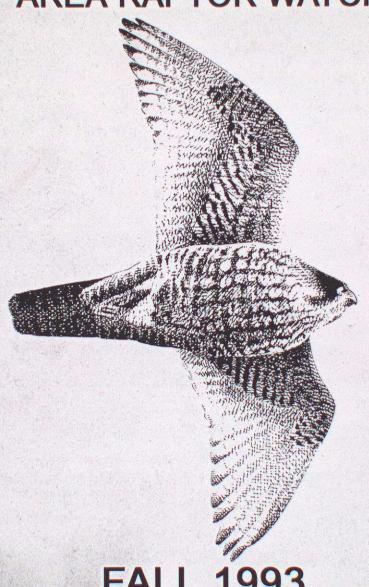
# REPORT ON THE **GREATER METROPOLITAN TORONTO AREA RAPTOR WATCH**



**FALL 1993** 

JOHN J. BARKER

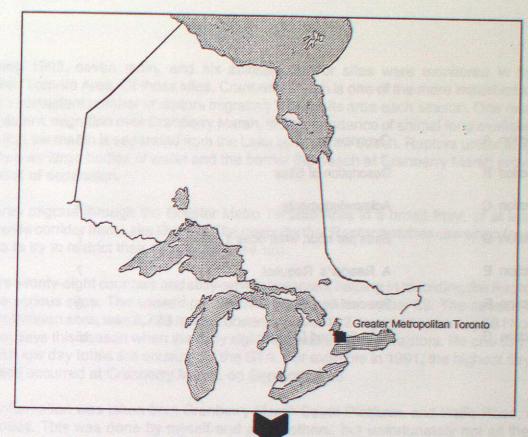
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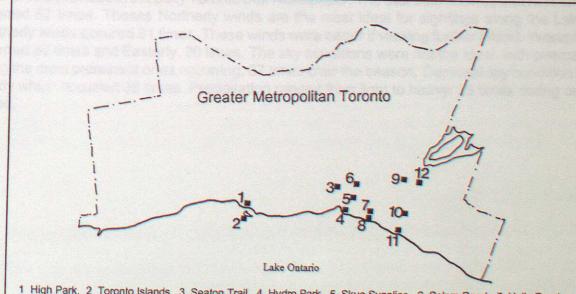
JOHN J. BARKER

# MAP SHOWING LOCATIONS OF THE GREATER TORONTO AREA RAPTOR WATCH

#### ONTARIO



#### Enlargement



1 High Park, 2 Toronto Islands, 3 Seaton Trail, 4 Hydro Park, 5 Skua Supplies, 6 Salem Road, 7 Halls Road, 8 South platform-Cranberry Marsh, 9 Myrtle Station, 10 Fernwood Avenue, 11 McLaughlin Bay, 12 Purple Woods

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#### **OVERVIEW**

A

During 1993, seven main, and six auxiliary, raptor sites were monitored in the Greater Metropolitan Toronto Area. Of those sites, Cranberry Marsh is one of the more important sites due to its having a consistent number of raptors migrating through its area each season. One reason for the more consistent, migration over Cranberry Marsh, is the abundance of animal food available. Another reason is that the marsh is separated from the Lake by a narrow beach. Raptors prefer to fly close but not directly over large bodies of water and the barrier the beach at Cranberry Marsh provides is just the right kind of separation.

Birds of prey migrate through the Greater Metro Toronto Area in a broad front, of at least a Sixty-kilometre wide corridor from Lake Ontario. The methods that Raptor watches use when faced with this situation is to try to restrict their data to a closed site.

There were twenty-eight counters and sixty-seven observers helping in recording the Raptors as they flew by the various sites. The season ran from August 28 to November 28. The season total count result, from thirteen sites, was 9,723 raptors observed, over 112 days and spanning 381 hours. There were seven days this season when the daily sightings exceeded 500 raptors. No one day exceeded 1,000. Such low day totals are unusual for the GTA. For example in 1991, the highest day total was 5,575, which occurred at Cranberry Marsh, on September 20.

Weather information was taken from Cranberry Marsh South-Platform, and Hall's Road, as well as Purple Woods. This was done by myself and a few others, but unfortunately not all the counters submitted weather information. Thus weather information for the missing days were taken from the general data provided in the Daily Toronto Star Newspaper. The Star data showed that Northerly winds occurred 62 times. Theses Northerly winds are the most ideal for sightings along the Lakeshore. Southerly winds occurred 81 times. These winds were better if viewing further inland. Westerly winds occurred 55 times and Easterly, 20 times. The sky conditions were not the ideal, with overcast skies being the most prominent ones occurring, 67 times over the season. Our ideal sky condition is partly cloudy which occurred 35 times. Precipitation ranged from light to heavy, 25 times during our count period.

#### **DESCRIPTION OF SITE**

3

#### Cranberry Marsh - South Platform, Whitby, Durham Region

This is the main Cranberry Marsh watch location. It is at the end of Halls Road, just beside Lake Ontario. The South Platform looks in an NW direction. Counters at this site record only those raptors travelling in an E-W direction. Because of the food source available at the marsh, certain raptors like Red-tail Hawk, Osprey, Merlin, Northern Harrier, American Kestrels and occasionally Bald Eagle and Peregrine Falcon, stop at the marsh enroute to other locations. It becomes difficult to distinguish locals from migrant raptors and thus to avoid double counting. The best that can be suggested is that by observing the behaviour of individual birds, it becomes easier to distinguish one type from the other.

#### Cranberry Marsh - Halls Road, Whitby

This site was not popular with some of our counters, but it was chosen because it has both a wider, unobstructed viewing area and is closer to Highway Two, which Broad-winged Hawk follow more than the lakeshore. The wider, unobstructed viewing area provides a better chance of following raptors long enough to figure out if they are migrants or locals.

#### McLaughlin Bay Wildlife Reserve - The Hill - Oshawa

The writer did not attend this site during the watch so can only pass on comments from the counters who submitted data. Don Wiens, who covered this site on October 5, mentioned that half the raptors follow the path leading over the look out hill, near Lake Ontario. While the other half fly North of Highway 401.

#### Purple Woods Conservation Area - Platform - Scugog

This site is located on the Oak Ridge Moraine, which is twenty-one kilometres from Lake Ontario. In elevation it is 1000 feet above Lake Ontario. The view from the platform is very good on a clear day. One problem that exists is the smog that hangs over the main cities between the platform and Lake Ontario. This restricts viewing the central water shed of Durham. The raptors fly from the NE-E direction. When very strong South winds are blowing, this spot should have potential for significant sightings.

#### High Park - Grenadier Hill - Etobicoke

Grenadier Hill, is beside the restaurant in High Park, near the parking lot. The Toronto Ornithological Club Newsletter, has mentioned that there have been hawk sightings in this location, over the last few years. I suggest that this site should become a permanent Raptor watch location during the 1994 Fall season, and would welcome any volunteer counter(s) and observers.

#### Seaton Trail - South of Concession Four - North Pickering

This site was selected by Ariel Shamir, who has had raptor watch experience at the International Birdwatching Centre, in Eilat, Israel. On September 16, D. Vinson, from Oshawa, spotted the GTA day peak of Broad-winged Hawks, in the central portion of Oshawa, thus counting in this area in the future could well provide some interesting results.

#### Toronto Islands - Gibraltar Point - City of Toronto

This area has the potential to produce some interesting Hawk movements. I hope a person (s) will come forward and report on this site in the future.

#### Other Sites Reporting

- A) Skua Supplies Parking Lot Ajax
- B) Myrtle Station Quarry Pit Scugog
- C) Fernwood Avenue Residential Area Oshawa
- D) Courtice Soybean Field Newcastle
- E) Hydro Park Hydro Marsh Pickering
- F) Salem Road, North of Highway Seven North Pickering

#### **ACKNOWLEDGMENTS**

C

Many thanks to the people who submitted data to me and particularly to the notable observers listed below who spent a considerable amount of their time in the field. Without their imput this report would have been impossible to put together.

Dave Calvert, Phill Holder, Theo Hoffman, Doug Lockrey, Alfred Lisk, Norm Murr, Ron Pittaway, Rayfield Pye, Ariel Shamir, Danielle Vinson, and last but not lest Bob Yukich.

I will now list the observers who helped at the various sites. If I neglected to mention someone, Please forgive me.

Cranberry Marsh - South Platform

M.Bain, R.Baker, J.Barker, H.Battae, E.Beagan, R.Beerworth, D.Calvert, S.Chessman, E.Coes, H.Currie, A.Dobson, G.Dorkes, D.Dorkes, B.Falls, L.Fazio, J.Floegal, C.Floegal, G.Gallant, D.Gascoigne, E.Gillan, J.Guild, B.Henshaw, T.Hoar, P.Holder, M.Holder, D.Jonak, J.Iron, H.Kerr, M.King, J.Kuramoto, J.Larkin, A.Lisk, D.Lockrey, B.Maxwell, N.Murr, D.O'Brien, T.Osborne, D.Peuramaki, R.Pittaway, R. Pye, K.Ridge, G.Sadowski, A.Shamir, R.G.Shillabeer, J.Silverberg, J.M.Speirs, P.S.-Scanlon, J.Stevens, T.Talevi, W.Todd, R.Tozer, D.Tozer, J.Welsh, D.Wiens, S.Woods, D.Worthington, E.Wugalter.

