

- Orians, G. H. 1971. In Farner, D. S. and J. R. King. *Avian Biology*. Academic Press, New York. 586 p.
- Rockwell, A. D. 1971. Field Notes. *Pennsylvania Game News* 42-8:35.
- Schmidt, Hans. 1948. *Die Vogel Sudamerikas*. San Andres, Argentina. 382 p.
- Welly, J. C. 1962. *The Life of Birds*. W. B. Saunders. Philadelphia. 546 p.
- Wernstedt, F. L. 1972. *World Climatic Data*. Climatic Data Press. Lamont, Pennsylvania.

Broome Co. Coop. Ext. Assoc. Binghamton, New York 13905
State University of New York at Binghamton, Binghamton, New York
13901

THE 1972 SPRING MIGRATION AT DERBY HILL WITH REMARKS ON THE PERIOD 1963-1971

GERALD A. SMITH

I. INTRODUCTION

During the last ten years a considerable amount of data on the spring migration occurring at the Derby Hill hawk lookout on the southeastern corner of Lake Ontario has been assembled. Beginning with the observations of J. R. Haugh and T. J. Cede during the early and mid-nineteen sixties, observations have been made on a regular basis. Some new data, particularly regarding the length of the period of migration of some hawks and seasonal counts of some species, have been obtained. It is the purpose of this paper to review the 1972 spring migration at Derby hill with special emphasis upon the hawk movements. Also, where pertinent, comments regarding new data obtained since 1965 will be included.

II. THE 1972 HAWK MIGRATION

A. GENERAL COMMENTS

The 1972 hawking season was one of distinct contrasts. The opinion of any observer on how good a year it was depended mainly upon how lucky or persistent he was. There were many days when observers would leave Syracuse, only forty miles to the south, with southerly winds prevailing, only to reach Derby and find the winds coming from the north. Consequently, they saw only a poor flight when these conditions prevailed. On the other hand, when the correct conditions occurred, the flights were often quite spectacular. This combination of events produced several interesting occurrences. Among these were record single day totals for four species, and record late departure dates for five species.

The season began in late February and continued through most of the month of March with very few major movements. The first two-thirds of March saw no one-hundred-plus days. There was also very little variety during this period, as Red-tailed Hawks made up most of the flight. March 20-21 saw the first large flight, consisting mainly of Red-tailed Hawks and Red-shouldered Hawks. The final day of the month brought the best movement to date, 520 birds, including two Golden Eagles. Following the continuation of the March 31 movement on April 1, the dismal weather returned. The next ten days of April brought snow, cold and north winds, weather so adverse that it greatly retarded migration. These conditions were in turn probably responsible for setting the stage for the massive movements of the period April 12-18. This damming effect finally gave way on April 12 and provided a spectacular flight of Red-tailed Hawks, Red-shouldered Hawks and Turkey Vultures, with lesser numbers of other species. This flight was followed in quick succession by another huge movement on the fifteenth, in which Sharp-shinned Hawks, Marsh Hawks and Sparrow Hawks were the star performers. April 18 produced all fifteen species of hawks that normally occur at Derby, including the best Broad-winged Hawk flight of the year and three eagles. Thus, in the course of this one remarkable week, 7762 hawks of fifteen species, more than fifty percent of the season total, passed the lookout. The remainder of April was disappointing in the number of hawks seen. In a normal year this is the period when large flocks of Broad-winged Hawks pass the lookout. This year, however, there was no huge "big day." Instead the birds drifted through on several days of 200-700 a day. In part this was due to unfavorable wind conditions along the lakeshore. On several of these days southerly winds prevailed as far north as Mexico, New York about five miles south of Derby. North of the village, however, northerly winds prevailed so the flight that was occurring was greatly dispersed and many birds were missed. The first half of May was in large measure a continuation of April. The flights began to diminish gradually as they usually do at this time, but several large movements were noted somewhat later than usual. In particular the movement of May 14 was very large for so late, in numbers and in variety. The overall tardiness of the migration was in part reflected by several record late dates this year. Late May and early June brought the season gradually to a close as the flights diminished to 5-50 birds a day. As has been noted during the past three years, due mainly to increased observations, the hawk migration extends well into June. It now seems that flights of one-hundred-plus hawks, mainly immature Broad-winged Hawks, can occur as late as mid-June. This year observations were made on three dates in June and 143 hawks of seven species were noted. A large late flight of 121 individuals, mostly immature Broad-winged Hawks, with a scattering of other hawks, on June 14 brought the season to a close.

