

The following table deals with the 7 most-commonly-counted raptors. We arbitrarily chose those which were noted at least 10 times for 3 or more days:

Turkey Vulture (TV), Osprey (OS), Northern Harrier (NH), Sharp-shinned Hawk (SS), Broad-winged Hawk (BW), Red-tailed Hawk (RT), and American Kestrel (AK).

Number of migrants counted on the big day-periods (up to October 22)

	S3-4	S7-9	S13-14	S16	S20-21	S26-28	S30 - O-1	O 6	O 10 - 11	O 15 - 16	O 22
TV					32	150	323	69	281	468	
OS		24	31		16	8					
NH	15	15	10		18	16	22		10	7	5
SS	442	559	658	174	650	326	242	220			
BW			971		2,095	15					
RT *							47			133	53
AK	86	129	216		168	132	100	43	35		

(*) RT also had big numbers well beyond October 22:

October 25 -26	October 30	November 7 -9	November 11	November 16	November 24
242	28	358	31	51	23

Days when two or more of the other raptors were observed

( ) = not a big raptor day (as per Table D)

September	3-4	7-9	13-14	16	20-21	(23)	26-28
	BE	BE	BE		BE		BE
	CH	CH	CH	CH	CH		CH
					RS		RS
		ML	ML		ML	(ML)	ML
							PG
October	1	6	(8)	10-11	15-16	22	25
	BE	BE		BE			
	CH	CH		CH			
				NG			
	RS				RS		RS
						RL	RL
			(ML)	ML			
	PG			PG			
November	(6)	8-9	11	16	(23)	24	
					BE		
	(CH)					CH	
		NG	NG				
		RS	RS	RS			
		RL	RL	RL		RL	
		GE					

Table D

Big Raptor Days

Wind Direction (**WD**), Barometric Pressure (**BP**), Rising (**R**), Falling (**F**), Steady (**st**) taken at 7am est

	Dates	Big Days		Preceding Days		Following Days	
		WD	BP	WD	BP	WD	BP
September	3,4	N	R,st.	SW	st.	W	st.,F
September	7,8,9	N	R,st.	S	F	S	st. (rain)
September	13,14	NW	R	S,SE	st. (rain),R	SW	F
September	16	SW	R	SW	st.	SW	F (rain)
September	20,21	NW	R	SW	F	SW	st.
September	26	N	R	SW	F (rain)		
September	27	N	st.				
September	28	SE	st.			W	F
September	30	NW	st.	W	F		
October	1	N	R			NW	R (rain)
October	6	NW	R	S	F	N	R (muggy)
October	10	W	R	SE	st.		
October	11	NW-SE	R			SE	st.
October	15	N	R	W	R (drizzly)		
October	16	N	R			E	st.
October	22	NW	R	NE	st.	W	st.
October	25	SE	R	SW	R		
October	26	NE	F			NW	F
October	30	W	R	SW	st.	SE	F
November	7	E	st.	E	R		
November	8	N	st				
November	9	N	st.	W	R		
November	11	NW	F	W	R	W	st. (snow)
November	16	NW	R	NNW	R	SW	R
November	24	W	R	W	F	SW	F

1) From August 30 to October 22 (54 days) were observed 10,319 raptors.
92% (9,493) were counted during the 21 days of 11 big day - periods in this interval: an average of 452/day. During the 33 non-big days an average of 25 raptors/day were observed.
2) If we removed September 16 and Oct.11 the aforementioned total would be 9,160 of 10,319 (88.8%).
3) From October 23 to November 30 (39 days) we counted 1,200 raptors. 86% (1,030) flew on the nine days after October 22: an average of 114/day. During the other 30 days an average of five raptors/day were counted.

The CMRW feels that Central Lake Ontario Conservation Authority (CLOCA) recognizes the value of the Raptor Watch and, hence the needs to allow the use of Hall's Rd. for automobile access by birders. Also it is our wish that CLOCA consider an expansion of the tiny platform.

Some Highlights while doing the counting

September 7: **Least Bittern**; **Bald Eagle** (2yr) - This eagle flew west to Corner Marsh, Ajax and back to Cranberry on September 8&9, the eagle again flew west from Cranberry.
September 9: **Bald Eagle** (immature, wing tag "HO"/ "OH") this bird entertained us with low-level flights including snatching a teal and fish on several occasions until September 26.
September 14 and 21: 849 and 1,801 **Broad-winged Hawks** respectively kept the counters alert.
September 22: First waves of migrating **Blue Jays** and **Rusty Blackbirds**.
September 23: Marsh became alive with **Redhead, Greater Scaup, Northern Shoveller, American Wigeon, and Shorebirds.**
September 26: (5) **Peregrine Falcon**
September 27: (1) adult **Tundra Peregrine**; a second Peregrine caught a **Red-winged Blackbird**
October 1: (5) **Bald Eagles**; our first **Golden Eagle** and **Northern Goshawk**; (4) **Peregrines**; (1) Great Egret.
October 4: (3) **Hooded Mergansers**; (2) **Baird's Sandpipers**; an immature **Red-headed Woodpecker**
October 6: Thousands of **Blue Jays**
October 8: Adult **Tundra Peregrine**; **Common Snipe**
October 15: White morph **Snow Goose**
October 16: (2) **Snow Goose**; **Fox sparrow**; **Purple Finch**, our first **Rough-legged Hawk**
October 18: **Pileated Woodpecker**; (8) **Ruddy Ducks**; **Northern Parula**
October 19: (3) **Snow Goose**; (36) **Ruddy Ducks**
October 20: **Dunlin**
October 21: **Veery, Purple Finch,** and **Long-eared Owl**
October 25: **Osprey band # 140, a rather late migrant**, Dark morph **Rough-legged Hawk**, (4) **Snow Goose**
October 27: **Northern Shrike**
October 29: **Pileated Woodpecker**
October 30: **Red-throated Loon** (on Lake Ontario)
October 31: We contacted CLOCA re: the large numbers of **Canada Goose** dying on the marsh.
November 2: On Lake Ontario: **Black Scoter, Common Loons, Common Goldeneye**, and **Horned Grebe.**
November 4: (10) **Common Redpolls**, **(1) Little Gull**, **Palm Warbler**, **Am. Pipits**, Blue morph **Snow Goose**
November 8: (4) **Golden Eagles**; **Ross's Goose** with (4) **Snow Goose**; **White-rumped Sandpiper**, and a **Great-horned Owl**
November 11: Juvenile **Golden Eagle** (unfortunately our last)
November 12: **Tundra Swan**, **Ross's Goose** with (3) **Snow Goose**
November 14: First substantial snowfall
November 15: (2) **Short-eared Owls**, one harassed a 4yr. **Bald Eagle** over Lynde Shores at the Lake
November 16: (4) male **Northern Harriers**, (2) **Pine Grosbeaks** male & female, **Snow Buntings**, (2) **Short-eared Owls**
November 17: Marsh nearly ice-free, (1) **Tundra Swan**
November 18: Ducks have returned
November 23: (2) **Bald Eagles**
November 27: **Adult Bald Eagle with a dark green wing tag**, (1) immature **Glaucous Gull**
November 29: **Ross's Goose**, (3) **Snow Goose** (1 having separated from the others)
November 30: **Day 93** - rainy, no visibility, no birds

GREATER TORONTO RAPTOR WATCH — CRANBERRY MARSH, WHITBY, ONTARIO, CANADA

DATE\ SPECIES — REGIONNAL RECORD — STATION RECORD — AUTUMN 1997

	HRS	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UA	UB	UF	UE	UR	DAY TOTAL	SEASON
																					4	27	27
30-Aug	6.5	2	5		1	12	3																
31-Aug	3.5		1			1								1								3	30
Total	**10**	**2**	**6**	**0**	**1**	**13**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**30**	
1-Sep	6.5	1	2		4	64								5		1	1				2	80	110
2-Sep	4																					0	110
3-Sep	7	2	5	1	5	142				5	15			52	1		1	10	1		2	242	352
4-Sep	7	6	6		10	300	2				11			34	1		1	1			3	375	727
5-Sep	6	1	6		1	24				1	6			16								55	782
6-Sep	4				2	5									1							8	790
7-Sep	7.5		16	2	7	114	3			1				61	**5**				1			210	1,000
8-Sep	7		5		7	207	2		1	9	2			34	3	1	2	3			4	280	1,280
9-Sep	6		3	2	1	238					1			34	1		2	4	1		3	290	1,570
10-Sep	0.5		2																			2	1,572
11-Sep	2		1			3																4	1,576
12-Sep	2.5														1							1	1,577
13-Sep	7		**17**			356	8			22	9			**170**	4		1	13	2		1	603	2,180
14-Sep	5.5		14	1	10	302	4			849	5			46				2	1		13	1247	3,427
15-Sep	4.5		1			14								11	1							27	3,454
16-Sep	4		3		1	174	2							16				2				198	3,652
17-Sep	2																					0	3,652
18-Sep	3					62								6	1	1						70	3,722
19-Sep	1					5								11	1							17	3,739
20-Sep	8.5	1	11	1	6	223	4			294	10			108	**5**						12	675	4,414
21-Sep	7.5	31	5	3	12	**427**	**13**		3	**1,801**	18			60	1				1			**2,375**	6,789
22-Sep	4.5	12	1		6	27	1				2			6				2				57	6,846
23-Sep	4				1	37				7	1			7	2	1						56	6,902
24-Sep	6		2		1	30	1							21	1	1					2	59	6,961
25-Sep	1																					0	6,961
26-Sep	8	117	6	3	6	200	5		2	15	18			77	2	**5**		9	2		1	468	7,429
27-Sep	7.5	1	4		8	68	2							48		2			1			134	7,563
28-Sep	7	32	8		2	58	3				1			7		2					1	114	7,677
29-Sep	4					10																10	7,687
30-Sep	5	1			1	30					2			21	1	1						57	7,744

