# Summer Number

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# SUMMARY OF WEATHER CONDITIONS

From U. S. Weather Bureau Reports (Cleveland Hopkins Airport)

- June Temperatures averaged about normal, with no extreme highs or lows. Rainfall of 2.95 inches was almost one-half inch below normal.
- July With only one day of 90° or above, temperatures averaged 1.6° below normal. Total rainfall was near normal, though slightly more than 50% occurred on a single day, the 3rd.
- August -Extremely dry. Total rainfall of 1.30 inches was barely one third of normal. Temperatures averaged about normal, and there was no spell of extreme heat.

All records, observations, and comments should be sent to Donald L. Newman, 14174 Superior Road, Cleveland 18, Ohio.

#### COMMENT ON THE SEASON

Southbound Shorebirds. The occurrence of two Solitary Sandpipers on June 30, in Rocky River Reservation marked the beginning of the southerly passage of shorebirds (Klamm). Next to be observed were two Least Sandpipers and one Dowitcher at White City on July 10 (Carrothers), after which the number and variety of birds gradually increased. At Cleveland on July 14, there was a "marked influx of adult Spotted Sandpipers", while "the local residents were still tending recently-hatched chicks" (Klamm). An unusually early migrant was a single Ruddy Turnstone on July 29 at Gordon Park, where it was in the company of gulls and terms assembled on the rocks (Klamm).

In the absence of any reports from the Akron lakes for the month of August, we have but a limited knowledge of the shorebird migration during that month. In the immediate Cleveland area, which offers little habitat attractive to shorebirds, a fair number of birds was observed, including four Baird's Sandpipers at White City on August 19 and 25 (Klamm).

For the second successive summer, observers at Cleveland Hopkins Airport reported an abundance of Upland Plovers feeding in the grassy areas during August. Forty-three birds were counted there on August 11, 25 on the 19th, and 31 on the 24th (Stasko), though it seems certain many more were present which could not be enumerated because they were out of binocular range and were in areas from which observers are excluded. Prior to 1961 little was known about the status of the Upland Plover in the Cleveland region during the latter part of the summer after nesting activity was concluded. Thus these records of occurrence at Cleveland Hopkins Airport have added considerably to our knowledge of this species.

<u>Nighthawks in Migration</u>. On the exceptionally early date of July 30, a band of 30 Common Nighthawks was observed at 5:30 p.m. moving south down the Chagrin River Valley (Tramer). First of the August migrants to be reported were 89 birds counted at intervals as they passed in a southeasterly direction over Lakewood on the evening of the 20th (Stasko). Then on August 24, some 55 birds - headed toward the southeast in groups of two or three to as many as a dozen - were recorded as they sailed and zigzagged over Lower Shaker Lake in a period of 40 minutes at sunset (Newman). Finally, approximately 250 "leisurely feeding" birds were noted in about a 20-minute period before dusk on August 29, when, in both large and small groups, they drifted from west to east or southeast over Lakewood (Klamm).

<u>Swallows Gathering</u>. Along the lakefront at Cleveland on July 29, more than 300 Barn Swallows, some 75 Tree Swallows, and a small number of Bank Swallows were observed in passage from east to west "in loose groups" (Klamm). Gatherings of Purple Martins were first reported on August 5, when in the far western portion of the region, beyond Elyria, "over 1,300 were counted in groups of up to 200 or so" (Johnson). In a residential section of Rocky River, near Wager

Beach, an estimated 1,000 birds were gathered on the telephone wires on the morning of August 11 (Stasko), and some 800 were observed in the same locality on August 18 (Klamm). At Clague Park on the morning of August 27, well over 500 birds were assembled (Stasko). All of these reports are from localities in the western portion of our region, that is, west of the Cuyahoga River. Only one gathering of Purple Martins was reported from the eastern portion of the region: an estimated 400 birds at White City on August 18 (Carrothers).