Cranberry Marsh - Halls Road

J.Barker, T.Hoffman, J.Larkin, R. Pye, A.Lisk, D.Lockrey, M.Wilson, J.M.Speirs

McLaughlin Bay

D. Wiens, R. Pye, W. Todd, T. Hoar, A. Shamir, J. Richards, P. Holder, J. Iron

**Purple Woods Conservation Area** 

R.Baker, J.Barker, R.G.Shillabeer, R.Pittaway, S.Wood, J.Iron, A.Lisk, D.Lockrey. R. Pye

Seaton Trail

A.Shamir, D.Lockrey, S.Kenn

Myrtle Station

A.Lisk

Skua Supplies

P.Holder

Fernwood Avenue

D.Vinson

Courtice

**B.**Hobbs

Hydro Marsh

M. Wilson and J.M. Speirs

North Pickering

A.Vilk

High Park: B. Yukich, N. Murr, M. King, PS. Scanlon

Toronto Islands: N.Murr

## BIRDS PER HOUR, WHAT DOES IT MEAN? \_\_

D

Birds Per Hour is a statistic that provides comparison among watches, where the number of viewing hours varies from site to site. The calculation is: Number of Birds counted divided by the number of viewing hours at the site.

#### A READER'S REQUEST

E

If you would like to volunteer to count, observe, or to share your Fall season Hawk sightings in the Greater Metro Toronto Area, Please contact the address below.

John J. Barker

### SPECIES ACCOUNTS

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#### Turkey Vulture (Cathartes aura)

The counts from thirteen sites came to 1067, in 1993. The Cranberry Marsh - South Platform, season total was 681. This was the highest site total for the season. High Park reported 291, which was the second highest site total for the season. Six other sites reported much lower individual sightings. Comparing Cranberry Marsh's 1990-93 season average of 1015 to the 1993 total, there was drop of 33%. The drop between 1992 and 1993 was smaller at 12%.

Interestingly, the birds per hour comparison between 1992 and 1993, at Cranberry Marsh, shows a different trend, increasing from 2.4 in 1992 to 3.7 in 1993. However, High Park's birds per hour statistic for 1993, at 8.9, was significantly higher than Cranberry Marsh's. The 1993 day peak at the South Platform of Cranberry Marsh of 294, occurred on September 30. The 1992 day peak was somewhat lower at 252, and occurred later in the season on October 19, 1992.

#### Osprey (Pandion haliaetus)

The GTA season total sightings came in at 73. In 1993, Cranberry Marsh's - South Platform total reached 33. Four other sites had lower numbers of Osprey. There was a drop of 46% from our 1992 season at Cranberry. Comparing the 1990-93 Cranberry Marsh average of 66, to the 1993 total, there was a decrease of 50%.

The birds per hour ranged from a low of 0.1 at High Park and Purple Woods, to a high of 0.4 at Cranberry's Halls Road site. In 1992, South Platform's birds per hour statistic was 0.2, resulting in the opposite trend between 1992 and 1993, with a 50% increase in sightings vs the 50% decrease between the 1990-93 average and 1993. Cranberry Marsh's, 1993 day peaks occurred at the South Platform on September 5 and 29, with 6 sightings recorded on both dates. The 1992 day peak was 15, which occurred on September 11, and was the highest number of ospreys recorded at Cranberry Marsh since 1990.

Osprey is one of the most difficult species to monitor at Cranberry Marsh, because they have a habit of arriving in late July, before the beginning of our official count season. As a result we probably under count this species each year. However, in the interest of ensuring that an individual is truly migrating at the time it is viewed, there are no plans to begin the official count season earlier than in the past.

#### Bald Eagle (Haliaetus leucoceohalus)

The 1993 total for all sites in the GTA was 20, with five out of thirteen sites counting this species. The South Platform at Cranberry had a total count of 13 for the season. This is one Eagle better than our

1992 season that came in at 12, resulting in an 8% increase in 1993 over 1992. The 1990-93 average at Cranberry was 15. In comparison to the 1993 total there was a 13% decrease. Birds

F Species Accounts cont....

Our first Bald Eagle was seen on August 30, by T. Hoar at McLaughlin Bay. The last one was seen on November 7, by A. Vilks, at Salem Rd., in North Pickering. On the day peak side of things, we reached a new high of 5 on September 19, at Cranberry Marsh. The previous high there was 4, seen during the 1990-92 period.

per hour showed the following: South Platform .07, Halls Road

AGE OF BALD EAGLES (Number seen)						
1st year 7	2nd year 4	3rd year				
4th year 2	4-5 year 1	Unk. 5				

#### Northern Harrier (Circus cyaneus)

.05, and McLaughlin Bay .04.

The thirteen site total in 1993, for Northern Harriers, was 194. There were seven sites reporting this species. At Cranberry Marsh - South Platform, there was a total of 93 Northern Harriers counted. Our new location at Gibraltar Point, at the Toronto Islands, reported 34. This was also our second highest count this season. The 1990-93 average at Cranberry Marsh was 132. In comparison, the 1993 total showed a 70% decrease. Between 1992 and 1993 there was a decrease of 28%. Birds per hour emerged as follows: Toronto Islands 3.1, High Park 0.6, South Platform 0.5, McLaughlin Bay 0.7. Day peaks were interesting at the Toronto Islands where, on October 9 there was count 30. This is much higher than the South Platform that came in at 14 on September 19. High Park also had 14 but their peak occurred on October 18. Halls Road had a peak of 10 on September 16. There were only 3 reported sightings of male Harriers at Cranberry Marsh this season, with one on each of September 15, September 17, and October 27. Males are rare in the GTA. It is possible that observers may be unaware of this and may ignore these birds as they flew by the various sites. My hope is that observers will pay closer attention to the gender of Northern Harriers, and report any male Harriers they see.

#### Sharp-shinned Hawk (Accipiter striatus)

The overall GTA site total was 2652 for 1993. The South Platform at Cranberry Marsh accumulated 1084, which was a 49% drop from the 1992 count of 2117. High Park counted 751, Halls Road came next with 429, McLaughlin Bay's total was 217. Six other sites were below one hundred. The 1990-93 average for Cranberry was 1521. Again, as for the previously mentioned species accounts in this report, 1993 results represent a decrease of 29% compared to the 1990-93 average. From 1992 to 1993, there was also a decrease in Sharp-shinneds sighted of 49%. Day peaks varied significantly between our sites with High Park coming in with 520 on September 11, while Cranberry Marsh - South Platform peaked at 304, which was a record, given the previous high of 300 on September 23,1992.

Species Accounts cont.... F

Halls Road peaked at 119, also on September 11,1993. McLaughlin Bay, on October 5, peaked at 117. Purple Woods reached their peak on October 11, with 39. Seaton Trail and Skua Supplies had 13 and 12, respectively on September 7 and September 15. Two other sites were below ten. Birds per hour came out as follows: High Park 23, McLaughlin Bay 9.2, Halls Road 6.6, the South Platform 6. In 1993, the B.P.H. statistic was 6.6 at Toronto Islands, 4.4 at Purple Woods and Fernwood Avenue came in at 2. Among these last two sites sits Myrtle Station, their B.P.H. is 3.7.

#### Cooper's Hawk (Accipiter cooperii)

Eight out of thirteen GTA sites recorded a total of 128 sightings in 1993. Cranberry's South Platform counted a total of 59 and High Park 32. The most interesting site was Purple Woods. This site counted 13, showing that in this central part of Durham, while the sites of Fernwood Avenue, Myrtle Station and Purple Woods were being watched, Cooper's were following the Moraine. Five other sites reported less than 10. The 1990-93 average for the South Platform was 105. Compared to 1993, there was a decline of 44%. Between 1992 and 1993, there was a decrease at the South Platform of 55%. Birds per hour developed as follows: High Park reached 10, Toronto Islands 0.4, Myrtle Station 1.2, and the South Platform 0.3. In 1992, the South Platform B.P.H. was 0.4. Purple Wood was 0.3. Day peaks of 22 occurred on October 18 at High Park. The South Platform hit 7 on September 29. In 1992, the South Platform day peak was 26, occurring on September 23. On September 12, at Purple Woods, I recorded 9 individuals. Six Cooper's Hawks were flying together in a very tight flock, which included five female/ immature and one male. I don't recall seeing this species flying in such a concentration previously. They usually fly singlely or in pairs. It's possible that this was a family migrating together.