Perhaps the most striking facet of the 1972 hawk migration at Derby hill was the extreme concentration of a large portion of the hawks that migrate early into a one-week period in mid-April. This concentration must be regarded as in large part responsible for the record high daily counts that occurred during this period. Also it is likely that this effect is in part responsible for the record high seasonal counts of some species. These birds probably passed in a mass movement when observers were present instead of a portion of them slipping through on days when observers were not present. Likewise, the lack of favorable conditions for concentrating hawks during the migration period of the Broad-winged Hawks is most likely the reason for the low counts of that species. Thus the 1972 season clearly illustrates just how greatly such factors as weather conditions and observer availability affect the totals from a hawk lookout such as Derby hill.

B. HAWK BREAKDOWN BY SPECIES

Turkey Vulture

This species has been increasing rather steadily as a migrant at Derby since the first regular counts. This is not unexpected in view of its general increase throughout the northeast. The record high of 1969 is almost nine times the 1963 count. 1972 was a better than average year for Turkey Vultures, with the majority of the birds occurring in April. Turkey Vultures are often observed passing the lookout in groups of 4-30 birds, although the lower numbers are more frequent. It has become progressively more difficult in the last three years to determine a true departure date for this species due to the presence of summering or breeding birds in the Lake Ontario plain from Oswego to Pulaski. Reports of migrant Turkey Vultures after the end of May may be somewhat questionable.

Goshawk

1972 was the second lowest year for this species during the ten year period. The individuals noted were in large measure adults with very few immatures. The few young birds noted passed mainly in April. In recent years this species has been noted returning very early as a migrant. In fact it is the earliest of migrant hawks and it is possible any time after mid-February, given south winds, to have a flight of these birds. During the record high year of 1970 many returning birds were noted prior to March 1.

Sharp-shinned Hawk

The numbers of these small accipiters seem to fluctuate considerably from year to year. This may be in part due to coverage factors. On almost any April day, as long as it is not raining, between 3-150 of these

birds can be noted. Even on those days of northerly winds many have been noted passing. Since the lookout is not always manned on such days, many may escape detection. This points out the importance of establishing daily coverage at all major hawk lookouts. The count of 1002 on April 15 is the second highest total ever recorded for a single day. Sharp-shinned Hawks have been noted passing the lookout well into June of recent years. Almost invariably these late birds are immatures.

Cooper's Hawk

1972 was an average year for this species. Cooper's Hawks on the average migrate earlier than Sharp-shinned Hawks and pass in much smaller numbers. The heaviest movement this year occurred between March 20 and April 18. The Sharp-shinned Hawk to Cooper's Hawk ratio is about 15:1. This species also departs much sooner than Sharp-shinned Hawks, a migrant Cooper's Hawk being rare after the tenth of May.

Red-tailed Hawk

These large handsome buteos were recorded in very high numbers this year. The total of 803 recorded on April 12 was fifty to sixty percent higher than the previous high for a single day. The seasonal total of 3,354 was almost 800 higher than the previous best year. The damming effect of the poor weather of March and early April was undoubtedly in large part responsible for these counts. Instead of a steady movement of a few every day, they were concentrated so that, when favorable conditions prevailed, a mass movement occurred. Probably instead of drifting through on days when observers were not present, they all came on days of favorable conditions when observers were present. This species has the most extended migratory period of any hawk at Derby. Red-tailed Hawks were noted on all but three of the fifty-two days of observation. Due mainly to increased coverage during June, Red-tailed Hawks have been noted passing well into that month. Of particular interest is the fact that, unlike most other species that are noted migrating in June, many of these birds are adults. Where are they going at that date? Are they sterile birds, or perhaps unsuccessful breeders from farther south, or simply wandering individuals? Whatever the reason, these individuals behave in all ways like the migrants of earlier in the season.