GREATER TORONTO RAPTOR WATCH — CRANBERRY MARSH, WHITBY, ONTARIO, CANADA

DATE\ SPECIES — REGIONNAL RECORD — STATION RECORD — AUTUMN 1997

	HRS	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UA	UB	UF	UE	UR	DAY TOTAL	SEASON
Total	**126**	**196**	**105**	**12**	**72**	**1177**	**48**	**0**	**6**	**2999**	**75**	**0**	**0**	**760**	**30**	**14**	**5**	**35**	**9**	**0**	**37**	**5580**	
1-Oct	8	322	2	**5**	**21**	212	7	1	7		45		1	79	1	4		3	1		1	712	8,456
2-Oct	3		1		3	1	1							3								9	8,465
3-Oct	5.5		1		4	11	2				1			1								20	8,485
4-Oct	5.5		3		1	18	1	1			1			5			1	1			5	37	8,522
5-Oct	6	3				39	1				2			2							1	48	8,570
6-Oct	5	69	2	2	4	220	5				3			43				2				350	8,920
7-Oct	7					1								1								2	8,922
8-Oct	6.5	24		1		31	1				10			6	2	1						76	8,998
9-Oct	4																					0	8,998
10-Oct	8	198	1		1	25	8				12			33	3	3					1	285	9,283
11-Oct	6	83	1	1	9	29	2	2			4			2	1			1				135	9,418
12-Oct	5	9	1		1	11					5		1	1								29	9,447
13-Oct	5					2	1							1	1							5	9,452
14-Oct	5				1	10			1		13			1				1				27	9,479
15-Oct	6.5	26			1	22					24			2	1						1	77	9,556
16-Oct	7	**442**			6	20	1		5		109			1				4				588	10,144
17-Oct	5	11			4	14					25	1						2			1	58	10,202
18-Oct	5	2				1	1				4											8	10,210
19-Oct	5	1				4	1				2			3		1		4				16	10,226
20-Oct	5.5	2			3	2	1				4			1	1							14	10,240
21-Oct	3				1	2					2											5	10,245
22-Oct	6	11			5	4	1				53	2										76	10,321
23-Oct	4				1						10											11	10,332
24-Oct	5				3	9	1				16											29	10,361
25-Oct	8	21	1		19	16		1	10		197	2	1				1	12	1		12	294	10,655
26-Oct	5.5	1			5	4	1				45	3						1				60	10,715
27-Oct	2.5				4	1					3							1				9	10,724
28-Oct	4				1	2	1				2				1		1					8	10,732
29-Oct	4											1										1	10,733
30-Oct	3.5				3	2	1				28			2								36	10,769
31-Oct	2																					0	10,769

GREATER TORONTO RAPTOR WATCH — CRANBERRY MARSH, WHITBY, ONTARIO, CANADA

AUTUMN 1997

REGIONNAL RECORD — STATION RECORD

DATE\ SPECIES	HRS	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UA	UB	UF	UE	UR	DAY TOTAL	SEASON
Total	145	903	9	4	73	489	28	4	16	0	574	9	2	104	10	5	3	29	1	0	21	2284	
1-Nov	2	2					2					1		2								5	10,774
2-Nov	2																					0	10,774
3-Nov	3										3											3	10,777
4-Nov	4.5				1	8	2		1		10											22	10,799
5-Nov	3						1															1	10,800
6-Nov	4				1	3	2	3			4	1			1	1						18	10,818
7-Nov	5				1	4	5		2		64	3	1		1							81	10,899
8-Nov	7	3				9	8		1	13	238	4	4					3		1		288	11,187
9-Nov	6					1	6	1	2	4	56	19						1		2		94	11,281
10-Nov	2										3	1										4	11,285
11-Nov	6.5					2	1		2	9	31	6	1					1				55	11,340
12-Nov	2			1														1				2	11,342
13-Nov	3								1													1	11,343
14-Nov	1																					0	11,343
15-Nov	3				1	1	1				5	1			1							11	11,354
16-Nov	5					5	15			3	51	6										85	11,439
17-Nov	3										3											3	11,442
18-Nov	4							1			2	1										4	11,446
19-Nov	3							1				1										2	11,448
20-Nov	3					1	1				1	1										4	11,452
21-Nov	0.5																					0	11,452
22-Nov	2																					0	11,452
23-Nov	4.5				2			1														3	11,455
24-Nov	4.5						5	2	1		23	5										37	11,492
25-Nov	3							1														1	11,493
26-Nov	1.5							1														1	11,494
27-Nov	4				1	1	4		1		5	1										13	11,507
28-Nov	2																					0	11,507
29-Nov	5					3	5				1							3				12	11,519
30-Nov	5																					0	11,519
Total	104	5	0	8	38	38	58	11	8	32	0	500	51	6	8	4	0	2	13	0	0	6	750
94	385	1106	120	24	184	1737	90	12	54	2999	1149	60	8	873	44	19	10	77	10	0		68	

Greater Toronto Raptor Watch
Fall 1997

Cranberry Marsh Raptor Watch
One Day Peaks for Migrating Raptors

Species	September	October	November	Day Peak 1997	7 yrs Range of Peaks
TV			Sep.26 - Oct.16	442 - Oct.16	250 - 800
OS			Sep.3 - 23	17 - Sep.13	006- 024
BE			Sep.5 - Oct.19	5 - Oct.1	004 - 005
NH			Sep.3 - Oct.1	21 - Oct.1	11 - 68
SS			Sep. 3 - Oct.1	427 - Sep.21	140 - 427
CH			Sep.3 - Oct.12	13 - Sep.21	07 - 25
NG				2 - Oct.11	02 - 06
RS			Oct.10 - Nov.9	13 - Nov.8	03 - 20
BW			Sep.13 - 21	1801 - Sep.21	540 - 5,200
RT			Oct.16 - Nov.16	238 - Nov.8	113 - 600
RL	Oct.22 - Nov.9			19 - Nov.9	02 - 47
GE	Oct.15 - Nov.8			4 - Nov.8	02 - 10
AK			Sep. 13 - Oct.1	170 - Sep.13	60 - 230
ML			Sep.13 - Oct.4	5 - Sep. 7	04 - 09
PG			Sep. 5 - Oct.12	5 - Sep.26	02 - 07

1997 Peak Period

1990 - 1996 Peak Period

Range of Migration

80 % of Flight — Sep26 to Oct. 16

Greater Toronto Raptor Watch

Cranberry Marsh, 1990 to 1997 Seasonal Totals

	1990	1991	1992	1993	1994	1995	1996	1997	Total
TV	884	1,721	772	681	1,869	644	1,175	1,434	9,180
OS	76	94	61	33	52	57	86	140	599
BE	15	20	12	13	11	27	19	30	147
NH	129	177	129	93	322	157	76	230	1,313
SS	1,037	1,846	2,117	1,084	1,296	1,310	1,363	3,905	13,958
CH	66	164	132	59	31	57	42	99	650
NG	36	37	33	11	9	49	13	13	201
RS	81	186	168	16	20	28	7	61	567
BW	5,631	6,357	1,118	700	11,303	1,477	2,423	3,004	32,013
SW	0	0	0	0	0	1	0	0	1
RT	1,269	1,858	1,483	496	283	1,303	527	1,221	8,440
RL	101	222	30	5	17	119	21	60	575
GE	19	13	8	5	4	21	9	9	88
AK	410	1,086	758	269	661	479	378	1,050	5,091
ML	21	74	40	17	31	50	17	47	297
PG	21	38	29	13	19	15	14	24	173
GY	1	1	0	0	0	0	0	0	2
UR	116	466	352	84	208	171	76	192	1,606
Total	9,915	14,360	7,242	3,579	16,135	5,965	6,246	11,519	76,961
Hours	100	425	320.5	182	255.5	388	287	415	2,065
Days	43	76	62	56	57	80	71	93	846
Year Total Minus BW	4,284	8,003	6,124	2,879	4,832	4,488	3,823	8,515	42,948