#### Northern Goshawk (Accipiter gentilis)

All the sites reporting, this species came in at 42. Over at Cranberry's South Platform the count was 11. Last year (1992), the total was 33. High Park and the Toronto Islands came to 10 apiece. Five other sites reported lower numbers (4). Earlier in August, I thought we might have a good migration of Goshawks due to early sightings along the Lakeshore of Durham, including my own of one adult male at Darlington Provincial Park, on August 8. Well all that I can say is that I was wrong. The 1990-93 average at Cranberry's South Platform was 29, resulting in a decrease of 69% compared to 1993 totals. Looking at last season's total (1992), to compare with the recent season (1993), we're down by 67%. Birds per hour showed the following: High Park 0.31, Toronto Islands 0.09, the South Platform 0.06, Halls Road and Purple Woods 0.05, and to finish off, Myrtle Station, Fernwood Avenue, and McLaughlin Bay 0.04. Day peaks for the various sites appeared this way: Toronto Islands peaked at 9 reported by Norm Murr, on October 10, at the South Platform, 2 were recorded on September 19, and High Park noticed 5 on October 18. In 1992, Cranberry's South Platform reported a peak of 5 on October 19, 3 higher than in 1993. Tyler Hoar, commented on an odd sight on September 5, at

Cranberry Marsh. He saw "A snake or <u>Jesses</u> in Talons" (A falconers controlling device). Doug Lockrey, suggested that he may have had a Goshawk on November 26 also at Cranberry, but he chose to record it as an unidentified, instead.

#### Red-shouldered Hawk (Buteo lineatus)

The season total from four sites was 104. High Park was the place to be for this species, with a total of 85 sighted. The flight at the South Platform was dismal in comparison, with only 16. Last season (1992), at Cranberry was tremendously better with 168 counted. Something must have happened in 1993 to change their flight course. Any ideas? Our 1990-93 average was 113. In comparison, 1993 decreased by 85% at Cranberry. Between 1992 and 1993, the drop at Cranberry was serious at 90%. Birds per hour appeared this way: High Park 2.61, South Platform 0.09, Purple Woods 0.05, and finishing with 0.01 at Halls Road. Day Peaks over at High Park came in at 73 on October 18. Unfortunately over at the South Platform they only had 4 on October 27. In the 1992 season, the high was set on October 25 with 80 at Cranberry's South Platform.

#### Broad-winged Hawk (Buteo platypterus)

The overall count in the GTA came to 2950 in 1993. The highest count of the season came from an unlikely place, Fernwood Avenue. This site was covered on one day, September 16, by D. Vinson, who sent her notes to me by mail. A migration of 735 Broad-winged Hawks occurred over her house near the Harmony Creek Conservation Area, in the North-Central part of Oshawa. This central area of Durham remains a mystery about how it could be covered. The problem is: what would be a good location to restrict our data to? I would welcome any ideas that you might have.

Other sites reporting were as follows: the South Platform 700, Halls Road 588, High Park 261, Skuas 230, Purple Woods 193, Myrtle Station 171, McLaughlin Bay 66, and Seaton Trail and the Toronto Islands coming in at 5.

The 1990-93 average for the South Platform was **3451**. Subtracting this from our 1993 total results in a difference of **2751** or a decrease of **80%**. The 1992-93 season comparison showed a drop of **37%**.

Birds per hour at Halls Road were 9, at High Park 8, Purple Woods 4.9, at the South Platform 3.8, McLaughlin Bay 2.9, and Seaton Trail as while as Toronto Islands with 0.2.

Day peaks were as follows: (Fernwood Avenue, see above), the South Platform, **537** September 19, Halls Road **329**, September 15, McLaughlin Bay **35**, September 19, Purple Woods **93**, September 13, Myrtle Station **171**, September 12, Skua Supplies **230**, September 15, and High Park **261**, September 11.

At Cranberry Marsh's South Platform on September 19, we formed the opinion that had the weather conditions been different we could have had a larger count of Broad-wings. I and others find it very hard to do an accurate count when the Hawks fly against a blue sky without any clouds. The

Species Accounts cont.... F

Broad-wings we had were straight up and flying very high over us, so that the observer had to watch in an uncomfortable position with neck stretched and back bent for a long time.

#### Red-tailed Hawk (Buteo jamaicensis)

1400 was the overall site total for 1993. High Park came in at 781, but the South Platform had to settle for a low 496. In 1992, the South Platform had a season total of 1483. Skua Supplies had 60 in one day. Seven other sites had less than 23. The Cranberry's South Platform, 1990-93 average was 1276, so we were on the down side again with a drop in 1993 of 61%. Between 1992 and 1993, there was a decrease of 67%. High Park's birds per hour was 24, the South Platform's was 2.7, Myrtle Station's was 1.2, and six other sites reported less than 0.06. A day peak of 515 occurred at High Park on November 1. The South Platform at Cranberry Marsh recorded a day peak of 162 on October 31. In 1992, the peak at the South Platform was 371, reached on October 25. Halls Road had 7 set on September 23,1993, McLaughlin Bay had 4 recorded on September 19 and Purple Woods reached a peak of 5 on each of September 13, 16 and October 11. Skua Supplies clocked 60 in one hour on September 15. Four other sites reported less than 3. Norm Murr, sent a comment in regarding watching Red-tails at November 1. Norm remarked: "(A) continued stream of Red-tails in a four hour period." I wish we had that at the South Platform this year, but we had to settle for less. On the day peak at Cranberry however, I did notice some Red-tails flying differently than the majority. Some chose to fly in a strait line from Thickson Point over the water instead of flying towards land like most other Redtails were doing on October 31. I can only wonder how many Raptors we may miss by picking up only one flight pattern. I think it might be wise to consider counting both flight patterns in the fall 1994 migration. Are you aware of a Northern sub-race of Red-tail, called Abietcola? Doug Lockrey recorded 1 on September 5, and on November 6, I and other observers noticed 4 at South Platform. I am no expert on this type of Red-tail, but I can tell you that there is more dark pigment on both the upper and lower parts of the Hawk, than you see on the typical Eastern Red-tails. As explained in the Osprey account, you can use the same process to distinguish local from migrant Red-tails. I sense an irritation in some observers who hear me often say that the Hawk that they think is a migrant is what I believe to be a local. Maybe I am wrong, But I believe that it is better to be conservative in counting migrants than to mark a local more than once. I am open to any suggestions that you may want to share on the topic of keeping track of local vs. migrant raptors in our area.

#### Rough-legged Hawk (Buteo lagopus)

If some of you were looking for this species during the fall migration, the Greater Metro Toronto Area was not the place to look. Overall the site total was only 14. This is without a doubt, the lowest Toronto has seen since we started counting in 1990. It's hard to remember 1991, when we had a season total

of 222 at Cranberry Marsh, considering in 1993 that the South Platform could only reach 5. I guess this species was flying else were. In 1992, the South Platform had 30. High Park, in 1993, did not do much better than Cranberry, with 6. Only two other sites reported less than 2. Our 1990-93 average was 89, thus the 1993 count resulted in a large drop of 94%. The difference between 1992 and 1993 was a drop of 83%. Birds per hour at High Park was 0.18, at the South Platform 0.03, at McLaughlin Bay 0.08, and at Seaton Trail 0.05. A day peak of 3 occurred at High Park on November 1. The South Platform had a peak of only 2 on October 31, while McLaughlin Bay had 2 on October 10. Light Morphs made up all the Hawks we saw at the South Platform. Dark Morph. were very rare anywhere in 1993, with only a few being seen and reported.

#### Golden Eagle (Aquila chrysaetos)

Five sites reported a total of 12. South Platform recorded 5 vs. 8 in the 1992 season. High Park reached a count of 4. Purple Woods, Hydro Marsh and North Pickering each had 1. Our 1990-93 average count of Golden Eagles was 11. compared to the 1993 total, we experienced another drop of 54%. Between 1992 and 1993 there was a decline of 38%. Birds per hour for High Park in 1993 was 0.12, for the South Platform was 0.03, and Purple Woods was 0.02. In the area of day peaks there was a tie between the South Platform and High Park with 2. The dates on which these Eagles were noticed was, for the South Platform, October 24, and for High Park, on November 6. Our

AGE OF GOLDEN EAGLES (numbers seen)

1992 season day peak was 5 on October 31. The first recorded Eagle of the 1993 season was seen by Bob Shillabeer, Howard Battae and Dave Calvert. This was an adult seen at the South Platform, on September 30. Our last of the season was an age unknown, observed at Salem Road, North of Highway 7, By Andre Vilks, on November 7.

#### American Kestrel (Falco sparverius)

Nine sites in the GTA reported a total of **749** in 1993. The South Platform had a season sum of **269**, whereas in the 1992 season, the figure was **758**. Halls Road came in with **260**. McLaughlin Bay had **115**. High Park noticed **75** for their Total. Five other sites came in with less than **15**. The 1990-93 average for Cranberry Marsh - South Platform, was **631**. The South Platform 1993 total in comparison was lower by **57%**. Between the 1992 and 1993 seasons, there was a drop of **65%**. Birds per hour was as follows in 1993: High Park **2.3**, South Platform **1.5**, Halls Road **4**, Myrtle Station and Toronto Islands **0.8**, Seaton Trail **0.05**, and Fernwood Avenue **1**. Day peaks at Halls Road were **92**, at the South

#### Species Accounts cont .... F

Platform 59, at McLaughlin Bay 65, and at High Park 59, all on September 11. Purple Woods had 5 on September 12. Four other sites had less than 6. In 1992 the South Platform scored a 179, set on September 29.