Red-shouldered Hawk

The flight of Red-shouldered Hawks was about average for the ten year period. This species is one of the most unlikely hawks to be recorded at Derby after the end of April, and this year was no exception. The

departure date of April 29 is slightly early. The majority pass from March 15 to April 15 each year. Perhaps the finest sight of all those associated with the Derby hill hawk flights is that of dozens of adult Red-shouldered Hawks swooping low past the bluff in late March. At that time the ground is usually still snow-covered and the deep red breasts of these birds literally glow with snow-reflected sunlight.

Broad-winged Hawk

This species is the showpiece item of Derby. A warm day with strong southerly winds in late April is the fervent desire of every fanatic hawk watcher. When these conditions occur, the results are often spectacular. The sight of hundreds of these birds passing in swirling masses is well worth any effort to see. During 1972 there was no really massive flight. With the exception of April 18 there were no strong southerly wind days during the migration peak of these birds. Instead, they drifted through a few hundred per day. The record low count of Broad-winged Hawks this year is indicative of how important a role weather plays in the number of hawks seen each year at Derby.

Rough-legged Hawk

The 1972 movement of this species was the largest on record for Derby. On three different dates the previous high count for a single day was surpassed. The maximum of 55 on April 18 was 20 birds above the previous high. A light-phase individual observed on May 20 was a week later than the previous record late.

Golden Eagle

Six of these magnificent birds were recorded at Derby this year. Most interesting is the fact that, of the six, five were immatures. Contrast this situation with that of the following species. The immature seen on May 13 was a record late date by a week. It is interesting to note that over the years the numbers of the two eagles recorded at Derby are almost identical. Away from Derby in the area, however, the situation is quite different. Bald Eagles are seen with some regularity at other locations while Golden Eagles are comparatively rare.

Bald Eagle

Six individuals of this species were noted, of which only one was an immature. If this situation continues to prevail it may not be too long before the Golden Eagle is the "common" eagle at Derby. One possible reason why Bald Eagles are so scarce at Derby as compared with places like Hawk Mountain Pennsylvania, is coverage. Very few observers go to the lookout after the early part of May. If the hill were manned with

greater regularity during late May and early June, many of the Bald Eagles that travel north from Florida to Canada might be seen. Our knowledge of the late May and early June movements of this and other species could be substantially increased if better coverage were maintained during this period.

Marsh Hawk

1972 was a record year for Marsh Hawks, with both daily and seasonal highs set. The 146 seen on April 15 is thirty percent higher than the previous high. The increased counts of this species are also due in large measure to the damming effect. During the last three years this species has been noted passing as late as mid-June. These individuals are always immatures.

Osprey

The numbers of this species recorded at Derby fluctuate markedly from year to year. Even the record high year is only about one-third of the total recorded each year from Hawk Mountain. Although birds of the year would account for a portion of this difference, they certainly would not explain it all. The reason is probably the same as noted under Bald Eagle. On the days I have spent on the lookout during late May in the last four years, this species and the Broad-winged Hawk have been the main constituents of the hawk movements. Another possibility may be that these birds pass even under adverse weather conditions such as rain. For example, on one day in early May 1971 I observed a hawk movement of 36 birds of three species flying in a steady rain. They included 19 Ospreys, 11 Sharp-shinned Hawks, and 6 Sparrow Hawks.

Peregrine Falcon

The rarest hawk at Derby with the exception of the accidental Gyrfalcon. Each eagle is three times as frequent in occurrence as the Peregrine Falcon. I have noted this species almost as often at Derby on unfavorable wind days as on favorable days. Thus, some of these birds may slip through undetected. To ascertain their true frequency, daily coverage is needed.