GREATER TORONTO RAPTOR WATCH

Cranberry Marsh, Fall 1997, Averages and Birds per Hour

Species	1990-96 Averages	1995 Total	1995 B.P.H.	1996 Total	1996 B.P.H.	1997 Total	1997 B.P.H.	1990-97 Averages	1990-97 B.P.H.
TV	1,175	644	1.660	1,652	5.756	1,434	3.455	1,311	4.444
OS	66	57	0.147	86	0.300	140	0.337	86	0.292
BE	17	27	0.070	19	0.066	30	0.072	21	0.071
NH	155	157	0.405	76	0.265	230	0.554	188	0.637
SS	1,436	1,310	3.376	1,363	4.749	3,905	9.410	1,994	6.759
CH	79	57	0.147	42	0.146	99	0.239	93	0.315
NG	27	49	0.126	13	0.045	13	0.031	29	0.098
RS	75	28	0.072	7	0.024	61	0.147	81	0.275
BW	4,144	1,477	3.807	2,423	8.443	3,004	7.239	4,573	15.502
SW	1	1	0.003	0	0.000	0	0.000	1	0.003
RT	1,031	1,303	3.358	527	1.836	1,221	2.942	1,206	4.088
RL	74	119	0.307	21	0.073	60	0.145	82	0.278
GE	11	21	0.054	9	0.031	9	0.022	13	0.044
AK	577	479	1.235	378	1.317	1,050	2.530	727	2.464
ML	36	50	0.129	17	0.059	47	0.113	42	0.142
PG	21	15	0.039	14	0.049	24	0.058	25	0.085
GY	2	0	0.000	0	0.000	0	0.000	2	0.007
UR	205	171	0.441	76	0.265	192	0.463	229	0.776
Total	9,126	5,965	15.374	6,723	23.425	11,519	27.757	10,994	37.268
Hours	240	388		287		415		295	

Greater Toronto Raptor Watch

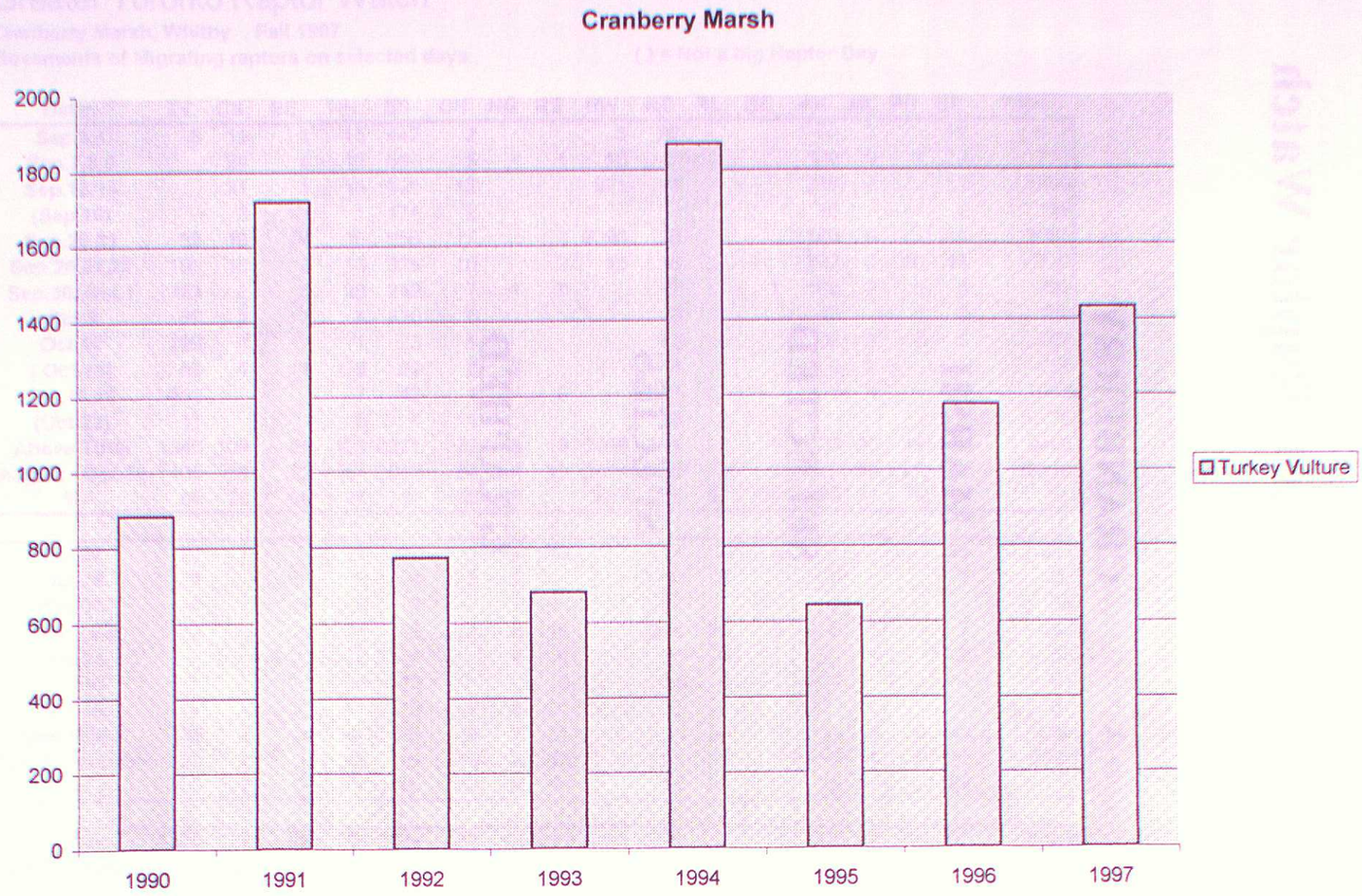
Cranberry Marsh, Whitby Fall 1997

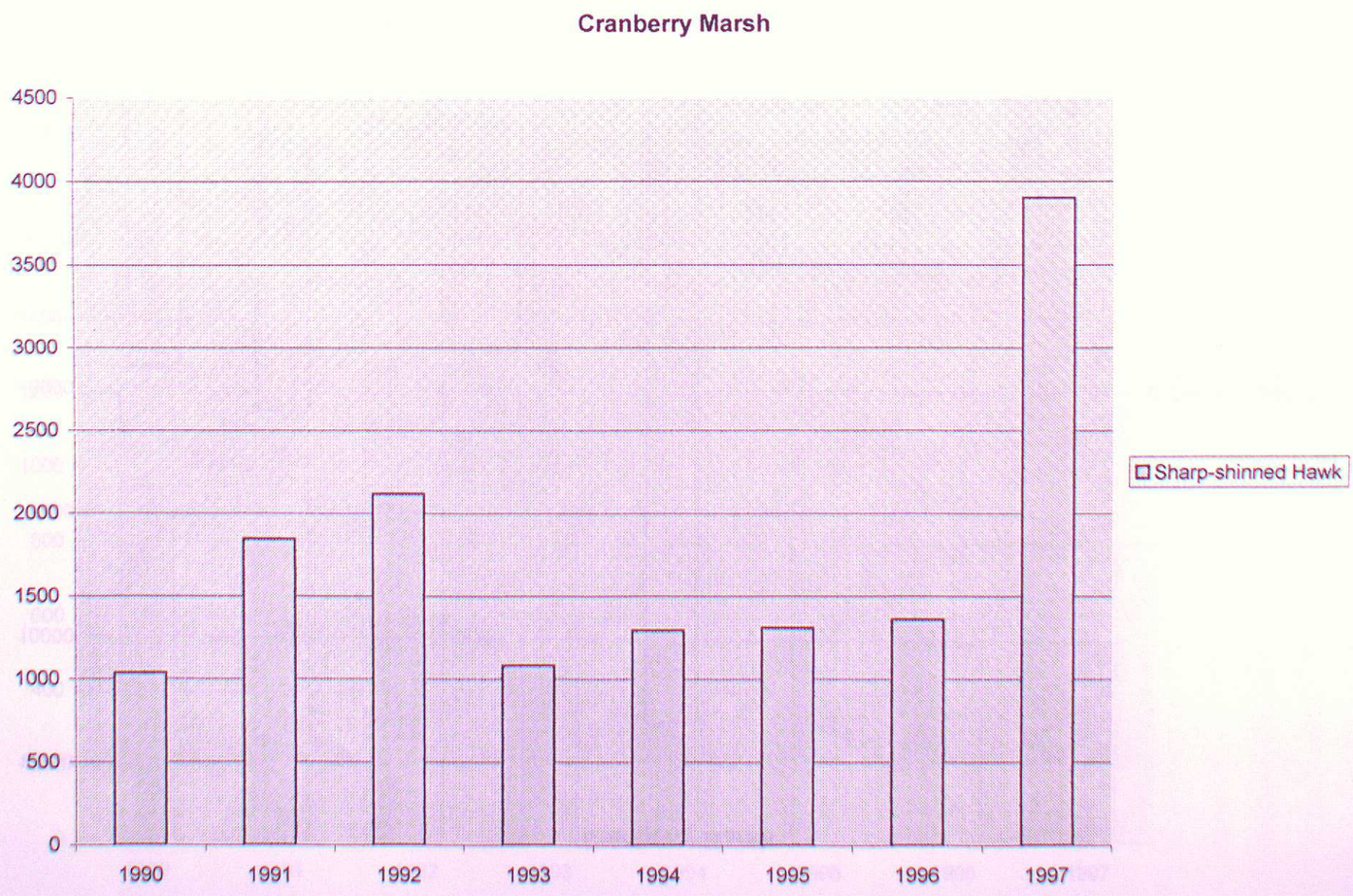
Movements of Migrating raptors on selected days **( ) = Not a big Raptor Day**