Warblers and Other Passerine Migrants. A stray Black and White Warbler was observed in Mentor Township on July 7, and another there on July 31 (Hammond). An uncommonly early migrant was a single Connecticut Warbler in Rocky River Reservation on July 28 (Klamm). The beginnings of a true migratory movement were not noted, however, until August 18, when 1 Chestnut-sided, 1 Wilson's, and 2 Canada Warblers were recorded. Thereafter numbers and variety of warblers gradually increased, with a particularly good movement occurring on the week end of August 25-26 when nine transient species were observed. At that time, too, Empidonax flycatchers appeared in abundance, and the first Swainson's Thrush was reported. In the final five days of August there was apparently a quite steady, though limited, flow of warblers through the region; 12 species, both breeding and non-breeding, were recorded.

Among the fringillids an extraordinary early arrival was a solitary adult Slate-colored Junco at the Lower Shaker Lake on August 18 and 19, at least five weeks ahead of the normal time of arrival (Knight). Also ahead of time was a White-throated Sparrow in Rocky River Reservation on August 29 (Ackermann).

### NOTEWORTHY RECORDS

<u>Hooded Merganser</u> - An immature bird was observed on Rocky River on July 15, which is the first summer record in the history of the Cleveland region (Klamm).

Osprey - On the morning of June 9, a single bird sailed and circled briefly over Chester Township, Geauga County, as it proceeded in a northerly direction (Tramer). A bird was also seen over Rocky River Reservation on July 5 (Ackermann).

<u>Purple Gallinule</u> - The bird which was first recorded at Waite Hill on May 16, 1962, was observed there almost daily through June 25, thus establishing not only a first springtime but also a first summer record of occurrence (Flanigan). For a detailed account of this occurrence see the Field Notes section in this issue.

<u>Piping Plover</u> - At White City on the morning of July 31, a single individual was studied for about ten minutes before it flew off to the west (Carrothers). The last previous report of this species was in August 1952, also at White City.

<u>Stilt Sandpiper</u> - Three birds in changing plumage, still showing "distinct belly barring", were feeding at White City on August 25 (Klamm).

<u>Red-breasted</u> <u>Nuthatch</u> - On June 25 and 28, a solitary individual, seemingly a female, was observed eating suet at a feeding station in Chardon (Spare).

Brown Creeper - At about 8:00 a.m. on June 10, in North Chagrin Reservation, a lone bird, which was utterly silent, was watched for several minutes as it searched for food on the trunks of some large trees (Rickard).

<u>Mockingbird</u> - A single bird which was first seen in early May was present throughout the summer at Spencer Wildlife Area, but it was not heard singing by any of several persons who observed it (Morse).

<u>White-eyed</u> <u>Vireo</u> - The bird which was seen repeatedly during May in Spencer Wildlife Area remained at least until July 1, when observations ceased. It was always found in the same thicket, but there was no evidence of nesting activity (Morse). This is the first summer record since 1955.

Chestnut-sided Warbler - In the same scrub-growth area off Sherman Road, Geauga County, where a singing male was present in June 1961, a singing bird occurred again this summer. On July 10, it was observed with food in its bill but no nest nor young were found (Carrothers). A non-singing male was seen just once on June 16 in Mentor Township (Hammond).

<u>Prairie</u> <u>Warbler</u> - On the morning of July 1, in a copse just south of Virginia Kendall Park, a bird was observed singing at regular intervals. Visits to the area on the three following days failed, however, to produce any sight or sound of this bird (Henderson). This is the first summer record of a singing bird in the present century.

<u>Western</u> <u>Meadowlark</u> - For the fifth consecutive summer this species was present at Burke Lakefront Airport where, unfortunately, the recently-erected fence prevented access to the grassy areas adjoining the landing strips. On July 1, however, at least five birds were recorded, and it is thought that "possibly two pairs nested successfully" (Klamm).