Pigeon Hawk

The season's count of 7 for this species was average. The movement was unusually compacted—all the individuals occurred within an eight-day period.

Sparrow Hawk

This small falcon was recorded in very high numbers this year. The spectacular flight of 296 on April 15 was three times the previous high daily count. These birds have been noted passing well into June; however, there is some question regarding the status of June Sparrow Hawks as true migrants.

III. NON-FALCONIFORMES

The seasonal totals of non-hawks for 1972 are included for information purposes. These counts are less representative of actual numbers passing than the hawk counts, due to several factors. These include the difficulty in identifying small passerines flying past without stopping. Also many of these species migrate more or less regardless of the wind direction. In addition there is the fact that when a large hawk is in view several thousand small birds could pass unnoticed by all observers present.

IV. SUMMARY

During the last ten years regular observations of migrant hawks and other birds have been carried on at Derby hill near Texas, Oswego County New York. The information collected has been published in several places. Of recent years, information regarding numbers, dates of occurrence, and fluctuations in migrant hawks occurring there has been gathered. These observations suggest some interesting trends that, with increased observer coverage, might provide more insight into the status of hawks in eastern North America. Caution is required, however, in the use of raw data for drawing conclusions regarding the status of the hawk populations. Recent years have seen an increase in the number of observers manning the lookout. Despite this, the lookout is manned on only fifty- to sixty-five percent of the period March 1-May 31 and is manned very little in June. More coverage by competent observers is needed on unfavorable wind days and later in the season. Due to the factors of fluctuating coverage and variable weather conditions, generalizations based only upon raw data from one hawk migration point such as Derby Hill may be unreliable. Data on the migration of non-hawks at Derby hill in the spring is limited in extent.

V. ACKNOWLEDGEMENTS

I would like to thank the following persons for use of their data from their records and for aid in making the observations: B. Brosseau, D. W. Crumb, P. DeBenedictis, F. C. Dittrich, C. and E. Farnham, E. M. Freeborn, F. LaFrance, D. Muir, J. W. Propst, M. S. Rusk, F. G. Scheider, K. Slotnick, C. G. Spies, R. J. Sutliff, Pepper Trail.

Also I would like to thank M. S. Rusk and C. G. Spies for their critical reading of this paper.

Chart I

Species	Feb. 27	Mar. 1	Mar. 2	Mar. 5	Mar. 7	Mar. 11	Mar. 12	Mar. 18	Mar. 19
T.V.	0	0	0	0	0	0	0	0	0
Goshawk	1	1	2	1	2	2	5	0	0
S.s.H.	0	0	0	0	0	0	0	0	0
C.H.	0	0	0	0	0	0	1	0	1
R.t.H.	0	0	2	1	27	7	39	28	22
Rs.H.	0	0	0	0	0	0	1	0	1
B.w.H.	0	0	0	0	0	0	0	0	0
R.l.H.	0	0	1	0	3	2	2	6	1
G.E.	0	0	0	0	0	0	0	0	0
B.E.	0	0	0	0	0	0	0	0	0
M.H.	0	0	1	0	0	0	1	0	0
Osprey	0	0	0	0	0	0	0	0	0
P.F.	0	0	0	0	0	0	0	0	0
P.H.	0	0	0	0	0	0	0	0	0
S.H.	0	0	1	0	1	0	2	0	2
TOTAL	1	1	7	2	33	11	51	34	27