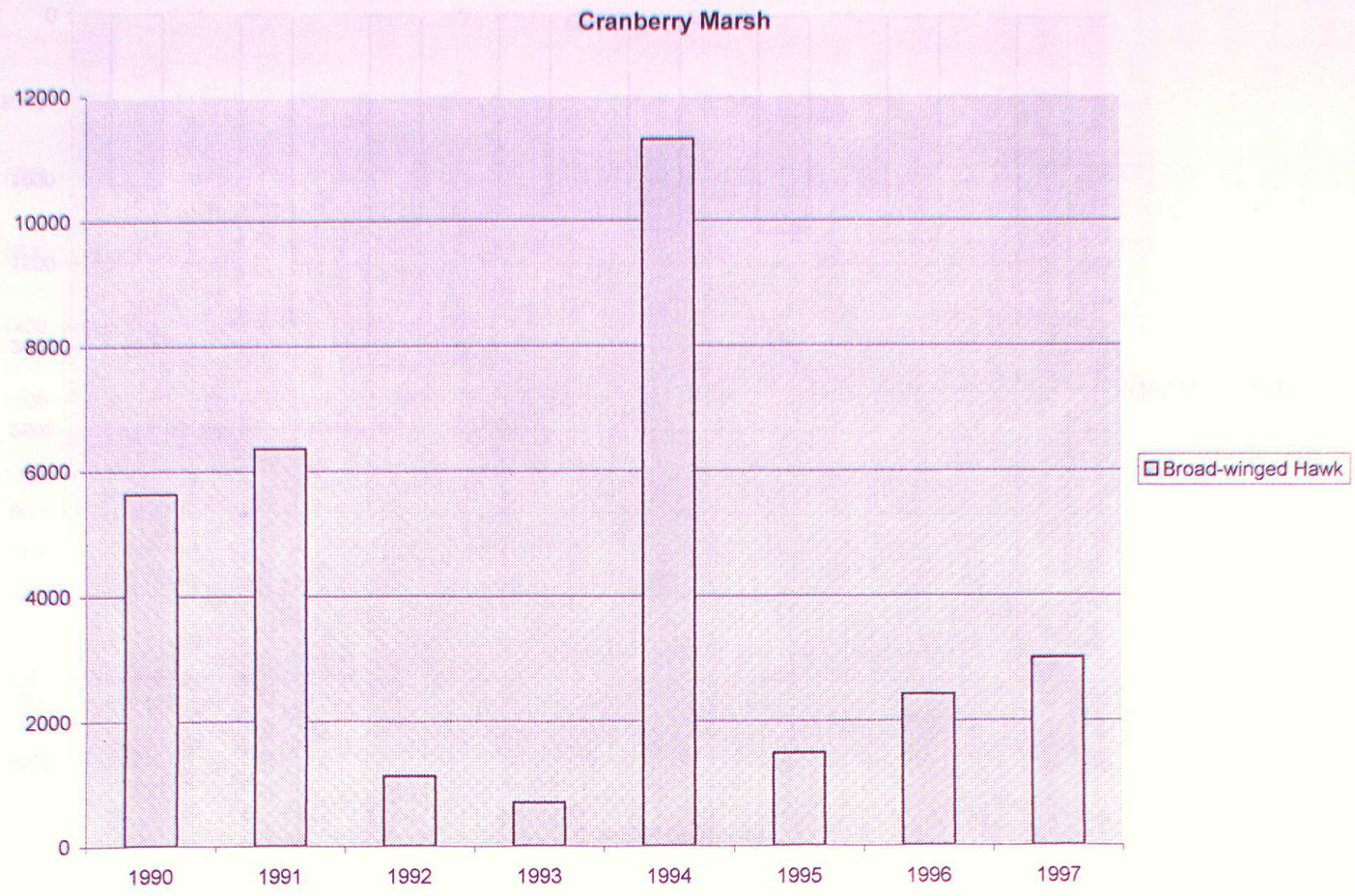
Dates	TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UR	Total
Sep.3,4	8	11	1	15	442	2			5	26			86	2		19	617
Sep.7,8,9		24	4	15	559	5		1	10				129	9	1	20	777
Sep.13,14		31	1	10	658	12			871	14			216	4		33	1850
(Sep.16)		3		1	174	2							16			2	198
Sep.20,21	32	16	4	18	650	17		3	2095	28			168	6		15	3052
Sep.26,27,28	150	18	3	16	326	10		2	15	18			132	2	10	14	716
Sep.30, Oct.1	323	2	5	22	242	7	1	7		47		1	100	2	5	5	769
Oct.6	69	2	2	4	220	5				3			43			2	350
Oct.10	198	1		1	25	8				12			33	3	3	1	285
(Oct.11)	83	1	1	9	29	2	2			4			2	1		1	135
Oct.15,16	468			7	42	1		5		133			3	1		5	665
(Oct.22)	11			5	4	1				53	2						76
Above Total	1340	109	21	123	3371	72	3	18	2996	341	2	1	928	30	19	119	9493
Aug.30 - Oct.22	1405	139	22	157	3812	84	4	19	3004	420	3	2	1040	42	24	142	10319
%	95	78	95	78	88	75	95		99.7	81	67	50	89	71	79	84	
Oct.25	21	1		18	17		1	10		197	2	1				26	294
Oct.26	1			5	4	1				45	3					1	60
Oct.30				3	2					28			2				35
Nov.7,8,9	3		1	14	19	1	3	19		358	26	5	6	1		7	463
Nov.11				2	1		2	9		31	6	1		1		2	55
Nov. 16				5	15			3		51	6		1			4	85
Nov. 24					5	2	1			23	5					1	37
Sub-totals	25	1	1	47	63	5	7	41	0	733	48	7	9	2	0	41	1030
Oct.23 - Nov.30	27	1	8	73	93	15	9	42	0	801	57	7	10	5	0	50	1198
%	93	100	12	64	68	33	78	98 -		92	84	100	90	40 -		82	
Big Days	1365	111	22	170	3434	77	10	59	2996	1074	50	8	937	32	19	160	10524
Aug.30 - Nov.30	1434	140	30	230	3905	99	13	61	3004	1221	60	9	1050	47	24	192	11519
%	95	79	73	74	88	78	77	97	99.7	88	83	89	89	68	79	83	