#### Merlin (Falco columbarius)

The season total from five sites comes to 27. The South Platform at Cranberry Marsh had 17, which was the lowest count that has been encountered since the count began in 1990. Halls Road's total was 5 in sixteen days of viewing. Over at McLaughlin Bay, in nine days, observers had 2. Up on the Oak Ridge Moraine, at Purple Woods C.A., they had 1 in ten days. Toronto Islands, in two days, had 1 a day. The 1990-93 average was 38, thus there was a drop of 55% in the 1993 total, compared to the 1990-93 average. 1993's count was 58% less then 1992's. Birds per hour occurred as follows: the South Platform 0.09, Halls Road and McLaughlin Bay 0.08, Purple Woods 0.02 and Toronto Islands 0.2. The day peak at the South Platform was 4 on September 12. For the 1992 season, the peak at Cranberry was 5, seen on three dates ranging from September 19 to October 17. Back to 1993: Halls Road had 3 on September 4.

#### Peregrine Falcon (Falco peregrinus)

Four sites reported a total of 20 sighted in 1993. The South Platform noticed 13 over a four week period from September 25 to October 25. In 1992, the South Platform had 29 in a ten-week period. McLaughlin Bay had 4. Purple Woods numbered only 2. Toronto Islands had to settle for 1. Our 1990-93 average was 25, so again there was a decline in 1993 of 48%. The drop between 1992 and 1993 was 55%. Birds per hour at McLaughlin Bay was 0.2, at Toronto Islands 0.1, at the South Platform 0.07, and at Purple Woods 0.05. Day peaks of 6 occurred at the South Platform on September 29. For Purple Woods, a peak of 2 occurred on October 1. At McLaughlin Bay there were some reported sightings of Peregrine's released from a Government-sponsored breeding program. Which uses York University as its release site. The University is located in the City of North York, which is west of McLaughlin Bay.

#### STATISTICS AND GRAPHS.

G

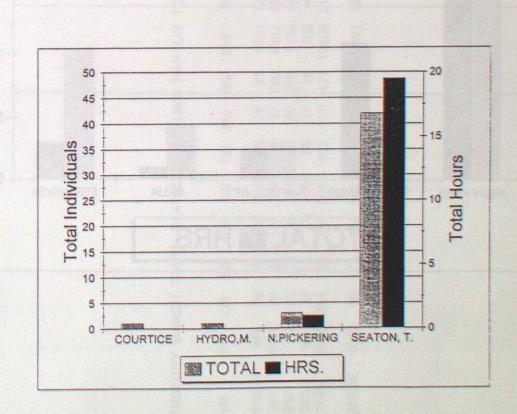
Title	Туре	Page
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#### Abbreviations

GTA = Greater Toronto Area, CMSP = Cranberry Marsh South Platform, CMHR = Cranberry Marsh Halls Road, MBRW = McLaughlin Bay Raptor Watch, PWRW = Purple Woods Raptor Watch, HPRW = High Park Raptor Watch, TIRW = Toronto Islands Raptor Watch

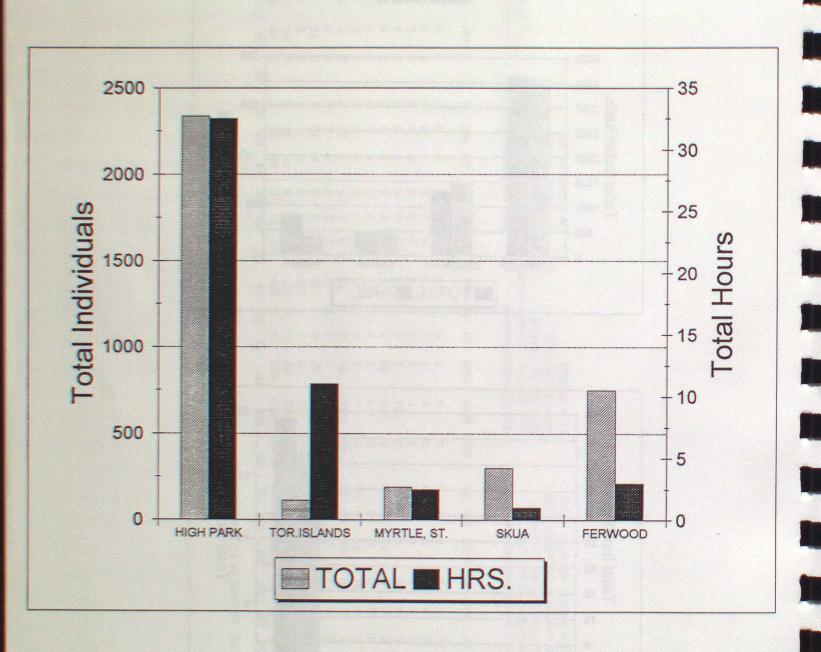
# Raptor Count Totals - Observer Hours per Site

		Paptor Co.	unt Totals		
		Observer Ho	urs per Site		
4000 -					T <sup>200</sup>
3500 -					
S 3000 -					150
2500					100
Total Individuals					100
<u>_</u> 1500					
1200					
P 1000 -					-50
500 -					+
0 -		32			ļ <sub>0</sub>
	CMRW-SP	CMRW-HR	MBRW	PWRW	
		<b>TOTAL</b>	HRS.		



	2	OS	BE	I	SS	G	NG	RS	BW	RT	교	GE		ME	0		UAL	JB U		H)	S S	TOTAL	H	DYS
CMRW.SP	681	33	13	93	1084	59	1.1	16	700	496	20	2		17	13			37	0	0	24	3579		3
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MARW	56	-	-	17	217	7	4	0	99	9	2	0		2	4			11	0	0	9	527		
WRW	25	4	0	2	80	13	2	N	193	17	0	-		-	2	0		10	-	0	13	385		-
SEATON T	9	0	0	-	16	V	0	0	5	8		0		0	0	0		0	0	0	0	42		
HIGH PARK	291	20	0	19	751	32	10	85	261	781	9	4	75	0	0	0	3	15	0	0	0	2338	32.5	9
TORISLANDS	0	0	0	34	48	4	10	0	-	4		0		2	-	0		0	0	0	0	113		
MYRTLE, ST.	0	0	0	0	6	9	-	0	171	3		0		0	0	0		0	0	0	-	191		
SKUA	0	0	0	0	12	0	0	0	230	09		0		0	0	0		0	0	0	0	302	-	
FERWOOD	-	0	0	0	9	0	-	0	735	2		0		0	0	0		0	0	0	0	748	m	
COURTICE	0	0	-	0	0	0	0	0	0	0		0		0	0	0		0	0	0	0	-		
HYDRO,M.	0	0	0	0	0	0	0	0	0	0		-		0	0	0		0	0	0	0	- '		
N.PICKERING	0	0	N	0	0	0	0	0	0	0		-		0	0	0		0	0	0	0	6		
GRAND TOTAL	1067	23	20	194	2652	128	42	104	2950	1400	4	12	749	27	20	0	49	110	-	6	108	9723	381	-
HRS. = HOURS TV = TURKEY VULTUR OS = OSPREY BE = BALD EAGLE	JLTUR		SHAF COO NOR RED	PER'S THER SHOU	SS = SHARP-SHINNED HAWK CH = COOPER'S HAWK NG = NORTHERN GOSHAWK RS = RED-SHOULDERED HAWK	HAWI	× ××		RT= RE RL = R GE = G AK = AI	= RED-TAILED HAWK = ROUGH - LEGGED HAWK = GOLDEN EAGLE	ED HV LEGC EAGI TREL	3ED I	HAWK		B B B B B B B B B B B B B B B B B B B	GYRE UNID.	PEREGRINE FALCON GYRFALCON UNID. ACCIPITER UNID. BUTEO	E FALCON NA IPITER	CON		UF = N	JNID. JNID.	FALCON	

## Raptor Count Totals - Observer Hours per Site



CRANBERRY MARSH SOUTH- PLATFORM AUTUMN RAPTOR TOTALS, AVERAGES, BIRDS BY SEASON PER HOUR

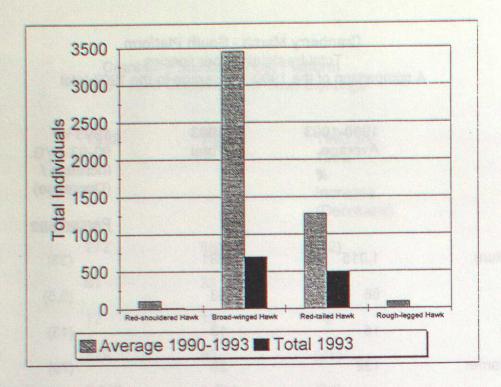
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u u	1	15	20	12	13	09	15
S	)	9/	94	61	33	264	99
2		886	1721	777	681	4060	1015
XX		1990	1991	1992	1993	TOTAL	AVERAGE
			1	9			

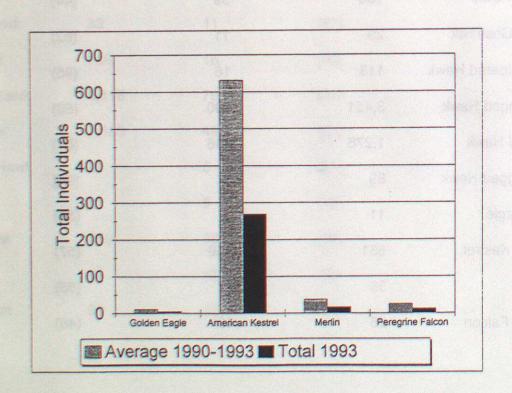
#### Cranberry Marsh - South Platform 1993 - 1992 Comparison of Total Sightings