Yellow-headed Blackbird - For seven or eight minutes on June 1, a male bird was studied carefully as it fed in a plowed field along Sherman Road just east of County Line Road in Geauga County. Then it suddenly disappeared and was not seen again (Carrothers). This record is the third for the year 1962, whereas there had been but four records in the entire previous history of the Cleveland region.

#### FIELD NOTES

Purple Gallinule at Waite Hill. (Since the Purple Gallinule had never been reported in the Cleveland region prior to May 1962, we asked Annette B. Flanigan to write the following account covering the entire period she observed this bird. - Ed.) On the morning of May 16, 1962, I discovered a Purple Gallinule on the marshy end of the pond near our home in Waite Hill. This particular area was flanked on one side by a dense growth of rose bushes extending out over the water. Throughout its stay I never saw the bird anywhere but in this limited area, which consisted of about 150 square feet. It fed there regularly between about 7:30 and 8:30 a.m. and again between 7:00 and 8:00 p.m., EDT. Sometimes it also appeared toward late afternoon.

For several days following May 16, the Purple Gallinule fed together with a Common Gallinule, thus making it possible for me to note the difference in their manner of feeding and of moving about. The Purple Gallinule was deliberate in its movements and fed on the top of the grassy areas, so that most of its legs were out of the water. It seemed to prefer shallow water where the grasses were growing. At times it would step from dry twig to dry twig to cross a space rather than walk through the water. And it would reach down into the water to feed while clinging to a branch. Its deliberate manner of walking was like that of the Green Heron, while its habit of constantly flicking its tail was like that of the Sora Rail. In contrast, the Common Gallinule was much quicker in its movements and it fed more like a duck, with its body down in the water.

The Purple Gallinule seemed to become accustomed to the presence of my husband and myself, so that after several weeks we could go out into the open quietly without disturbing its feeding. (During the bird's stay, it was seen, and even photographed, by many persons.) The gallinule always appeared from the rose tangle, where it went to rest when not feeding. I never saw it rest in the open; but two or three times it climbed into the tangle by way of a fallen log and paused a few minutes to preen. Sometimes it would climb the rose bushes and then drop into the tangle, resting a foot or so above the water. Occasionally, when alarmed, it flew to the tangle, generally with feet dangling and tossing its wings.

On June 25, which was the last date I saw the bird, the gallinule was feeding a short distance away from its usual area, where I had never seen it feeding before. At that time in the month the water was gradually receding in the pond. Possibly, then, the feeding area became insufficient, compelling the bird to depart. - ANNETTE B. FLANIGAN

Nesting of Least Flycatcher. On June 9, a Least Flycatcher was discovered building her nest at a height of about 17 feet on the horizontal limb of an elm tree which stands near the Rodgers Road bridge in the Chagrin River Valley. The principal material used in construction at that time was the feathery white down of the seeds of

the cottonwood tree. It appeared that only one bird was engaged in the building of the nest. By June 12, the nest was completed but incubation seemingly had not begun; nor was the female seen at midmorning on June 14, though the male was singing nearby. When the nest was next observed on June 17, the female was incubating and the male was singing a short distance away. The same circumstances prevailed on visits to the nest on June 24 and July 1. On July 8, both parents were feeding the nestlings, whose number could not be determined, and on July 15, the nest was empty. - JAMES M. SURMAN, JR.

Two Nestings of the Solitary Vireo. (The following account is based upon information furnished by Vera Carrothers, Bertram C. Raynes, Richard Rickard, W. C. Snider, and James M. Surman, Jr. - Ed) Just off the nature trail south of the Trailside Museum in North Chagrin Reservation, a Solitary Vireo built her nest about seven feet above ground in a small fork of a horizontal branch of a small beech sapling. When the nest was first observed on May 19, the female was sitting on it. Later, by use of a mirror mounted on a long pole, it was found that the nest contained four eggs. On June 2, both adults were feeding the nestlings, whose number was not ascertained. Finally, on June 10, which was the last date of observation, the nest contained at least one young bird, which to judge from its size seemed to be a Brown-headed Cowbird.