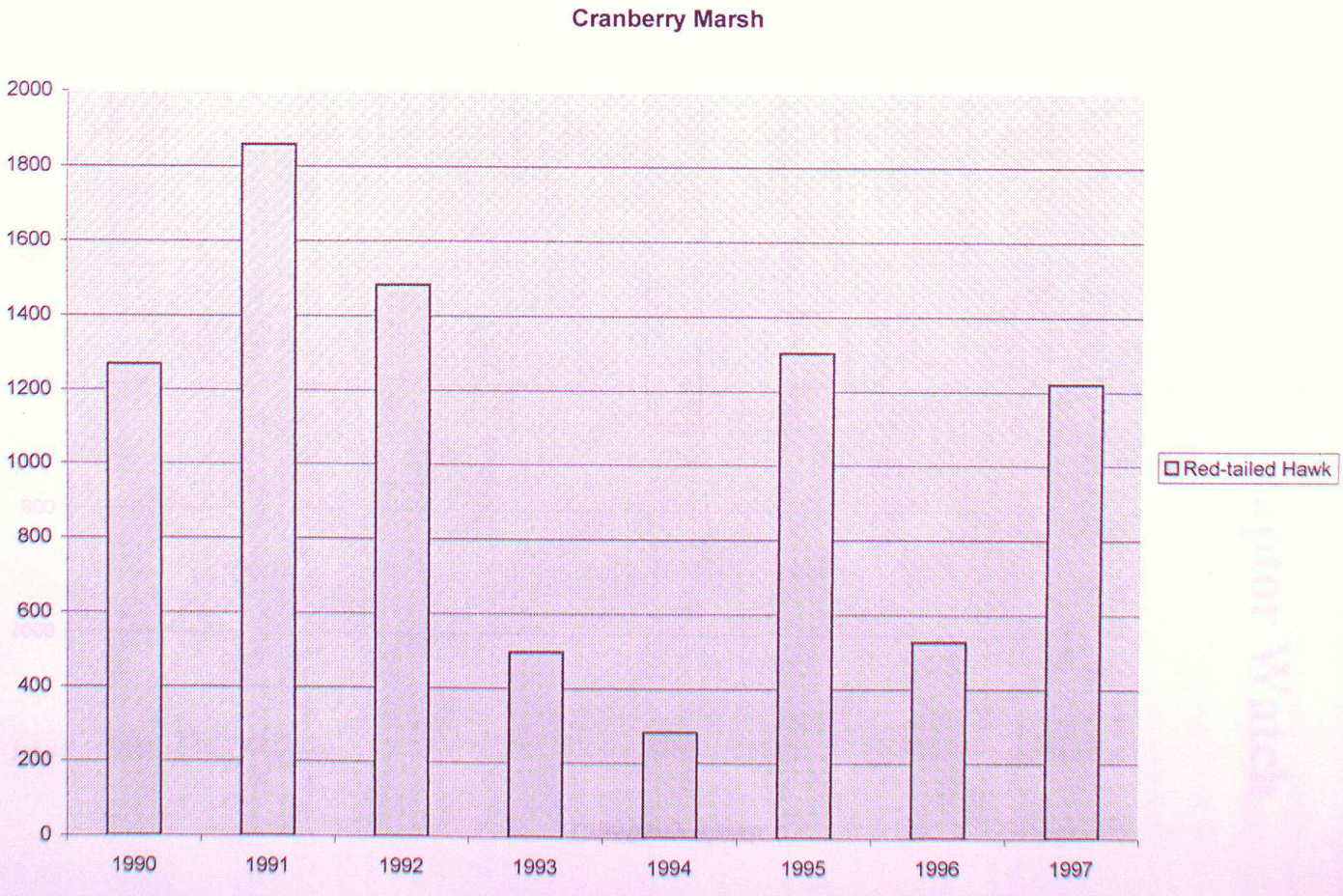
Greater Toronto Raptor Watch

CRANBERRY MARSH SELECTED SPECIES GRAPHED


Cranberry Marsh
2000
1800
1600
1400
1200
1000
800
600
400
200
0
1990
1991
1992
1993
1994
1995
1996
1997
Turkey Vulture


Cranberry Marsh
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1990
1991
1992
1993
1994
1995
1996
1997
Sharp-shinned Hawk


Cranberry Marsh
12000
10000
8000
6000
4000
2000
0
1990
1991
1992
1993
1994
1995
1996
1997
Broad-winged Hawk


Cranberry Marsh
2000
1800
1600
1400
1200
1000
800
600
400
200
0
1990
1991
1992
1993
1994
1995
1996
1997
Red-tailed Hawk

Greater Toronto Raptor Watch

HIGH PARK

WEATHER

DATA

ANALYSIS

Greater Toronto Raptor Watch
Fall 1997

High Park Weather Data Analysis

By Don Barnett

As in 1996, comparisons were made in 1997 between the number of raptors, by species, observed at High Park under a variety of weather elements. The purpose of the project was to determine the level of correlation between raptor migration and a specific group of weather elements. Secondly, time of day distribution of raptor observations was collected.

The major elements recorded were wind velocity, wind direction, relative humidity, barometric pressure and time of day raptor observations. The raptor watch operated from August 28 to November 30, 1997. Weather data was recorded hourly with on-site collection. Barometric pressure and relative humidity readings were obtained from Environment Canada at Pearson International Airport, which is approximately 14 kilometres northwest of High Park.

Raptor observations were also recorded by specific hourly groups. The raptor observations were then broken down into the number of birds, by species, which were sighted under each of the weather elements. This number was expressed as a percentage of the total of that species seen during the monitoring season. For each weather element, the number of observer hours was recorded and expressed as a percentage of the total observer hours. This data of comparison of raptor observations with weather conditions is on the following pages. The level of variation in the relationship between the number of raptors observed and the weather elements was considerable between species but in general there was some correlation between migrant numbers and wind direction and, not surprisingly, time of day distribution.

In comparison with the 1996 weather data (GTRW, 1996 report), there was no consistent relationship with wind speed, relative humidity or barometric pressure. In many cases a dominant weather element in 1996 was not dominant in 1997.

An example is Red-shouldered Hawk where 91% of the migrants in 1996 flew on a north-west wind. In 1997 32% flew on that wind and the dominant wind direction switched to north-east at 40%.

25% of Broad-winged Hawks in 1996 flew at a barometric pressure reading of 101.00 - 101.99 kpa whereas in 1997 over 99% of the species flew under the same pressure range.

Red-tailed Hawks moved from 83% on a north-west wind in 1996 to 35% under the same wind direction in 1997 and the dominant wind direction moved to north-east at 42%.

Obviously only long term weather observations will demonstrate the long term weather conditions under which raptors migrate but based on the two year data, certain conclusions could be suggested. It appears that the only significant weather factor, which seems to approach consistency in raptor migration, is wind direction. There does not seem to be consistency at all, year to year between migration numbers and wind speed, relative humidity and barometric pressure.

The weather data analysis should be useful in identifying the dominant weather elements under which migrants fly and to focus observer hours, in future, on days which provide the greatest potential for significant migration movement.

Greater Toronto Raptor Watch
Fall 1997
High Park: Summary of weather elements Sept.1 to Nov.30, 1997

Species	Season Total	Wind Direction From N	NW	W	NE	SW	S	SE	E
TV	1,803	376	1,003	42	282	26	24	50	
OS	67	3	33	16	2	3	2	8	
BE	20	1	9	5	1		2	2	
NH	173	12	99	36	9	8	5	4	
SS	4,415	256	3,023	416	53	251	125	290	1
CH	131	12	83	15	5	6	6	3	1
NG	18	3	8	1	4	1		1	
RS	84	4	27	8	34	2	3	8	
BW	5,051	49	4,070	808	2	10	40	72	
RT	1,550	137	548	164	645	21	5	30	
RL	21		6	5	9		1		
GE	12	1	2	3	6				
AK	627	25	370	147	8	31	21	25	
ML	26	2	11	4	2	3	1	2	1
PG	15	2	7	4	1			1	

Species	Barometric Pressure Kpa 99.0 to 99.99	100.00 to 100.99	101.00 to 101.99	102.00 to 102.99	103.00 to 103.99	Wind Speed L	M	S	VS
TV	6	15	807	672	303	599	863	323	18
OS	3	1	37	26		42	15	4	6
BE			14	6		8	11	1	
NH	4	4	98	66	1	61	58	39	15
SS	130	9	2,638	1,618	20	1,813	1,829	425	348
CH		2	73	55	1	62	49	5	15
NG			10	8		6	7	5	
RS		2	50	31	1	25	45	14	
BW	3	2	1,279	3,767		2,352	2,221	211	267
RT	3	28	1,085	412	22	490	775	258	27
RL			13	8		5	9	7	
GE		1	7	4		4	4	3	1
AK	23	4	346	254		314	183	79	51
ML			16	10		13	10	3	
PG			5	9	1	9	6		

High Park

Comparison of Raptor observations with weather conditions

Species Turkey Vulture **Total Hours** 479 **Total Birds** 1,803

Wind Speed

	Light	Medium	Strong	Very Strong
# of Birds	599	863	323	18
% of Species Total	33.22	47.87	17.92	1.00
% of Total Hours	**58.25**	27.14	12.11	2.51

Wind Direction From

	N	**NW**	W	**NE**	SW	S	SE	E
# of Birds	376	1,003	42	282	26	24	50	
% of Species Total	**20.85**	**55.63**	2.33	**15.64**	1.44	1.33	2.77	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	56 - 70 %	71 - 85 %	86 - 100 %
# of Birds	638	785	309	69	2
% of Species Total	**35.39**	**43.54**	17.14	3.83	0.11
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	**103.0 - 103.99**
# of Birds	6	15	807	672	303
% of Species Total	0.33	0.83	44.76	37.27	16.81
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	10-11	**11-12**	**12-13**	**13-14**	**14-15**	15-16	16-17	17-18
# of Birds		7	3	10	86	205	551	332	371	192	46	

High Park

Comparison of Raptor observations with weather conditions

Species Osprey **Total Hours** 479 **Total Birds** 67

Wind Speed

	Light	Medium	Strong	Very Strong
# of Birds	42	15	4	6
% of Species Total	62.69	22.39	5.97	8.96
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	**NW**	**W**	NE	SW	S	SE	E
# of Birds	3	33	16	2	3	2	8	
% of Species Total	4.48	49.25	23.88	2.99	4.48	2.99	11.94	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	41 - 55 %	**56 - 70 %**	**71 - 85 %**	86 - 100 %
# of Birds		1	31	34	1
% of Species Total		1.49	46.27	50.75	1.49
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds	3	1	37	26	
% of Species Total	4.48	1.49	55.24	38.81	
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	**10-11**	**11-12**	12-13	13-14	14-15	15-16	16-17	17-18
# of Birds			3	6	14	25	7	4	8			

Greater Toronto Raptor Watch
Fall 1997

High Park

Comparison of Raptor observations with weather conditions

Species Bald Eagle **Total Hours** 479 **Total Birds** 20

Wind Speed

	Light	**Medium**	Strong	Very Strong
# of Birds	8	11	1	
% of Species Total	40.00	55.00	5.00	
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	**NW**	**W**	NE	SW	S	SE	E
# of Birds	1	9	5	1		2	2	
% of Species Total	5.00	45.00	25.00	5.00		10.00	10.00	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	**56 - 70 %**	71 - 85 %	86 - 100 %
# of Birds	3	6	10	1	
% of Species Total	15.00	30.00	50.00	5.00	
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	**101.0 - 101.99**	102.0 - 102.99	103.0 - 103.99
# of Birds			14	6	
% of Species Total			70.00	30.00	
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	10-11	11-12	**12-13**	13-14	14-15	15-16	16-17	17-18
# of Birds				3		3	7	3	4			