20

Species	Mar. 20	Mar. 21	Mar. 22	Mar. 25	Mar. 26	Mar. 28	Mar. 29	Mar. 30	Mar. 31
T.V.	0	0	0	0	0	0	0	0	1
Goshawk	1	5	0	1	2	1	0	1	6
S.s.H.	0	5	0	1	0	0	0	3	8
C.H.	8	26	1	6	0	0	0	1	12
R.t.H.	217	220	4	137	3	3	2	4	342
Rs.H.	35	131	8	47	2	2	2	3	115
B.w.H.	0	0	0	0	0	0	0	0	0
R.l.H.	1	8	1	0	0	0	2	5	10
G.E.	0	0	0	0	0	0	0	0	2Imm.
B.E.	0	0	0	1Imm.	0	0	0	0	0
M.H.	5	4	3	0	1	0	0	14	10
Osprey	0	0	0	0	0	0	0	0	0
P.F.	0	0	0	0	0	0	0	0	0
P.H.	0	0	0	0	0	0	0	0	0
S.H.	11	15	6	2	0	1	4	40	13
UID	0	0	0	0	0	0	0	0	1
TOTAL	278	414	23	195	8	7	10	71	520

Species	Apr. 1	Apr. 4	Apr. 5	Apr. 6	Apr. 10	Apr. 11	Apr. 12	Apr. 13	Apr. 15
T.V.	3	0	1	0	2	9	57	0	8
Goshawk	6	0	0	0	0	0	3	0	3
S.s.H.	72	0	3	2	1	3	121	1	1002
C.H.	23	0	0	0	0	0	29	1	6
R.t.H.	367	2	8	1	6	1	803	1	212
R.s.H.	81	0	4	0	0	0	20	1	23
B.w.H.	0	0	0	0	0	0	0	0	3
R.l.H.	36	1	1	0	1	0	48	3	28
G.E.	0	0	0	0	0	0	0	0	0
B.E.	0	0	0	0	0	0	0	0	0
M.H.	44	2	3	0	1	0	62	42	146
Osprey	0	0	0	0	0	0	2	4	6
P.F.	0	0	0	0	0	0	0	0	0
P.H.	0	0	0	0	0	0	0	1	2
S.H.	46	2	2	1	1	4	52	26	296
UID	0	0	0	1	5	0	20	0	14
TOTAL	678	7	22	5	17	17	1217	80	1749

21

Species	Apr. 16	Apr. 18	Apr. 19	Apr. 21	Apr. 22	Apr. 23	Apr. 24	Apr. 27	Apr. 28
T.V.	12	29	0	1	1	12	0	2	7
Goshawk	0	2	0	1	0	1	0	0	0
S.s.H.	170	255	142	73	154	80	14	13	31
C.H.	2	21	1	1	2	4	1	0	1
R.t.H.	34	494	2	15	12	43	3	9	55
R.s.H.	27	19	0	1	0	4	0	0	0
B.w.H.	0	3337	0	142	23	320	452	30	232
R.l.H.	10	55	0	0	2	20	1	0	8
G.E.	0	1	Ad	0	0	0	0	0	1 Imm.
B.E.	0	2	Ad	0	0	1 Ad	0	0	1 Ad
M.H.	12	35	13	3	10	14	1	3	8
Osprey	0	16	5	2	2	12	1	8	11
P.F.	0	1	Ad	0	0	0	0	0	0
P.H.	0	3	0	1	0	0	0	0	0
S.H.	16	68	5	3	6	1	1	1	2
UID	0	73	0	14	0	75	5	0	0
TOTAL	283	4411	168	257	212	587	479	66	375

Species	Apr. 29	Apr. 30	May 1	May 2	May 3	May 6	May 12	May 13	May 14
T.V.	4	5	0	2	2	4	0	2	1
Goshawk	0	1	0	0	0	0	0	0	0
S.s.H.	87	56	16	11	26	164	0	5	24
C.H.	5	1	0	1	0	1	0	0	0
R.t.H.	89	41	6	2	1	50	0	17	7
R.s.H.	1	0	0	0	0	0	0	0	0
B.w.H.	472	234	14	5	1	317	104	104	184
R.l.H.	3	1	2	1	0	5	0	2	4
G.E.	1 Imm	0	0	0	0	0	0	1 Imm	0
B.E.	0	0	0	0	0	0	0	0	1 Ad
M.H.	11	1	4	1	1	5	0	6	7
Osprey	28	11	1	6	1	13	1	3	6
P.F.	0	0	0	0	0	0	0	0	1 Imm
P.H.	0	0	0	0	0	0	0	0	0
S.H.	5	3	2	0	7	4	0	0	1
UID	0	0	2	0	0	5	0	0	0
TOTAL	706	354	47	29	39	568	105	140	235