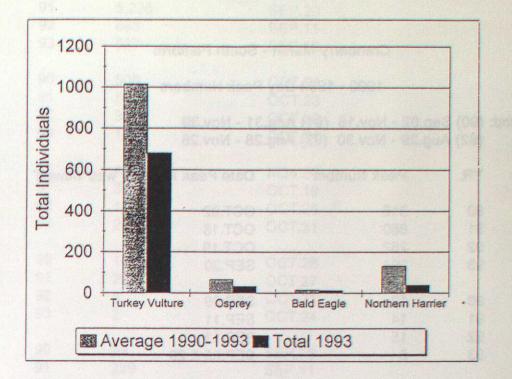
Species	1992	1993	1993 Vs 1992
			% Increase (Decrease)
Turkey Vulture	772	681	(12)
Osprey	61	33	(46)
Bald Eagle	12	13	8
Northern Harrier	129	93	(28)
Sharp-shinned Hawk	2,117	1,084	(49)
Cooper's Hawk	132	59	(55)
Northern Goshawk	33	11	(67)
Red-shouldered	168	16	(90)
Broad-winged Hawk	1,118	700	(37)
Red-tailed Hawk	1,483	496	(67)
Rough-legged Hawk	30	5	(83)
Golden Eagle	8	5	(38)
American Kestrel	758	269	(65)
Merlin	40	17	(58)
Peregrine Falcon	29	13	(55)

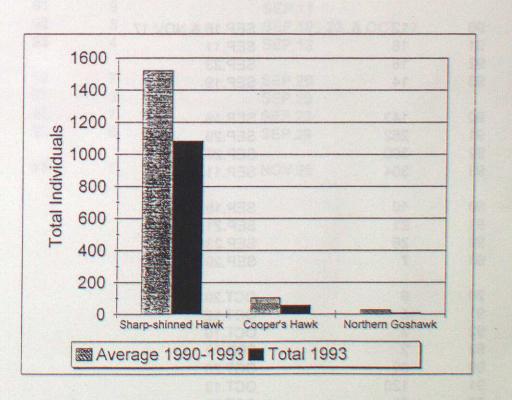
# Cranberry Marsh - South Platform Total by sightings per species A comparison of the 1990-93 average to the 1993 total

Species 800	1990-1993 Average	1993 Total	1993 vs 90-93 AVG. Increase / (Decrease)
			Percentage
Turkey Vulture	1,015	681	(33)
Osprey	66	33	(0.5)
Bald Eagle	15	13	(13)
Northern Harrier	132	39	(70)
Sharp-shinned Hawk	1,521	1,084	(29)
Cooper's Hawk	105	59	(44)
Northern Goshawk	29	11	(62)
Red-shouldered Hawk	113	16	(85)
Broad-winged Hawk	3,451	700	(80)
Red-tailed Hawk	1,276	496	(61)
Rough-legged Hawk	89	5	(94)
Golden Eagle	11	5	(54)
American Kestrel	631	269	(57)
Merlin	38	17	(55)
Peregrine Falcon	25	13	(48)









#### Cranberry Marsh - South Platform

#### 1990 - 1993 Day Peak Numbers

Viewing Period: (90) Sep.02 - Nov.18 (91) Aug.31 - Nov.30 (92) Aug.29 - Nov.30 (93) Aug.28 - Nov.28

Species	YR.	Peak Number	Date Peak Number was viewed
TV	90	316	OCT.02
	91	860	OCT.13
	92	252	OCT.19
	93	294	SEP.30
OS	90	12	SEP.09
	91	14	SEP.11
	92	15	SEP.11
	93	6	SEP.05 & 29
BE	90	4	SEP.16
	91	4	SEP.29
	92	4	SEP.23
	93	5	SEP.19
NH	90	12	SEP.16 & NOV.17
	91	18	SEP.11
	92	16	SEP.23
	93	14	SEP.19
SS	90	143	SEP.16
	91	252	SEP.29
	92	300	SEP.23
	93	304	SEP.11
СН	90	10	SEP.16
	91	21	SEP.21
	92	26	SEP.23
	93	7	SEP.29
NG	90	6	OCT.20
	91	5	OCT.12
	92	5	OCT.19
	93	2	SEP.19
RS	90	30	OCT.26
	91	120	OCT.13
	92	80	OCT.25
	93	4	OCT.27

BW	90	4,111	SEP.16
	91	5,236	SEP.20
	92	683	SEP.11
	93	537	SEP.19
RT	90	505	OCT.26
	91	600	OCT.28
	92	371	OCT.25
	93	162	OCT.31
RL	90	47	NOV.08
	91	33	OCT.19
	92	10	OCT.25
	93	2	OCT.31
GE	90	10	OCT.26
	91	2	OCT.27
	92	5	OCT.31
	93	2	OCT.24
AK	90	99	SEP.16
	91	229	SEP.11
	92	179	SEP.29
	93	59	SEP.11
ML	90	5	SEP.16
	91	9	SEP.11
	92	5	SEP.19 , 23, & OCT.17
	93	4	SEP.12
PG	90	7	SEP.29
	91	5	SEP.29
	92	7	SEP.23
	93	6	SEP.29
GY	91	1	NOV.30

#### Cranberry Marsh - South Platform Range of Dates 1990 - 1993

Species TV  90 Sep.02 - Oct.29 91 Aug.31 - Oct.28 92 Aug.31 - Nov.07 93 Sep.10 - Oct.27  OS  90 Jul.22 - Oct.16	2
91 Aug.31 - Oct.28 92 Aug.31 - Nov.07 93 Sep.10 - Oct.27	2
93 Sep. 10 - Oct. 27 90 Jul. 22 - Oct. 16	2
90 Jul.22 - Oct.16	
91 Aug.31 - Nov.02	
92 Aug.01 - Oct.23	
93 Aug.28 - Oct.25	
BE 90 Sep.02 - Nov.10	
91 Sep.01 - Nov.10	6
92 Aug.29 - Nov.1	6
93 Sep.11 - Nov.0	1
NH 90 Sep.02 - Nov.1	7
91 Aug.31 - Nov.2	5
92 Aug.11 - Nov.2	2
93 Aug. 28 - Nov. 1	
SS 90 Sep.02 - Nov.1	7
91 Aug.31 - Nov.3	0
92 Jul.10 - Nov.15	5
93 Aug.28 - Nov.2	22
CH 90 Sep.01 - Nov.1	
91 Aug.31 - Nov.3	30
92 Sep.01 - Nov.2	28
93 Sep.05 - Nov.0	06
NG 90 Sep.15 - Nov.	18
91 Sep.02 - Nov.	
92 Aug.15 - Nov.	07
93 Aug.08 - Nov.	

	Species	Year	Filght Period
	RS	90	Sep.16 - Nov.18
		91	Sep.29 - Nov.10
		92	Sep.23 - Nov.07
		93	Sep.03 - Nov.22
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	BW	90	Sep.02 - Oct.02
		91	Aug.31 - Oct.13
-		92	Aug.29 - Sep.29
		93	Aug.29 - Oct.14
	RT	90	Sep.02 - Nov.18
		91	Aug.31 - Nov.25
		92	Aug.21 - Nov.15
		93	Aug.28 - Nov.26
	RL	90	Oct.14 - Nov.18
		91	Oct.06 - Nov.28
		92	Sep.19 - Nov.15
		93	Oct.22 - Nov.07
	GE	90	Oct.26 - Nov.10
		91	Sep.11 - Nov.18
		92	Oct.19 - Oct.31
		93	Sep.30 - Nov.02
	AK	90	Sep.02 - Oct.26
		91	Aug.31 - Nov.25
		92	Aug.22 - Nov.08
		93	Aug.28 - Oct.24
	ML	90	Sep.13 - Oct.16
		91	Aug.31 - Oct.31
		92	Jul.22 - Oct.25
		93	Sep.02 - Oct.26
	PG	90	Sep.08 - Oct.06
		91	Aug.31 - Nov.17
		92	Aug.29 - Oct.25
		93	Sep.25 - Oct.24
	GY	91	Nov.30

#### PEAKS, AND RANGE OF DATES VIEWED DURING THE PERIOD OF AUG.28 TO NOV.28

SPECIES	NUMBER	PEAK DATE	RANGE OF DATES	SITE THAT PEAK WAS VIEWED	
TV	294	SEP.30	AU.29 / NO.01	CRANBERRY- SOUTH PLATFORM	
os	6	SEP.5 / SEP.29	AU.28 / OC.25	CRANBERRY- SOUTH PLATFORM	
BE	5	SEP.19	AU.30 / NO.07	CRANBERRY- SOUTH PLATFORM	
NH	30	OCT.09	AU.28 / NO.13	TORONTO ISLANDS	
SS	520	SEP. 11	AU.28 / NO.22	HIGH PARK	
СН	22	OCT.18	SE.04 /NO.06	HIGH PARK	
NG	9	OCT.10	AU.29 / NO.06	TORONTO ISLANDS	
RS	73	OCT.18	SE.17 / NO.22	HIGH PARK	
BW	735	SEP.16	AU.29 / OC.14	FERNWOOD AVE OSHAWA	
RT	515	NOV.01	AU.28 / NO.26	HIGH PARK	
RL	3	NOV.01	OC.10 /NO.07	HIGH PARK	
GE	2	OCT.24 / NOV.06	SE.30 / NO.07	CRANBERRY / HIGH PARK	
AK	92	SEP.11	AU.28 / NO.06	CRANBERRY - HALLS ROAD	
ML	4	SEP.12	SE.04 / OC.26	CRANBERRY- SOUTH PLATFORM	
PG	6	SEP.29	SE.05 / OC.24	CRANBERRY- SOUTH PLATFORM	

NUMBER OF TIMES WEATHER CONDITIONS OCCURED DURING VIEWING PERIOD

SOURCE: "THE TORONTO STAR NEWSPAPER; DAILY WEATHER FORECAST"; PREPARED BY MTI. INC.