The second nest of this pair of Solitary Vireos was placed on the horizontal branch of a hemlock tree about seven feet above ground and the same distance out from the trunk. This nest site was to the east of the Trailside Museum, perhaps 500 feet distant from the first site. As early as June 16, an adult vireo was observed taking a lichen from an old (?) vireo nest and carrying it to the exact spot where the second nest was located, but the nest was not actually discovered until July 13. At that time it contained one large nestling, which may have been a Brown-headed Cowbird. Both adults were present on July 14, and at least one of them fed the nestling. The following day the nest was empty, and none of the vireos was seen or heard.

Twice before, in 1958 and 1960, a pair of Solitary Vireos nested in North Chagrin Reservation in the same general area where the present nestings occurred. A total of four nests was found in those two years, but only one produced young although it is not known whether they were actually fledged.

Flocking of Starlings. During the last week of August a tremendous concentration of Starlings occurred through a large part of southern Lorain County. Individual flocks ranged in size from 500 to over 30,000 birds. What was more remarkable was the fact that in 20 miles of driving on country roads we were never out of sight of flocks of Starlings either in the air or feeding in the fields. I have seen extremely large concentrations of Red-winged Blackbirds in western Ohio in previous years, but I have never seen anything to approach this for high population density over such a large area. - ROBERT J. MORSE.

# SPRING HAWK MIGRATICN THROUGH THE CLEVELAND, OHIO, REGION

by

# Neil Henderson

On a spring day when the wind is right, hundreds of hawks fly high over industrial Cleveland on their way around the Great Lakes to the wilder areas north. Even birders and ornithologists have largely been unaware of these migrants, although good flights have been seen along the lake shore and smaller flights over the Terminal Tower in downtown Cleveland.

In March, 1962, at the suggestion of its president, Bertram C. Raynes, the Kirtland Bird Club of Cleveland organized a cooperative effort to track hawks across Cleveland. The project was directed by Neil Henderson; Albert Sauer recruited and stationed watchers on the west side of Cleveland and Leo Deininger on the east. Donald L. Newman and Charles Margolis surveyed old Cleveland area records and concluded that hawk migration required winds with a southerly component. There were not enough data to prove more specifically the importance of wind direction. During the next two months Raynes and Henderson conferred at least once during every week. When the week-end weather promised well, Sauer and Deininger contacted the other cooperators and on Saturday and Sunday the hawk-watch was on. On those days Vera Carrothers stayed at her telephone to relay messages and comments. These are the persons who at one time or another watched from the beaches, hilltops, rooftops and other vantages:

Fred J. Ackermann
William and Mary Baum
Edna Black
Kay Booth
David DeSante
Leo Deininger
Neil Henderson
William and Nancy Klamm
Clair Meirs
Donald Newman

John Rae
Bertram and Margaret Raynes
Albert Sauer
Robert Schwab
Scotty Shugar
Michael Stasko, Sr.
Ethel Surman
James Surman, Jr.
Elliot Tramer

#### Our main objectives were:

- a) to find out how many hawks flew, at what times, and in what directions over various Cleveland locations; and to
- b) establish whether there are preferred narrow trails, or whether the hawks simply move over a broad front; and
- c) to estimate flight speeds by comparing the reports of successive observers.

# Results

The accompanying Table 1 shows the total numbers of hawks seen and the number of groups of observers for each of the days for which we have reports. The chart indicates maximum rates of passage reported each day by each observation post. The map (see Figure 1) shows most of the observation points, together with flight directions and the <a href="maximum">maximum</a> rates of passage during the entire period. The map is, therefore, stylized.

#### Discussion

Beyond a doubt, daytime spring migrants over Cleveland fly to the northeast, paralleling the Lake Erie shoreline even when they are many miles inland from the lake. No observer reported a migrant to leave the shore or fly north over Lake Erie, although there were always lakefront observers. There were, on the other hand, a few observations of hawks soaring in a northerly direction until they were near the shoreline, where they turned abruptly eastward in straight, fast, descending flight (Henderson). There were also observations of similar turning behavior nine miles inland, near the highest land in the eastern portion of Cuyahoga County (Surman).