28

Species	May 16	May 20	May 29	May 30	June 2	June 4	June 14
T.V.	0	0	2	1	1	0	2
Goshawk	0	0	0	0	0	0	0
S.s.H.	0	2	1	0	1	0	0
C.H.	0	0	0	0	0	0	0
R.t.H.	1	5	2	1	2	1	3
R.s.H.	0	0	0	0	0	0	0
B.w.H.	0	27	18	1	14	0	114
R.l.H.	0	1	0	0	0	0	0
G.E.	0	0	0	0	0	0	0
B.E.	0	0	0	0	0	0	0
M.H.	0	0	3	0	1	0	1
Osprey	1	2	6	0	1	0	1
P.F.	0	0	0	0	0	0	0
P.H.	0	0	0	0	0	0	0
S.H.	0	0	0	0	1	0	0
UID	0	5	0	0	0	0	0
TOTAL	2	42	32	3	21	1	121

Chart II — 1972 Non-Falconiformes

Species	Season Total	Comments
Common Loon	158	Maximum 77 passing April 19
Horned Grebe	13	
Pied-billed Grebe	6	
Great Blue Heron	101	Maximum 32 April 11
Green Heron	26	
American Bittern	8	
Canada Goose	4627	
Snow Goose	101	Flock of 100 March 31 is very high
Mallard	287	
Black Duck	232	
Gadwall	18	
Pintail	217	
Green-winged Teal	23	
Blue-winged Teal	22	
American Widgeon	13	
Shoveler	7	
Wood Duck	70	
Redhead	31	
Ring-necked Duck	14	
Canvasback	8	
Greater Scaup	5413	
Lesser Scaup	55	
Common Goldeneye	809	
Barrow's Goldeneye	1	Male March 30 very rare
Bufflehead	67	
Oldsquaw	2	
White-winged Scoter	114	
Hooded Merganser	57	
Common Merganser	83	
Red-breasted Merganser	232	
Common Gallinule	8	
American Coot	1	
Killdeer	577	A very large flight of 248 on April 13
American Woodcock	1	
Common Snipe	3	
Upland Plover	5	
Spotted Sandpiper	6	
Solitary Sandpiper	5	
Greater Yellowlegs	1	
Lesser Yellowlegs	10	
Dunlin	11	
Great Black-backed Gull	6	
Herring Gull	141	
Ring-billed Gull	1978	
Bonaparte's Gull	4	
Common Tern	46	
Caspian Tern	2	
Black Tern	50	

Species	Total	Comments
Rock Dove	241	
Mourning Dove	113	
Great Horned Owl	1	Non-migrant
Short-eared Owl	1	One April 15 Very Rare
Common Nighthawk	1	
Chimney Swift	223	6 still passing June 14
Ruby-throated Hummingbird .	20	Departure date 1 June 14
Belted Kingfisher	32	
Yellow-shafted Flicker	754	Maximum 340 April 29 Departure June 2 late Non-migratory
Pileated Woodpecker	1	
Red-headed Woodpecker	32	Maximum 12 May 13 1 still passing June 14
Yellow-bellied Sapsucker	1	
Hairy Woodpecker	12	
Downy Woodpecker	4	
Eastern Kingbird	101	Maximum 39 May 14 still passing on June 14
Great Crested Flycatcher	1	
Eastern Phoebe	48	
Horned Lark	748	Maximum 375 April 15 Very late for so large a number
Tree Swallow	1168	
Bank Swallow	418	
Rough-winged swallow	45	
Barn Swallow	740	
Cliff Swallow	134	4 still passing June 14
Purple Martin	131	
Blue Jay	7964	Maximum 3653 May 13 17 still passing on June 14
Common Crow	27,278	Maximum 7855 March 2
Black-capped Chickadee	89	
White-breasted Nuthatch	43	
Red-breasted Nuthatch	5	
House Wren	15	
Catbird	8	
Brown Thrasher	5	
Robin	5402	Maximum 3041 April 13
Wood Thrush	5	
Hermit Thrush	1	
Veery	1	
Eastern Bluebird	64	Maximum 38 April 15 2 still passing on June 2
Blue-gray Gnatcatcher	1	
Golden-crowned Kinglet	40	
Ruby-crowned Kinglet	21	
Cedar Waxwing	2362	Maximum 800 June 14
Northern Shrike	2	
Loggerhead Shrike	20	Maximum 5 April 18
Starling	16,867	
Warbling Vireo	1	