TIME OF DAY: AUG.28 TO NOV.02 - 8AM / 5PM | NOV.03 TO NOV.28 - 7AM / 4PM

MONTH DAYS	Aug-93 28-31	SEPT. 01-30	OCT. 01-31	NOV. 01-28	
CONDITIONS					TOTAL
N	0	7	5		
NE	0	2	o o	4	16
M NW	1	7	6	4 7	6
NNE	0	3	2		21
NNW	1	5	5		6
S	1	4	5	2	13
SE	1	6	7	0	18
SW	0	7	7	5	19
SSE	1	4 20 4	PERSON AND IN	11	25
SSW	0	,			10
W	0	8	12	6	9
WNW	1	4	12	6	28
WSW	10 10 0	5	Q	0	12
E	1	2	4	4	15
ESE	0	5	2		8
ENE STATE	0				8
0,OSS,ONO,OSO	0	2		2	4
CALM	1	9	· ·	7	3
RAIN	0	10	7		26
SNOW	0	0		· ·	25 6
SUNNY	2	9	11	,	30
P.CLOUDY	3	15	12	5	
M.CLOUDY	3	0	ō	Ŏ	35
FEW CL.	0	4	4	1	9
CLOUDY	0	20	24	23	67

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CMRW-HR MBRW	CMRW-S.P.	SEATON,T	CMRW-HR	PWRW PWRW	CMRW-S.P	CMRW-S.P	CMRW-S.P.	HIGH PARK		PWRW	CMRW-S.P	MBRW	CMRW-S.P.	CMRW-S.P.	CMRW-S.P.	CMRW-S P	CMRW-HR	MBRW	TORONTO	MBRW	TORONTO	CMRW-S.P	PWRW	CMRW. S D	CMRW-S.P	SEATON,T.	PWRW PWRW	CMRW-S.P	HIGH PARK	CMRW-S.P	MBRW	CMRW-S.P	CMRW-S.P	CMRW-S.P.	CMRW-S.P	CMRW-S.P.	CMRW-S.P	CMRW-S.P	
CM	S	SEA	CM	S S	CMR	CMR	CM	HIGH		d	CMR	Σ	CMR	CMR	CMR	CME	CMR	M	TORK	M C	TORC	CMR	2	E C	CMR	SEA	E S	CMR	HOH C	CMR	ME	CMR	CMR	CMR	CME	CMR	S S S S S S S S S S S S S S S S S S S	SAME OMES	
3/93	4/93	5/93	5/93	5/93	1/93	8/83	28/8	1/93	25	193	2003	1/93	5/93	3/93	193	193	88/			193	/93	193	193	193	/93	193	193												R
SE/23/93 SE/24/93	SE/24/93 SE/24/93	SE/25/93	SE/25/93	SE/25/93 SE/25/93	SE/27/93	SE/28/93	SE/20/83	SE/30/93		OC/01/93	0000283	OC/05/93	OC/05/93	OC/06/93	000/07/93	OC/09/93	OC/09/93	OC/08/93	OC/09/93	00/10/93	OC/10/93	OC/11/93	OC/11/93	OC/14/93	OC/15/93	OC/16/93	OC/16/93	OC/18/93	OC/18/93 OC/20/93	OC/22/93	OC/23/93	OC/23/93	OC/25/93	OC/26/93	OC/27/93	OC/28/93 OC/29/93	OC/30/93	OC/31/93	
												No.																		0	0				9 (		0		
									OTAL																			*										T. A.	2

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12-28	12-28 05-19	20-28	12-19	06-11	26-59	13-59	13-22	17-22		
		MNN NN		VARIABLE			W, SW NE, ENE, E	NW.WNW.		
CMRW-S.P. HIGH PARK	HYDRO MA CMRW-S.P.	CMRW-S.P. HIGH PARK	N.PICKERIN CMRW-S.P.	CMRW-S.P.	CMRW-S.P.	CMRW-S.P.	CMRW-S.P.	CMRW-S.P.		13
		NO/06/93 NO/06/93					NO/22/93 NO/26/93	NO/28/93	13	89
		32							M.TOTAL	G.TOTAL

DATES	SPECIE	OBS. COUNTER	TEMP.c	WEATHER	HUMIDITY BAR.PR.	" DATES
MT/DD/YF	7		L/H	CONDITIONS	AM/PM	MT/DD/YR
AU/28/93	5	4 J.BARKER	19-26	CLEAR	86-47	AU/28/93
AU/29/93	2	2 D.LOCKREY	15-23	HAZE	94-55	AU/29/93
AU/29/93	7	5 J.BARKER	15-23	HZ-P.CLCLEA	94-55	AU/29/93
AU/30/93	3	1 T.HOAR	20-25	CLEAR	72-61	AU/30/93
AU/31/93	1	2 D.LOCKREY	22-27	CLOUDY	91-75	AU/31/93
TOTAL						NOI01199
SE/01/93	0	1 D.LOCKREY	14-23	P.CLOUDY	88-52	SE/01/93
SE/04/93	8	4 J.B./A.LISK	16-23	P.CLOUDY	94-52	SE/04/93
SE/05/93	8	6 D.LOCKREY	15-20	CLOUDY	90-64	SE/05/93
SE/05/93	9	7 D.L. / J.B.	15-20	CLOUDY	90-64	SE/05/93
SE/05/93	4	1 J.BARKER	15-20	OC - CLEAR	90-64	SE/05/93
SE/05/93	1	1 J.IRON	15-20	CLOUDY	90-64	SE/05/93
SE/06/93	4	6 J.BARKER	11-13	RAIN	93-80	SE/06/93
SE/07/93	2	2 A. SHAMIR	10-19	CLR P.CLOUD	93-52	SE/07/93
SE/07/93	7	2 A.L. / D.L.	15-20	P.CLOUDY	93-52	SE/07/93
SE/08/93	3	2 T.HOFMAN	10-21	CLOUDY	94-46	SE/08/93
SE/09/93	2	2 A. SHAMIR	10-21	CLOUDY	94-46	SE/09/93
SE/10/93	7	2 A.L. / D.L.	13-16	DRIZZLE / RAIN	92-85	SE/10/93
SE/11/93	8	8 J.IRON	09-14	P.CLOUDY	82-59	SE/11/93
SE/11/93	7	8 J.BARKER	09-14	P.CLOUDY	82-59	SE/11/93
SE/11/93	8	1 A. LISK	09-14	P.CLOUDY	82-59	SE/11/93
SE/11/93	7	? B. YUKICH	09-14	P.CLOUDY	82-59	SE/11/93
SE/11/93	1	1 A. SHAMIR	09-14	P.CLOUDY	82-59	SE/11/93
SE/12/93	5	4 J.BARKER	12-20	CLOUDY / SHO	82-56	SE/12/93
SE/12/93	6	1 A. LISK	12-20	CLEAR / P. CL.	82-56	SE/12/93
SE/12/93	4	7 D.L./RF.PYE	12-20	OVERCAST	82-56	SE/12/93
SE/13/93	7	3 J.BARKER	19-27	CLEAR / P. CL.	68-55	SE/13/93
SE/14/93	2	1 J.BARKER	22-28	CLOUDY	67-58	SE/14/93
SE/14/93	3	1 J.BARKER	22-28	CLOUDY	67-58	SE/14/93
SE/15/93	5	2 J.BARKER	13-15	CLOUDY	93-72	SE/15/93
SE/15/93	3	1 P.HOLDER	13-15	CLOUDY	93-72	SE/15/93
SE/16/93	8	4 J.BARKER	05-15	CLEAR	87-61	SE/16/93
SE/16/93	6	1 D.VINSON	05-12	CLEAR	87-61	SE/16/93
SE/16/93	5	3 J.BARKER	05-15	CLEAR	87-61	SE/16/93
SE/17/93	5	4 J.BARKER	11-16	CLOUDY	91-70	SE/17/93
SE/18/93	3	2 RF-PYE, J.IRON	14-17	CLOUDY	57-65	SE/18/93
SE/18/93	2	2 J.B./RF.PYE	14-17	CLOUDY	57-65	SE/18/93
SE/18/93	2	1 J.BARKER	14-17	CLOUDY	57-65	SE/18/93
SE/19/93	8	1 T.HOAR	06-11	CLEAR	87-46	SE/19/93
SE/19/93	11	15 J.BARKER	06-14	CLEAR	87-46	SE/19/93
SE/19/93	3	5 J.BARKER	06-14	CLEAR	87-46	SE/19/93
SE/21/93	1	1 A. SHAMIR	08-15	CLOUDY/SHOW	80-72	SE/21/93
SE/21/93	1	1 A. SHAMIR		CLOUDY/SHOW	80-72	SE/21/93
SE/22/93	5	2 A. SHAMIR	05-18	CLEAR	90-62	SE/22/93
SE/22/93	5	2 D.LOCKREY	05-18	CLEAR	90-62	SE/22/93
SE/23/93	4	2 A. SHAMIR	16-19	P.CLOUDY	53-55	SE/23/93
SE/23/93	4	1 J.LARKIN	16-19	P.CLOUDY	91-55	SE/23/93
SE/24/93	3	1 SKUA	06-18	CLEAR / P. CL.	87-42	SE/24/93
SE/24/93	8	3 D.LOCKREY		CLEAR / P. CL.	87-42	SE/24/93
SE/24/93	5	2 T.HOFMAN		CLEAR / P. CL.	87-42	SE/24/93
SE/25/93	3	1 A. SHAMIR	06-18	P.CLOUDY	92-42	SE/25/93
SE/25/93	3	1 RF.PYE	17-19	P.CLOUDY	92-42	SE/25/93
SE/25/93	3	3 DL,RF.P.,M.BAIN	17-19	P.CLOUDY	92-45	SE/25/93
SE/25/93	4	3 J.BARKER	06-18	CLEAR	92-45	SE/25/93
SE/27/93	2	1 A. LISK	11-14	CLOUDY	91-85	SE/27/93
SE/28/93	5	1 A. LISK		CLOUDY/SHOW	65-84	SE/28/93