Greater Toronto Raptor Watch
Fall 1997

High Park

Comparison of Raptor observations with weather conditions

Species Northern Harrier **Total Hours** 479 **Total Birds** 173

Wind Speed

	Light	Medium	**Strong**	Very Strong
# of Birds	61	58	39	15
% of Species Total	35.26	33.53	22.54	8.67
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	**NW**	**W**	NE	SW	S	SE	E
# of Birds	12	99	36	9	8	5	4	
% of Species Total	6.94	57.23	20.81	5.20	4.62	2.89	2.31	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	**56 - 70 %**	71 - 85 %	86 - 100 %
# of Birds	8	33	104	23	5
% of Species Total	4.62	19.08	60.01	13.30	2.89
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds	4	4	98	66	1
% of Species Total	2.31	2.31	56.65	38.15	0.58
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	**10-11**	**11-12**	**12-13**	**13-14**	**14-15**	15-16	16-17	17-18
# of Birds		2	6	11	20	25	30	32	28	14	5	

High Park

Comparison of Raptor observations with weather conditions

Species Sharp-shinned Hawk **Total Hours** 479 **Total Birds** 4,415

Wind Speed

	Light	**Medium**	Strong	Very Strong
# of Birds	1,813	1,829	425	348
% of Species Total	41.07	41.43	9.63	7.88
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	**NW**	W	NE	SW	S	SE	E
# of Birds	256	3,023	416	53	251	125	290	1
% of Species Total	5.80	68.47	9.42	1.20	5.69	2.83	6.57	0.02
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	41 - 55 %	**56 - 70 %**	71 - 85 %	86 - 100 %
# of Birds	359	645	2,139	1,199	73
% of Species Total	8.13	14.61	48.45	27.16	1.65
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds	130	9	2,638	1,618	20
% of Species Total	2.95	0.20	59.75	36.65	0.45
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	**9-10**	**10-11**	**11-12**	**12-13**	**13-14**	**14-15**	15-16	16-17	17-18
# of Birds		79	133	424	827	908	771	548	428	263	34	

High Park

Comparison of Raptor observations with weather conditions

Species Cooper's Hawk **Total Hours** 479 **Total Birds** 131

Wind Speed

	Light	**Medium**	Strong	Very Strong
# of Birds	62	49	5	15
% of Species Total	47.33	37.41	3.82	11.45
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	**NW**	W	NE	SW	S	SE	E
# of Birds	12	83	15	5	6	6	3	1
% of Species Total	9.16	63.36	11.45	3.82	4.58	4.58	2.29	0.76
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	**56 - 70 %**	71 - 85 %	86 - 100 %
# of Birds	9	38	60	19	5
% of Species Total	6.87	29.01	45.80	14.50	3.82
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds		2	73	55	1
% of Species Total		1.53	55.73	41.99	0.76
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	**10-11**	**11-12**	**12-13**	**13-14**	**14-15**	15-16	16-17	17-18
# of Birds		3	5	4	13	36	26	19	15	9	1	

High Park

Comparison of Raptor observations with weather conditions

Species Northern Goshawk **Total Hours** 479 **Total Birds** 18

Wind Speed

	Light	**Medium**	**Strong**	Very Strong
# of Birds	6	7	5	
% of Species Total	33.33	38.89	27.78	
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	**NW**	W	**NE**	SW	S	SE	E
# of Birds	3	8	1	4	1		1	
% of Species Total	16.67	44.44	5.56	22.22	5.56		5.56	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	41 - 55 %	**56 - 70 %**	71 - 85 %	86 - 100 %
# of Birds	2	3	8	5	
% of Species Total	11.11	16.67	44.44	27.78	
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds			10	8	
% of Species Total			55.56	44.44	
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	**10-11**	**11-12**	**12-13**	**13-14**	14-15	15-16	16-17	17-18
# of Birds				1	5	3	3	5	1			

High Park

Comparison of Raptor observations with weather conditions

Species Red-shouldered Hawk **Total Hours** 479 **Total Birds** 84

Wind Speed

	Light	**Medium**	**Strong**	Very Strong
# of Birds	25	45	14	
% of Species Total	29.76	53.57	16.67	
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	NW	W	**NE**	SW	S	SE	E
# of Birds	4	27	8	34	2	3	8	
% of Species Total	4.76	32.14	9.52	40.48	2.38	3.57	9.52	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	56 - 70 %	71 - 85 %	86 - 100 %
# of Birds	12	39	22	10	1
% of Species Total	14.29	46.43	26.19	11.91	1.19
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds		2	50	31	1
% of Species Total		2.38	59.52	36.91	1.19
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	10-11	**11-12**	**12-13**	**13-14**	**14-15**	15-16	16-17	17-18
# of Birds			3	1	6	12	31	15	11	5		

High Park

Comparison of Raptor observations with weather conditions

Species Broad-winged Hawk **Total Hours** 479 **Total Birds** 5,051

Wind Speed

	Light	**Medium**	Strong	Very Strong
# of Birds	2,352	2,221	211	267
% of Species Total	46.56	43.97	4.18	5.29
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	**NW**	**W**	NE	SW	S	SE	E
# of Birds	49	4,070	808	2	10	40	72	
% of Species Total	0.98	80.58	16.00	0.04	0.20	0.79	1.43	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	**56 - 70 %**	71 - 85 %	86 - 100 %
# of Birds	39	1,492	3,093	423	4
% of Species Total	0.77	29.54	61.24	8.38	0.08
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds	3	2	1,279	3,767	
% of Species Total	0.06	0.04	25.32	74.58	
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	**10-11**	**11-12**	**12-13**	13-14	**14-15**	15-16	16-17	17-18
# of Birds		2	48	256	1,233	1,341	638	391	649	298	195	

High Park

Comparison of Raptor observations with weather conditions

Species Red-tailed Hawk **Total Hours** 479 **Total Birds** 1,550

Wind Speed

	Light	**Medium**	**Strong**	Very Strong
# of Birds	490	775	258	27
% of Species Total	31.61	50.00	16.65	1.74
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	NW	W	**NE**	SW	S	SE	E
# of Birds	137	548	164	645	21	5	30	
% of Species Total	8.84	35.36	10.58	41.61	1.36	0.32	1.94	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	56 - 70 %	71 - 85 %	86 - 100 %
# of Birds	217	699	505	118	11
% of Species Total	14.00	45.10	32.59	7.61	0.71
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	**101.0 - 101.99**	102.0 - 102.99	103.0 - 103.99
# of Birds	3	28	1,085	412	22
% of Species Total	0.19	1.81	70.00	26.58	1.42
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	10-11	**11-12**	**12-13**	**13-14**	14-15	15-16	16-17	17-18
# of Birds		1	4	20	182	329	358	323	242	88	3	

High Park

Comparison of Raptor observations with weather conditions

Species Rough-legged Hawk **Total Hours** 479 **Total Birds** 21

Wind Speed

	Light	**Medium**	**Strong**	Very Strong
# of Birds	5	9	7	
% of Species Total	23.81	42.86	33.33	
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	NW	W	**NE**	SW	S	SE	E
# of Birds		6	5	9		1		
% of Species Total		28.58	23.81	42.86		4.76		
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	56 - 70 %	71 - 85 %	86 - 100 %
# of Birds	2	9	9	1	
% of Species Total	9.52	42.86	42.86	4.76	
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds			13	8	
% of Species Total			61.91	38.10	
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	10-11	11-12	**12-13**	13-14	14-15	15-16	16-17	17-18
# of Birds						5	10	1	3	2		

High Park

Comparison of Raptor observations with weather conditions

Species Golden Eagle **Total Hours** 479 **Total Birds** 12

Wind Speed

	Light	**Medium**	**Strong**	Very Strong
# of Birds	4	4	3	1
% of Species Total	33.33	33.33	25.00	8.33
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	NW	**W**	**NE**	SW	S	SE	E
# of Birds	1	2	3	6				
% of Species Total	8.33	16.67	25.00	50.00				
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	56 - 70 %	71 - 85 %	86 - 100 %
# of Birds	2	8	1	1	
% of Species Total	16.67	66.67	8.33	8.33	
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	102.0 - 102.99	103.0 - 103.99
# of Birds		1	7	4	
% of Species Total		8.33	58.33	33.33	
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	10-11	11-12	**12-13**	**13-14**	**14-15**	15-16	16-17	17-18
# of Birds						1	3	3	4			