Species	Total	Comments
Nashville Warbler	3	
Parula Warbler	1	
Yellow Warbler	91	
Magnolia Warbler	9	
Cape May Warbler	29	Maximum 18 May 14
Black-throated Blue Warbler ..	3	
Myrtle Warbler	614	Maximum 310 May 13
Black-throated Green Warbler .	20	
Blackburnian Warbler	4	
Chestnut-sided Warbler	4	
Bay-breasted Warbler	4	
Blackpoll Warbler	4	Last migrant 1 male June 14
Pine Warbler	1	
Palm Warbler	7	
Ovenbird	1	
Northern Waterthrush	2	
Yellowthroat	11	
Wilson's Warbler	5	
Canada Warbler	2	
American Redstart	88	
House Sparrow	30	
Eastern Meadowlark	248	
Redwinged Blackbird	146,570	
Baltimore Oriole	736	
Rusty Blackbird	1340	
Common Grackle	29,662	
Brown-headed Cowbird	15,112	
Scarlet Tanager	21	
Cardinal	2	
Rose-breasted Grosbeak	49	
Indigo Bunting	6	
Evening Grosbeak	2349	Maximum 930 May 14
Purple Finch	56	
Pine Grosbeak	2	
Common Redpoll	4442	Maximum 1250 April 15
Pine Siskin	313	
American Goldfinch	2804	
Red Crossbill	4	
White-winged Crossbill	15	
Rufous-sided Towhee	4	
Savannah Sparrow	4	
Vesper Sparrow	11	
Slate-colored Junco	3	
Tree Sparrow	2	
Chipping Sparrow	263	
Field Sparrow	5	
White-crowned Sparrow	10	
White-throated Sparrow	2	
Song Sparrow	26	
Snow Bunting	124	

Table I 1972 Hawk Summary

Species	Arr. date	Dep. date	Total	Max.	Max. date	No. Days seen
T.V.	Mar 31	June 14*	171	57	Apr 12	25
Goshawk	Feb 27	Apr 30	48	6 each	Mar 31, Apr 1	21
S.s.H.	Mar 21	June 2	2547	1002	Apr 15	32
C.H.	Mar 12	May 6	156	29	Apr 12	24
R.t.H.	Mar 2	June 14	3354	803	Apr 12	49
R.s.H.	Mar 12	Apr 29	528	131	Mar 21	21
B.w.H.	Apr 15	June 14	6148	3337	Apr 18	22
R.l.H.	Mar 2	May 20	274	55	Apr 18	33
G.E.	Mar 31	May 13	6	2	Mar 31	5
B.E.	Mar 25	May 14	6	2	Apr 18	5
M.H.	Mar 2	June 14	479	146	Apr 15	37
Osprey	Apr 12	June 14	150	28	Apr 29	25
P.F.	Apr 18	May 14	2	1 each	Apr 18, May 14	2
P.H.	Apr 13	Apr 21	7	3	Apr 18	4
S.H.	Mar 2	June 2*	654	296	Apr 15	37