	**	3 M.KING,A.L.,D.CALV	05-10	CLOUDY/P.CLO	86-62		SE/29/93
SE/29/93	10	4 D.L./ R.SHILLABEER	00-09	CLEAR	91-32		SE/30/93
SE/30/93	12	1 B. YUCKICH	00-09	CLEAR	91-32		SE/30/93
SE/30/93	1	1 B. TUCKICH	00 00				
TOTAL		* DI COMPEY	09-16	CLOUDY	72-54		OC/01/93
OC/01/93	5	1 D.LOCKREY	11-13	CLOUDY/CLEA	89-43		OC/02/93
OC/02/93	2	2 J.BARKER		CLEAR/ CLOUD	76-47	30.8	OC/03/93
OC/03/93	4	4 J.BARKER / J.IRON	02-10	CLEAR/ CLOUD	77-42		OC/05/93
OC/05/93	5	1 D. WIENS		CLOUDY	77-42		OC/05/93
OC/05/93	7	2 A.LISK / D.JONAK	02-10	CLOUDY	83-55		OC/06/93
OC/06/93	3	1 D.WORTHINGTON	09-13	CLEAR	72-48		OC/07/93
OC/07/93	4	2 J.LARKIN/ D.CALVE	13-22		85-46		OC/08/93
OC/08/93	3	1 A.LISK	13-25	CLEAR	96-80		OC/09/93
OC/09/93	4	2 D.CALVERT / A.LISK	04-06	SHOWERS/RAI	96-80		OC/09/93
OC/09/93	2	1 J.BARKER	04-06	OVERCAST	96-80		OC/09/93
OC/09/93	2	1 RF.PYE	04-06	SHOWERS			OC/09/93
OC/09/93	8	J.GUILD	04-06	SHOWERS/RAI	96-80		OC/10/93
OC/10/93	9	2 RF.PYE / W.TODD	m02-07	CLOUDY.	81-54	31	OC/10/93
OC/10/93	7	19 J.BARKER	m02-07	CLOUDY/CLEA	81-54	31	OC/10/93
OC/10/93	8	1 N.MURR	m02-07	P.CLOUDY	81-54		OC/11/93
OC/11/93	3	1 ALISK	m01-10	CLEAR	89-44	00.5	OC/11/93
OC/11/93	8	5 J.BARKER	m01-10	CLEAR /P.CLOU	89-44	30.5	The second second second second
OC/13/93	7	1 N.MURR	m01-07	P.CLOUDY	81-39		OC/13/93
OC/14/93	7	1 D.LOCKERY	m03-09	P.CLOUDY	87-64		OC/14/93
OC/15/93	2	1 D.LOCKERY	05-11	CLOUDY/SHOW	87-80		OC/15/93
OC/16/93	1	2 D.L. / S.KENN	09-15	CLOUDY/SHOW	95-94		OC/16/93
OC/16/93	1	1 D.CALVERT	09-15	CLOUDY/SHOW	95-94		OC/16/93
OC/16/93	2	1 J.BARKER	09-11	CLOUDY/SHOW	95-94	30.3	OC/16/93
OC/18/93	9	2 A.LISK / M. KING	07-11	CLEAR /P.CLOU	70-56		OC/18/93
OC/18/93	10	3 N.MURR	07-11	CLOUDY	70-56		OC/18/93
OC/20/93	3	1 D.LOCKERY	03-11	CLOUDY	90-88		OC/20/93
OC/22/93	2	2 T.HOFMAN	06-08	CLOUDY	65-63		OC/22/93
OC/23/93	3	2 E.COES / A.SHAMIR	00-10	CLEAR	92-67		OC/23/93
OC/23/93	5	6 J.BARKER / RF.PYE	00-10	CLEAR	92-67	31.6	OC/23/93
OC/24/93	8	5 J.BARKER / RF.PYE	12-18	CLEAR /P.CLOU	61-48	31.1	OC/24/93
OC/25/93	8	2 J.BARKER	04-10	CLEAR	91-60	31.3	OC/25/93
OC/26/93	5	2 J.BARKER	04-15	P.CLOUDY	87-55	31.1	OC/26/93
OC/27/93	8	3 J.BARKER	08-10	RAIN/ P.CLOUD	88-69	31	OC/27/93
OC/28/93	0	2 J.BARKER	04-10	OVERCAST	86-59	30.8	OC/28/93
OC/29/93	0	2 J.BARKER	07-10	CLOUDY / CLEA	48-56	30.7	OC/29/93
	2	4 J.BARKER	00-06	CLOUDY	77-53	31	OC/30/93
OC/30/93 OC/31/93	5	5 J.BARKER	01-02	SNOW/RAIN	93-96	30.9	OC/31/93
TOTAL		J J.BARTER					
NO/01/93	2	1 P.HOLDER	m01-04	CLOUDY	72-60		NO/01/93
NO/01/93	9	2 B.YUKICH / M.KING	m01-02		72-60		NO/01/93
NO/01/93	1	1 P.HOLDER	m01-04		72-60		NO/01/93
NO/01/93	1	2 M.WILSON & M.SPEI			72-60		NO/01/93
NO/02/93	4	1 D.LOCKREY	m04-06		93-60		NO/02/93
NO/06/93	6	6 J.BARKER	m01/+1		79-81	30.9	NO/06/93
NO/06/93	6	? N.MURR	00-01	CLOUDY	61-81		NO/06/93
NO/07/93	0	3 J.BARKER	00-02	CLOUDY	72-60	31.1	NO/07/93
NO/07/93	2	1 A.VILKS	m01-02		72-60		NO/07/93
	0	2 D.LOCKREY	m04-06		93-60		NO/09/93
NO/09/93	1	3 J.BARKER	04-11	CLOUDY/ RAIN	96-86		NO.13/93
NO/13/93		1 J.BARKER	09-11	CLOUDY/ RAIN	88-95		NO/14/93
NO/14/93	0	1 D.LOCKREY	04-06	CLOUDY	74-72		NO/16/93
NO/16/93		1 J.BARKER	m03/+0		96-87		NO/20/93
NO/20/93	0	0 J.BARKER		CLOUDY/P.CLO	75-58		NO/21/93
NO/21/93	0	2 D.CALVERT/D.PEUR		SUNNY	63-59		NO/22/93
NO/22/93	2			5 CLOUDY/FLUR	71-80		NO/26/93
NO/26/93	1	1 D.LOCKREY		CLOUDY/P.CLO	95-70		NO/28/93
NO/28/93	0	2 J.BARKER	01-02	CLOUDTIP.CLO	90-10		NOIZOISS