High Park

Comparison of Raptor observations with weather conditions

Species American Kestrel **Total Hours** 479 **Total Birds** 627

Wind Speed

	Light	Medium	Strong	Very Strong
# of Birds	314	183	79	51
% of Species Total	50.08	29.19	12.60	8.13
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	NW	W	NE	SW	S	SE	E
# of Birds	25	370	147	8	31	21	25	
% of Species Total	3.99	59.01	23.45	1.28	4.94	3.35	3.99	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	41 - 55 %	**56 - 70 %**	71 - 85 %	86 - 100 %
# of Birds	19	105	311	178	14
% of Species Total	3.03	16.75	49.60	28.39	2.23
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds	23	4	346	254	
% of Species Total	3.67	0.64	55.18	40.51	
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	10-11	**11-12**	**12-13**	**13-14**	**14-15**	15-16	16-17	17-18
# of Birds		12	20	46	76	109	82	116	99	65	2	

High Park

Comparison of Raptor observations with weather conditions

Species Merlin **Total Hours** 479 **Total Birds** 26

Wind Speed

	Light	**Medium**	Strong	Very Strong
# of Birds	13	10	3	
% of Species Total	50.00	38.46	11.54	
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	NW	W	NE	SW	S	SE	E
# of Birds	2	11	4	2	3	1	2	1
% of Species Total	7.69	42.31	15.39	7.69	11.54	3.85	7.69	
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	**41 - 55 %**	**56 - 70 %**	71 - 85 %	86 - 100 %
# of Birds	1	6	13	3	3
% of Species Total	3.85	23.08	50.00	11.54	11.54
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds			16	10	
% of Species Total			61.54	38.46	
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	10-11	11-12	**12-13**	13-14	14-15	15-16	16-17	17-18
# of Birds		2	5			2	7	5	3	2		

High Park

Comparison of Raptor observations with weather conditions

Species Peregrine Falcon **Total Hours** 479 **Total Birds** 15

Wind Speed

	Light	**Medium**	Strong	Very Strong
# of Birds	9	6		
% of Species Total	60.00	40.00		
% of Total Hours	58.25	27.14	12.11	2.51

Wind Direction From

	N	**NW**	**W**	NE	SW	S	SE	E
# of Birds	2	7	4	1			1	
% of Species Total	13.33	46.67	26.67	6.67				
% of Total Hours	7.10	33.61	12.32	5.01	21.29	5.01	14.20	1.46

Relative Humidity

	26 - 40 %	41 - 55 %	**56 - 70 %**	71 - 85 %	86 - 100 %
# of Birds	1	1	9	4	
% of Species Total	6.67	6.67	60.00	26.67	
% of Total Hours	4.38	15.24	38.83	26.51	15.03

Barometric Pressure - Kilopascals

	99.0 - 99.99	100.0 - 100.99	101.0 - 101.99	**102.0 - 102.99**	103.0 - 103.99
# of Birds			5	9	1
% of Species Total			33.33	60.00	6.67
% of Total Hours	2.71	4.38	61.80	29.65	1.46

Time of Day Distribution - Eastern Standard Time

HRS	6 -7	7-8	8-9	9-10	10-11	**11-12**	12-13	13-14	14-15	15-16	16-17	17-18
# of Birds	1		2	1	1	5	2	1	1	1		

Greater Toronto Raptor Watch

PEOPLE

ATTENDING

HAWK

SITES

GTRW People attending Hawk Sites

First Name	Last Name	High Park	Cranberry	Counter	Observer	Visitor
Alfred	Adamo	Yes	Yes	Yes	No	No
Kim	Adams	No	Yes	No	Yes	No
Bill	Allison	Yes	No	No	No	Yes
John	Ankenman	Yes	No	No	No	Yes
Mark	Ansell	No	Yes	No	Yes	No
Margaret	Bain	No	Yes	No	Yes	No
Stan	Bajurny	Yes	No	No	Yes	No
Roy	Baker	Yes	Yes	No	Yes	No
John	Barker	Yes	Yes	Yes	No	No
Don	Barnett	Yes	No	Yes	No	No
Sam	Barone	Yes	No	No	No	Yes
Elizabeth	Barry	Yes	No	No	Yes	No
Chris	Bartlett	Yes	No	No	Yes	No
Howard	Battae	No	Yes	No	Yes	No
Dave	Beadle	Yes	No	No	Yes	No
Eleanor & Eileen	Beagan	No	Yes	No	Yes	No
Joe Lewis & Karen Lynn	Bearden	No	Yes	No	No	Yes
Brian	Beattie	No	Yes	No	Yes	No
Anne	Bell	Yes	No	No	No	Yes
Martin	Bence	No	Yes	Yes	Yes	No
Cecillia	Berkley	Yes	No	No	No	Yes
Gunner	Bessel	Yes	Yes	No	Yes	Yes
Holly	Bickerton	Yes	No	No	No	Yes
Alan	Blewitt	No	Yes	No	No	Yes
Ron	Bobson	No	Yes	No	No	Yes
Dan	Bone	Yes	No	Yes	No	No
Mary	Boswell	Yes	No	No	Yes	No
Mike & Colleen& Victor	Boudreau	No	Yes	Yes	Yes	No
Mike	Bowers	Yes	No	No	No	Yes
Doug	Bowie	Yes	No	No	No	Yes
Roy	Brooks	No	Yes	No	No	Yes
George	Bryant	No	No	No	No	No
Donald	Burton	Yes	No	No	Yes	No
Wayne	Busby	Yes	No	No	No	Yes
Kathy	Callahan	Yes	No	No	No	Yes
Dave	Calvert	No	Yes	No	Yes	No
Maureen	Campeau-Bowe	No	Yes	No	No	Yes
John	Carley	Yes	No	No	No	Yes
Fred	Carnrite	No	Yes	No	No	Yes
Geoff	Carpentier	No	Yes	No	Yes	No
Marg & John	Catto	Yes	No	No	Yes	No
David	Cattrall	No	Yes	No	No	Yes
Barrie	Chambers	No	Yes	No	Yes	No
Steve	Cheesman	No	Yes	No	Yes	No
Joyce	Closs	No	Yes	No	No	Yes
Glen	Coady	Yes	No	No	Yes	No
Peter	Cole	No	Yes	No	No	Yes

GTRW People attending Hawk Sites

First Name	Last Name	High Park	Cranberry	Counter	Observer	Visitor
Ken	Cook	Yes	No	No	Yes	No
Paul	Crook	No	Yes	No	Yes	No
Bob & Robbie	Cumming	Yes	No	No	No	Yes
Hugh	Currie	Yes	No	No	Yes	No
Anthony	Dale	Yes	Yes	No	No	Yes
Ian	Dalton	Yes	No	No	No	Yes
Mark	Deabreu	No	Yes	No	Yes	No
Luther	Dean	Yes	No	No	No	Yes
Jerry	Demarco	Yes	No	No	No	Yes
Ursula	Dexter	No	Yes	No	No	Yes
Keith	Discipline	No	Yes	No	No	Yes
Alex	Dobson	No	Yes	No	No	Yes
Gerry & Dennise	Doekes	No	Yes	No	Yes	No
Dennis	Duckworth	Yes	No	No	Yes	No
Keith	Dunn	No	Yes	No	Yes	No
John	Eastwood	No	Yes	No	No	Yes
Bill	Edmunds	No	Yes	No	No	Yes
Ardith	Ekdahl	Yes	No	No	No	Yes
Herb	Elliot	Yes	No	No	Yes	No
Bryan	Everitt	Yes	No	No	No	Yes
Peter	Ewens	Yes	No	No	Yes	No
Terry	Fahey	Yes	No	No	No	Yes
Jim	Fairchild	No	Yes	No	Yes	No
George&Jean	Fairfield	Yes	Yes	No	Yes	No
Bruce	Falls	Yes	No	No	Yes	No
Karin	Fawthrop	No	Yes	No	No	Yes
Luc	Fazio	Yes	No	No	Yes	No
John	Floegal	No	Yes	No	No	Yes
Angela	Flower	Yes	No	No	No	Yes
Bob	Foor	Yes	No	No	No	Yes
Donna	Foster	No	Yes	No	No	Yes
Gerald	Frechette	No	Yes	No	No	Yes
Gerry	Furlong	Yes	Yes	No	Yes	Yes
Marcel	Gahbauer	No	Yes	No	Yes	No
Gord	Gallant	No	Yes	No	Yes	No
John	Garcia	Yes	No	No	No	Yes
Dave	Gascoigne	No	Yes	No	Yes	No
Ray	Geras	Yes	No	No	Yes	No
Ed	Gillan	No	Yes	No	No	Yes
John	Glancy	Yes	No	No	No	Yes
Barb	Glass	No	Yes	No	No	Yes
Brette	Griffin	No	Yes	No	No	Yes
Jim	Griffith	Yes	No	No	No	Yes
Chester	Gryski	Yes	No	No	No	Yes
Jerry	Guild	Yes	No	No	Yes	No
Carol	Guy	Yes	No	No	Yes	No
Sid & Dot	Hadlington	No	Yes	No	No	Yes