On Easter Sunday, April 22, the second day of south winds following two weeks of cold weather, there were 177 sightings of at least 150 hawks flying in a generally northeast direction. Flights were observed from 9:15 a.m. to 5:30 p.m. Since the number of groups of cooperating observers that day was only ten, and since none covered their posts more than a few hours, it is likely that the 150 hawks seen were a minor part of the total movement. On the previous day when the number of groups of observers was six and the weather conditions similar, the number of hawks seen was only 31. There is no doubt that the actual passage was lighter on this day. Over the entire season, 409 migrant hawks were reported. All factors considered, our guess is that the season's passage of hawks was considerably greater than was detected, probably in the thousands.

At least two "tracks" were found. One, as has been suspected for a few years, passes over Perkins Beach, Terminal Tower and Fenn College, which lie in a straight line near Lake Erie. The evidence that it is a fairly narrow preferred corridor is that much of the time it looks that way from each of the vantage points, plus the simultaneous observations that people slightly off the track failed to see any hawks during periods when the traffic was brisk. The second track, apparently at times a more heavily traveled one, passes over the high ground of Cuyahoga County in Warrensville Heights. James Surman, Jr. and members of his family were able to monitor this track from their own back yard by lying on their backs with binoculars directed to the sky at all times.

It must be noted, however, that the narrowness of these tracks is not really proven. Scrutiny of the Easter Sunday observations by the Klamms at Perkins Beach and Raynes and Henderson at the Terminal Tower leads to

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the conclusion that only for a few minutes out of two or three hours were the groups of observers seeing the same hawks: Terminal Tower saw its greatest proportion in an earlier period when Perkins Beach saw almost none, yet Perkins Beach saw far more later when things were quite dull for Terminal Tower.

During the whole period of joint observation, the total for Perkins Beach was considerably higher than at Terminal Tower. (Similar comparisons at these two locations in previous years, though less systematic, likewise indicated that many of the hawks seen over one place were not seen over the other, and also that the numbers over Perkins Beach were generally greater overall.) The puzzle might be explained by alternate rising and falling of the hawks, so that during part of their flight they were too high to be visible. Another explanation could be that a slight shift in direction occurred in response to wind conditions, so that Perkins Beach was by-passed in one period, Terminal Tower in the other, although the change in flight direction was too slight to be noticed at either observation point. These points are some three miles apart.

Regarding the Warrensville track, it does seem a happy coincidence that the center of it should pass over the home of two of our most consistent observers. Would observers one mile south or north have missed these flights? As a matter of fact had observers (the Raynes) three miles southeast at Bedford-Chagrin Parkway for half an hour Easter Sunday in late afternoon and they too were seeing hawks, seven in half an hour. Still another dozen miles south, Henderson was watching at Virginia Kendall ledges, and even there a migrating broad-wing flew northeast in the same half hour. In these late afternoon hours no observer was watching from Perkins Beach or Terminal Tower, unfortunately.

Cleveland is, it appears, not one of those lucky locations where the hawks funnel into a narrow column which can be tallied with considerable accuracy by a single observer. Instead, the flight belt apparently extends more than 20 miles inland from Lake Erie, with more of the migrants in the corridors than elsewhere. This pattern partly explains why Cleveland observers, working singly, have apparently underestimated the spring hawk migration.