DATES MT/DD/YR AU/28/93	COMMENT
AU/29/93	
AU/29/93	N.GOSHAWK, 10:AM EST
AU/30/93	
AU/31/93	BALD BACK , 101: 1 LAN, O.AIVI EST
A010 1100	
SE/01/93	
	BE; 4-5YR , CAUGHT FISH X 3 TIMES
	RT; 1- DARK MORPH
SE/05/93	NG; SNAKE OR JESSES IN TALONS?
SE/05/93	NO, ONARE ON DECOES IN TAECHS!
SE/05/93	
SE/06/93	
SE/07/93	
SE/07/93	
SE/08/93	
SE/09/93	
SE/10/93	
SE/11/93	
	NG; 10:AM EST
SE/11/93	NO, 10.AW E01
SE/11/93	
SE/11/93	
	CH; 5-F, 1-M, IN A TIGHT FLOCK
SE/12/93	BW; ONE ADDED, SEEN JUST S.OF SITE
SE/12/93	DW, ONE ADDED, SEEN 3031 S.OF SITE
SE/13/93	
SE/14/93	
SE/14/93	
SE/15/93	NH; IST MALE SEEN
SE/15/93	
SE/16/93	BE; 9:07AM - 1ST YR./ 9:55 UNKNOWN
SE/16/93	
SE/16/93	
SE/17/93	
SE/18/93	
SE/18/93	
SE/18/93	
SE/19/93	NG; 12:12-IMM, 12:25-ADULT
SE/19/93	BW; FLYING VERY HIGH , NH; 2-M, BE; 2-AD, 1-3Y, 1-2Y, 1-UKN.
SE/19/93	
SE/21/93	
SE/21/93	
SE/22/93	
SE/22/93	
SE/23/93	
SE/23/93	
SE/24/93	
SE/24/93	
SE/24/93	
SE/25/93	
SE/25/93	
SE/25/93	
SE/25/93	
SE/27/93	
SE/28/93	

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SE/30/93 GE: ADULT 10:15AM EST SE/30/93 OC/01/93 GE; 1ST. YEAR, 9:40AM OC/02/93 OC/03/93 OC/05/93 OC/05/93 BE: 2ND YEAR, 1:PM OC/06/93 BE; 1ST YEAR & 2ND YEAR OC/07/93 OC/08/93 OC/09/93 HEAVY AND CONSISTENT RAIN, ENDED 12:30PM EST. OC/10/93 RL; LIGHT MORPH OC/10/93 BIRDLIFE INTERNATIONAL" - "WORLD BIRDWATCH" OC/10/93 OC/11/93 OC/11/93 POSSIABLY A BALD EAGLE? OC/13/93 OC/14/93 BE; 10:50AM EST OC/15/93 OC/16/93 RL; LIGHT MORPH OC/16/93 OC/16/93 OC/18/93 NG; 12:30PM EST OC/18/93 GE: 1ST YEAR 4:45PM EST OC/20/93 OC/22/93 OC/23/93 OC/23/93 OC/24/93 GE; 1ST YEAR, 1:21PM EST/ ADULT, 1:25PM EST OC/26/93 GE; 1ST YEAR, 11:55 PM EST OC/27/93 NH; FLYING V.HIGH, N-SW, NOT NORMAL IN OUR AREA. OC/28/93 OC/29/93 OC/30/93 OC/31/93 BE; 2:33 PM EST, 2ND YEAR NO/01/93 BE: 1:PM, 1ST YEAR NO/01/93 RT; \* CONTINUED STREAM OF RED-TAILS IN A FOUR HOUR PER NO/01/93 BE; 1ST YEAR NO/01/93 GE; ADULT NO/02/93 GE: ADULT, 11:45AM NO/06/93 RT; SUB-SPECIES: " abietcola " = 4 hawks, heavily pigmented birds. NO/06/93 GE; 1ST YR., 1:40PM , ADULT, 1:42PM NO/07/93 NO/07/93 BE; 10:30AM , TWO- 1ST YEAR GE; 10:15AM - UNKNOWN NO/09/93 NO.13/93 NO/14/93 NO/16/93 NO/20/93 WIND CHILL - 15c NO/21/93 NO/22/93 NO/26/93 UA; POSSIABLE N.GOSHAWK NO/28/93

BIRDS PER HOUR : SHOWING DIFFERENCE	'S BETWEEN SPECIES AND LOCATION
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SITE\SPECIES	TV	OS	BE	NH	SS	СН	NG	RS	BW	RT	RL	GE	AK	ML	PG
CMRW-SP CMRW-HR HIGH PARK MBRW PWRW SEATON,T. MYRTLE,ST. FERNWOOD TOR.ISLANDS	3.7 0.1 8.9 2.4 0.6 0.3	0.2 0.4 0.1 0.3 0.1	0.07 0.05 0.04	0.5 0.4 0.6 0.7 0.05 0.05	6 6.6 23 9.2 2 0.8 3.7 2 4.4	0.3 0.1 10 0.2 0.3 0.2 1.2	0.06 0.05 0.31 0.2 0.05 0.4 0.3 0.9	0.09 0.01 2.61 0.05	3.8 9 8 2.9 4.9 0.2 68.4 245 0.1	2.7 0.3 24 0.2 0.4 0.4 1.2 0.6 0.4	0.03 0.18 0.08 0.05	0.03 0.12 0.02	1.5 4 2.3 4.9 0.4 0.05 0.8 1 0.8	0.09 0.08 0.08 0.02	0.07 0.2 0.05

COMMREDOY MARCH		SOUTH PLATFORM	-	WHITEY	- DURHAM RM - ONTARIO	
CHARGERAL BARROTT	-	CONTRACTOR MANAGEMENT		The second second		

	DATE AU.28 AU.29	HRS 6	TV	os <sub>1</sub>	BE	NH 1	SS 7	СН	NG	RS	BW 1	RT 1	RL	GE	AK 4	ML	PG (	GY	UA	UB	UE	UF	UR 1	TOTAL 15 5 2
	AU.31	3						0	0	0	1	1	0	0	6	0	0	0	0	0	0	0	1	22
otal	3 SE.01	10	0		0	1	- 11	•								2			4	2			. 1	191
	SE.05 SE.07	4.5		6		2	153	4	1		11	3			3	1				0			D.	38
	SE.10	5	1	1		1	28	3				10			2 59	1								37 508
	SE.11 SE.12	5		5	1	7	304	2			114	16			6	4			1	1				31
	SE.18	2		3			6	3	2	3	537	11			43				4	6		2	6	12 724
	SE.19 SE.21	6	20	4	5	14	13	•		3														13 24
	SE.22	2		1 2		2 7	17 13	2			3	1			16	1								45
	SE.24 SE.25	3 4		*			2					1			1		2							5 2
	SE.27 SE.28	1				1	1					1			1	1	1							5
	SE.29	4.5	30	6		8	71	7			5	13			47 27	1 2	6		5	2		1	3	202 516
otal	SE.30	6.5 56.5	294 345	29	6	13 56	114 832	5 28	1	1	19 695	30 75	0	1	211	13	10	0	13	12	0	3	11	2353
	OC.02	6		1	4.1	2.00	2					2					1			1			1	8
	OC.03 OC.05	3		1	1	3	3 28	1	1			1			3									38
	OC.06	3			2	2	5	1	1						1									13
	OC.07 OC.08	2.5	5			*	1	1							2									4
	OC.09 OC.10	2.5	9 227			6	9 92	1 6				4			25	1			1	1			2	25 367
	OC.11	2					4								6	1				1				12
	OC.14 OC.15	1	2		1		12 2	2			4	3			6									30
	OC.16	1.5														1								1 120
	OC.18 OC.20	4	10			5	68	6	1	3		21			5		1							5
	OC.22 OC.23	2.5					4		1			2 5	1		1				1	3			1	3 24
	OC.24	7.5	8 73				2	1		1		4		2	2		1		1	1				88
	OC.25 OC.26	7	1	1		3	4	. 3	1	1		6	1	1		1			1	2			3	26 12
	OC.27	5	1		1	3	1	2	1	4		26							1					40
	OC.28 OC.29	2																						0
	OC.30	5						2				10								1			1	14
otal	OC.31	91.5	336	3	6	32	237	29	6	9	4	162 257	2	3	52	4	3	0	5	20	0	0	11	180 1021
	NO.01 NO.02	1.5 1.5			1	4	,					83		4										84
	NO.06	6				1 2	2	2	1	2		73		1					1	5			1	88
	NO.07 NO.09	3 2											1											1 0
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CRANBERRY MARSH - HALLS ROAD - WHITBY - DURHAM RM - ONTARIO

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MCLAUGHLIN BAY WILDLIFE RESERVE RAPTOR WATCH - OSHAWA - DURHAM RM - ONTARIO

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- ONTARIO PURPLE WOODS CONSERVATION AREA RAPTOR WATCH - SCUGOG - DURHAM RM

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SEATON TRAIL; SOUTH OF CONCESSION # FOUR - PICKERING - DURHAM RM - ONTARIO

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SKUA SUPPLIES; PARKING LOT - HWY 2 WEST OF WESTNEY ROAD, NORTH OF THE HWY 401- AJAX - DURHAM RM - ONTARIO

DATE TV OS BE NH SS CH NG RS BW RT RL GE AK ML PG GY UA UB UE UF UR TOTAL 302 SE.15

FERNWOOD AVE.- OSHAWA - DURHAM RM.- ONTARIO

DATE TV OS BE NH SS CH NG RS BW RT RL GE AK ML PG GY UA UB UE UF UR TOTAL SE.16 1 6 1 735 2 3

HYDRO MARSH - PICKERING - DURHAM RM - ONTARIO

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COURTICE - NEWCASTLE - DURHAM RM - ONTARIO

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NORTH PICKERING - DURHAM RM - ONTARIO

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HIGH PARK RAPTOR WATCH - ETOBICOKE - ME

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