GTRW People attending Hawk Sites

First Name	Last Name	High Park	Cranberry	Counter	Observer	Visitor
Celia	Harte	Yes	No	No	No	Yes
Stu	Hedges	No	Yes	No	No	Yes
Brian	Henshaw	No	Yes	No	Yes	No
Verna	Higgens	Yes	No	No	No	Yes
Tyler	Hoar	No	Yes	No	Yes	No
Brian	Hobbs	No	Yes	No	No	Yes
Theo	Hoffman	No	Yes	No	Yes	No
Phill & Matt	Holder	No	Yes	No	Yes	No
J.	Houghton	No	Yes	No	No	Yes
Jim	Hummel	Yes	No	No	No	Yes
Jean	Iron	Yes	Yes	No	Yes	No
Andrew	Jano	Yes	No	No	No	Yes
Al	Jaramillo	No	Yes	No	No	Yes
Don	Jennis	Yes	No	No	No	Yes
Florence	Jerome	No	Yes	No	No	Yes
Ed	Johns	No	Yes	No	No	Yes
Al	Johnston	No	Yes	No	No	Yes
Mike	Johnston2	No	Yes	No	No	Yes
Dana	Jonak	No	Yes	No	No	Yes
Richard	Joos	Yes	No	No	Yes	No
Tony	Jovan	Yes	No	No	No	Yes
Barbara	Kalthoff	Yes	No	No	No	Yes
James	Kamstra	No	Yes	No	No	Yes
John	Kelly	Yes	No	No	No	Yes
Harry	Kerr	No	Yes	No	Yes	No
Mike	King	Yes	Yes	No	Yes	No
Richard	King Baker	No	Yes	No	No	Yes
Gerry	King2	Yes	No	No	Yes	No
Mary	Kinkley	Yes	No	No	No	Yes
Hilde	Kittell	Yes	No	No	No	Yes
Eric	Koe	No	Yes	No	No	Yes
Judy	Kuramoto	Yes	Yes	No	Yes	No
Anthony	Lang	No	Yes	No	No	Yes
Dave	Langford	Yes	No	No	No	Yes
Mike&Judith	Lauzon	No	Yes	No	Yes	No
Gail	Lawlor	No	Yes	No	Yes	No
Vaughan	Lawrence	No	Yes	No	Yes	No
Rod	Lee	No	Yes	No	Yes	No
Phylis	Lehto	Yes	No	No	No	Yes
Terry	Lewis	Yes	No	No	No	Yes
Pat	Lewis2	Yes	No	No	No	Yes
Pam	Lewis3	Yes	No	No	No	Yes
Alfred	Lisk	No	Yes	Yes	Yes	No
Doug	Lockrey	No	Yes	Yes	Yes	No
Ron	Luft	Yes	No	No	No	Yes
Bunky	Lukasik	Yes	Yes	No	No	Yes
Fred	Lyonde	Yes	No	No	Yes	No

GTRW People attending Hawk Sites

First Name	Last Name	High Park	Cranberry	Counter	Observer	Visitor
Barry Kent	MacKay	No	Yes	No	No	Yes
Barbara	Mann	Yes	No	No	Yes	No
Jean	Martin	No	Yes	No	No	Yes
Bruce	Massey	Yes	No	No	Yes	No
Doug	McCall	No	Yes	No	No	Yes
Naish & Sheila	McHugh	Yes	No	Yes	Yes	No
John	McKay	Yes	No	No	No	Yes
Craig	McLaughlan	Yes	Yes	No	Yes	No
Carol	McLenn	No	Yes	No	No	Yes
Michelle	Meloche	No	Yes	No	Yes	No
Elizabeth	Mihalj	Yes	No	No	No	Yes
Dave	Milson	Yes	No	No	Yes	No
Linda	Mitchell	Yes	No	No	No	Yes
Tom	Mitchell2	Yes	No	No	No	Yes
Dorchen & Werner	Mohr	No	Yes	No	No	Yes
Susan	Morgan	No	Yes	No	No	Yes
Larry	Morse	Yes	No	No	Yes	No
Norm	Murr	Yes	Yes	Yes	Yes	No
Joelle	Murray	Yes	No	No	No	Yes
Margaret	Nevill	No	Yes	No	No	Yes
Rob	Nisbet	No	Yes	Yes	No	No
Derek	Noel	Yes	No	No	Yes	No
Graham	Nord	No	Yes	No	No	Yes
Dave	O'Brian	No	Yes	No	No	Yes
Terry	Osborne	Yes	Yes	No	Yes	No
Edge & Betty	Pegg	No	Yes	No	No	Yes
Don	Perks	Yes	No	No	Yes	No
Sam	Perri	Yes	No	No	No	Yes
Don	Peuramaki	No	Yes	No	Yes	No
Frank	Pinilla	Yes	Yes	No	Yes	No
Laurie	Pinkos	Yes	No	No	No	Yes
Anne	Pinteric	Yes	No	No	No	Yes
Pat	Pirisi	Yes	No	No	No	Yes
Ron	Pittaway	Yes	Yes	No	Yes	No
Walter	Podilchak	Yes	No	No	No	Yes
Arthur	Poirier	Yes	No	No	No	Yes
Rayfield	Pye	No	Yes	Yes	Yes	No
Alfred	Raab	Yes	No	No	No	Yes
Ken	Ridge	No	Yes	No	No	Yes
John	Ridley	No	Yes	No	No	Yes
Garth	Riley	Yes	No	No	Yes	No
Helene	Rimmele	Yes	No	No	No	Yes
Alex	Rivers	Yes	No	No	No	Yes
Maryanne	Rizzo	Yes	No	No	No	Yes
Bob	Ross	No	Yes	No	No	Yes
John	Sabean	No	Yes	No	No	Yes
Greg	Sadowski	No	Yes	No	Yes	No

GTRW People attending Hawk Sites

First Name	Last Name	High Park	Cranberry	Counter	Observer	Visitor
Alfheid	Salamon	No	Yes	No	No	Yes
Les	Sayer	No	Yes	No	No	Yes
Norm	Schippert	No	Yes	No	No	Yes
Leon	Schlichter	Yes	Yes	Yes	Yes	No
Don	Schram	Yes	No	No	No	Yes
Ron	Scovell	No	Yes	No	No	Yes
Carol	Sellers	Yes	No	No	No	Yes
Joe	Serensits	No	Yes	No	No	Yes
Ariel	Shamir	No	Yes	No	Yes	No
David	Shannon	No	Yes	No	Yes	No
Terry & Elizabeth	Shiels	Yes	No	No	No	Yes
Bob	Shillabeer	No	Yes	No	Yes	No
David	Shilman	No	Yes	No	No	Yes
Dave	Shirley	No	Yes	No	Yes	No
Jay	Silverberg	No	Yes	No	Yes	No
Dave	Skwarwa	Yes	No	No	No	Yes
Joe	Slinger	Yes	No	No	No	Yes
Roy	Smith	Yes	No	No	Yes	No
Terry	Smith1	No	Yes	No	Yes	No
Jake	Smythe	Yes	No	No	Yes	No
Don	Solley	Yes	No	No	No	Yes
Mike	Solomon	Yes	No	No	No	Yes
Dr. Murray	Speirs	No	Yes	No	Yes	No
Derek&Daphne	Spindlow	No	Yes	No	No	Yes
Carol	Stecik	No	Yes	No	Yes	No
Brian	Steele	No	Yes	No	Yes	No
Patrick	Stepien-Scanlon	Yes	Yes	No	Yes	No
John	Stevens	No	Yes	No	Yes	No
Mike	Street	No	Yes	No	Yes	No
Teo	Talevi	No	No	Yes	No	No
Calci	Tanti	Yes	No	Yes	Yes	No
Ken	Teasdale	Yes	No	No	Yes	No
Katie	Thomas	Yes	No	No	Yes	No
Anne	Thompson	No	Yes	No	No	Yes
Johanne	Tito	No	Yes	No	No	Yes
Ron	Tozer	No	Yes	No	Yes	No
Janice	Turner	No	Yes	No	No	Yes
J.	Vandergaast	No	Yes	No	No	Yes
Danielle	Vinson	No	Yes	Yes	No	No
Jerry	Walsh	No	Yes	No	Yes	No
Allan	Walsh2	Yes	No	No	No	Yes
Nancy	Walsh3	Yes	No	No	No	Yes
Eleanor	Wellman	No	Yes	No	Yes	No
Peter	Whelan	Yes	No	No	No	Yes
Elliott	Whitby	Yes	No	No	No	Yes
Don	Wiens	No	Yes	No	Yes	No
Brian	Wilkie	Yes	No	No	No	Yes

GTRW People attending Hawk Sites

First Name	Last Name	High Park	Cranberry	Counter	Observer	Visitor
Margaret&Reid	Wilson	No	Yes	No	Yes	No
Chris	Wise	No	Yes	No	No	Yes
Dianne	Witzell	Yes	No	No	No	Yes
Steve	Wood	No	Yes	No	Yes	No
Alan	Woods	No	Yes	No	No	Yes
David&Mary-Beth	Worthington	Yes	Yes	No	Yes	No
Ed	Wugalter	Yes	Yes	No	No	Yes
Bob	Yukich	Yes	No	Yes	Yes	No
William & Winnie	Yung	Yes	No	No	Yes	No