Another factor, however, is altitude. Practically every participant in the cooperative hawk-watch commented on the extraordinary height at which the majority of hawks were seen. Most reported the experience of finding hawks which they could not see without binoculars. Since so many hawks were near the limit of detection, one suspects that many others were undetected simply because they were too high. Perhaps this high-flying tendency in our region is simply due to the fact that our spring warm-air movements are from the southwest, coinciding fairly closely with a flight direction which carries the hawks around Lake Erie and Lake Ontario without crossing open water. In these circum- stances the migrants can soar more of the time on high thermals (using the word in the sense used by Cone, American Scientist 50, 180, and (1962). Only when the desired course is somewhat counter to the high winds would it be necessary for the hawks to drop out of the thermals and seek declivity winds. It is the latter type of flight (riding a declivity wind,

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i.e., wind with a steady upward component due to a slope such as a mountain, a forest edge, or a mass of buildings) which dictates a low course and one which is constant with respect to terrestrial landmarks.

To summarize our speculative interpretation of what we observed, the hawks fly unusually high and across a wide front over eastern Cleveland because there are plenty of high thermals moving in the right direction. They drop to lower altitudes and funnel into narrow tracks governed by ground winds whenever they find the high altitude air currents are carrying them closer to Lake Erie, which must be plainly visible to them from at least twenty miles inland. The two tracks we have discovered are very plausible locations for suitable declivity winds, the Perkins Beach-Terminal Tower track because it straddles the slope leading up to the Portage escarpment; and the Warrensville track because it is on the slope leading to the highest ground in the eastern part of Cuyahoga County. West of the Cuyahoga River, the situation may be a little different because the Lake Erie shore does not trend evenly to the northeast and there should be shoreline flights of migrants which have piled up against Lake Erie when carried by the southwest winds. It should follow that flight is at lower altitude along the west lakefront than elsewhere. Such mass flights are recorded in our local records.

### Summary

Apart from speculation, the observations accumulated by the Kirtland Bird Club's cooperating hawk-watchers can be summarized as follows:

- 1. In a period of a few weeks, more than 400 migrating hawks were seen. Nearly 200 were seen April 22, the day when we had the largest number of observers out.
- 2. The trend of the movement was to the northeast, parallel to the Lake Erie shore. There was no report of hawks leaving the land to fly over Lake Erie.
- 3. There are trails or corridors in which the migrants concentrate. Smaller numbers of hawks migrating parallel to Lake Erie but outside the preferred corridors were seen as much as 20 miles inland.
- 4. There were no overlapping records sufficiently definite to establish the speed of hawks with respect to the ground.
- 5. A large proportion of the hawks were flying high, near the limit of detection with binoculars.
- 6. Thermal soaring was the commonest mode of flight but sustained straight gliding was also seen.
- 7. Practically all the hawks were Buteos or Accipiters, and there were about 10 Buteos for every Accipiter.

Table 1.

Total Hawks per Day

Date	Groups of Observer Participating	Migrating Hawks Reported
4/21/62	6	31
4/22/62	10	150
4/23/62	1	0
4/26/62	2	4
4/27/62	2	12
4/28/62	4	57
4/29/62	6	144
5/5/62	3	11
		409

4/21/62 4/22/62 4/23/62 4/26/62 4/27/62 4/28/62 4/29/62 5/5/62 Rocky River Mouth \* WK MS \* WK 15 NK 0 FA 40 NK Perkins Beach WK WK WK WK WK 34 NK 5 NK 25 NK 28 NK 4 NK BR Terminal Tower BR8 NH 3 RS 0 NH Fenn College DD 4 NH Lakeview Cemetery 2 DN 2 DN 3 DN Wonell Road MS 12 FA Hilliard Bridge MS 1 FA Lakewood Park WB/WK WB WB 0 NB/NK 0 NB 0 NB Gordon Park 0 RS Fairhill Road 0 LD Sherman Road NH 1 BR Puritas - W 150th BR 13 AS 5 NH Granger Road LD 0 Warrensville Heights JS/DN 6 JS 24 ES 4 JS 1 JS 1 DN Pepper Pike BR1 MR Brainard Rd. NH1 BR South Chagrin BRBR7 MR 0 NH Painesville 8 KB Lake Erie Jr. JR Sci. Center 15 MS Virginia Kendall Park 1 NH

<sup>\*</sup> Evening observations of hawks evidently landing for the night.