TOTAL HAWKS 14,530

Table II Ten-Year Hawk Summary

Species	Earliest arr.	Latest dep.	Highest Year, No.	Lowest Year, No.
T.V.	Mar 25, 1970	June 14, 1972	1969-278	1963-30
Goshawk	Feb 18, 1970	May 10, 1970	1970-156	1965-42
S.s.H.	Mar 3, 1966	June 20, 1970	1966-5138	1963-1335
C.H.	Mar 7, 1964	May 16, 1971	1967-196	1965-70
R.t.H.	Feb 22, 1970	June 20, 1971	1972-3354	1965-789
R.s.H.	Mar 3, 1964	May 18, 1971	1967-977	1965-309
B.w.H.	Mar 29, 1967	June 20, 1971	1963-21,542	1972-6148
R.l.H.	Feb 26, 1971	May 20, 1972	1972-274	1965-116
G.E.	Mar 4, 1964	May 13, 1972	1966-13	1963-2
B.E.	Mar 7, 1964	June 2, 1970	1964, 1967-11 each	1963, 1968 2 each
M.H.	Feb 26, 1971	June 14, 1972	1972-479	1965-191
Osprey	Mar 29, 1963	June 15, 1970	1970-233	1963-53
P.F.	Mar 30, 1967, 1968	May 14, 1972	1964, 1965, 1969, 1970-4	1963-0
P.H.	Mar 15, 1968	May 16, 1970	1966-22	1963-3
S.H.	Mar 2, 1967, 1972	June 20, 1971	1972-654	1965-165

Table III Ten-Year Hawk Totals and Highest Day

Species	Highest single day	No.	Cumulative 1963-1972 Total
T.V.	Apr 10, 1969	66	1230
Goshawk	Apr 4, 1971	26	870
S.s.H.	Apr 21, 1966	2787	22,199
C.H.	Apr 3, 1971	55	1385
R.t.H.	Apr 12, 1972	803	17,596
R.s.H.	Apr 3, 1971	277	5662

Table III — (cont.)

B.w.H.	Apr 21, 1966	10,287	123,526
R.L.H.	Apr 18, 1972	55	1790
G.E.	Apr 12 and 26, 1967—Mar 31, 1972	2	64
B.E.	6 different dates	4	67
M.H.	Apr 15, 1972	146	3358
Osprey	May 1, 1970	81	1407
P.F.	Apr 25, 1964—Apr 25, 1965	2	19
P.H.	Apr 19, 1966	4	108
S.H.	Apr 15, 1972	296	4084

TOTAL IDENTIFIED HAWKS—183,586

Abbreviations used

Feb=February	R.t.H.=Red-tailed Hawk
Mar=March	R.s.H.=Red-shouldered Hawk
Apr=April	B.w.H.=Broad-winged Hawk
* =see text under the given species	R.L.H.=Rough-legged Hawk
arr=arrival	G.E.=Golden Eagle
dep=departure	B.E.=Bald Eagle
max=maximum	M.H.=Marsh Hawk
No.=number	P.F.=Peregrine Falcon
T.V.=Turkey Vulture	P.H.=Pigeon Hawk
S.s.H.=Sharp-shinned Hawk	S.H.=Sparrow Hawk
C.H.=Cooper's Hawk	UID=Unidentified hawk

VI. BIBLIOGRAPHY

- Haugh, J. R. and T. J. Cade
 1966 The Spring Hawk Migration Around The Southeastern Shore of Lake Ontario. The Wilson Bulletin. 78:1:88-110.
- Haugh, J. R.
 1966 Some Observations on the Hawk Migration at Derby Hill Kingbird. 16:1:5-16.
- Rusk, M. S. and F. G. Scheider
 Region 5 Kingbird report. 17:3:167-171.
 Region 5 Kingbird report. 18:3:158-163.
 Region 5 Kingbird report. 19 :3:160-167.
 Region 5 Kingbird report. 20:3:135-142.
- Rusk, M. S. and C. G. Spies
 Region 5 Report Kingbird 21:3:159-167.
- Scheider, Fritz
 Region 5 Report Kingbird. 16:3:166-171.
- 4173 Makyes Road, Syracuse, New York 13215