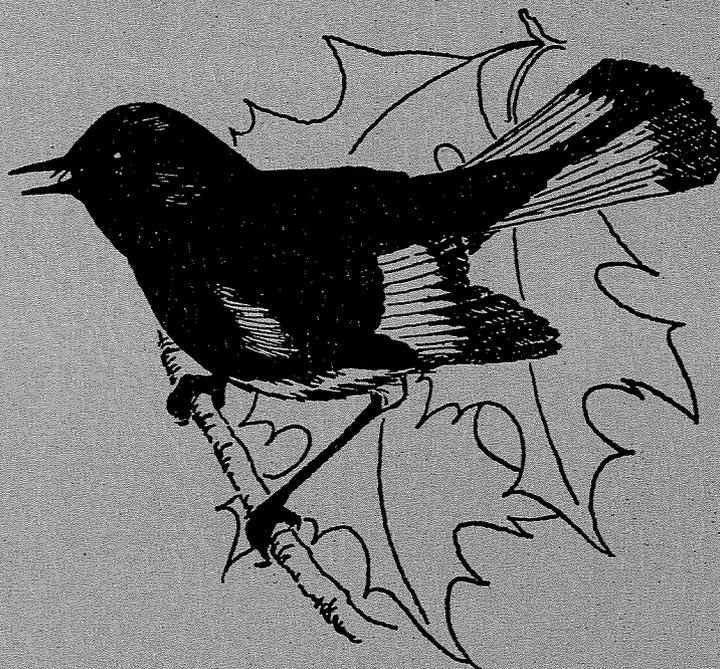


The REDSTART

Volume 34—Number 3

July, 1967



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POPULATION TRENDS FOR "BLACKBIRDS"

Harold E. Burt¹ and Maurice L. Giltz²

We have been operating a large decoy trap in Columbus, Ohio since the fall of 1963 and have banded some 40,000 birds. With this amount of material it might be profitable to explore some population trends and species differences. Accordingly we analyzed our data for the years 1964, 1965 and 1966 for four species: Grackle (*Quiscalus q. quiscula*), Cowbird (*Molothrus a. ater*), Red-winged blackbird (*Agelaius p. phoenicius*) and Starling (*Sturnus v. vulgaris*).

Our trap is of the conventional decoy type as developed by the Fish and Wildlife Service from the Australian crow trap. (cf. Meanly, 1961). It is 80'x30'x7' made of chicken wire and steel fence posts. On the top there is a "ladder" of 2"x4" mesh through which birds can drop with folded wings but cannot fly out. Cracked corn and water are provided and several birds are always left in the trap as decoys. On occasion the operator enters a door at one corner and drives the birds to the diagonally opposite corner and then down a tapering runway to the gathering cage. He then goes outside, removes the cage to a nearby bench and bands the birds.

The trap was in continuous operation during the 3 years covered by this study. Several men participated in the banding so that if one was out of town another took care of the operation. While we sometimes skipped a day or two the birds remained in the trap until we were ready for them.

Table 1

	1964		1965		1966		Total	
	No.	%	No.	%	No.	%	No.	%
Grackle	381	3	1873	9	966	17	3220	8
Cowbird	4715	42	6354	31	1299	22	12368	33
Redwing	1341	12	7497	36	1436	25	10274	27
Starling	4906	43	5046	24	2078	36	12030	32
Total	11343		20770		5779		37892	

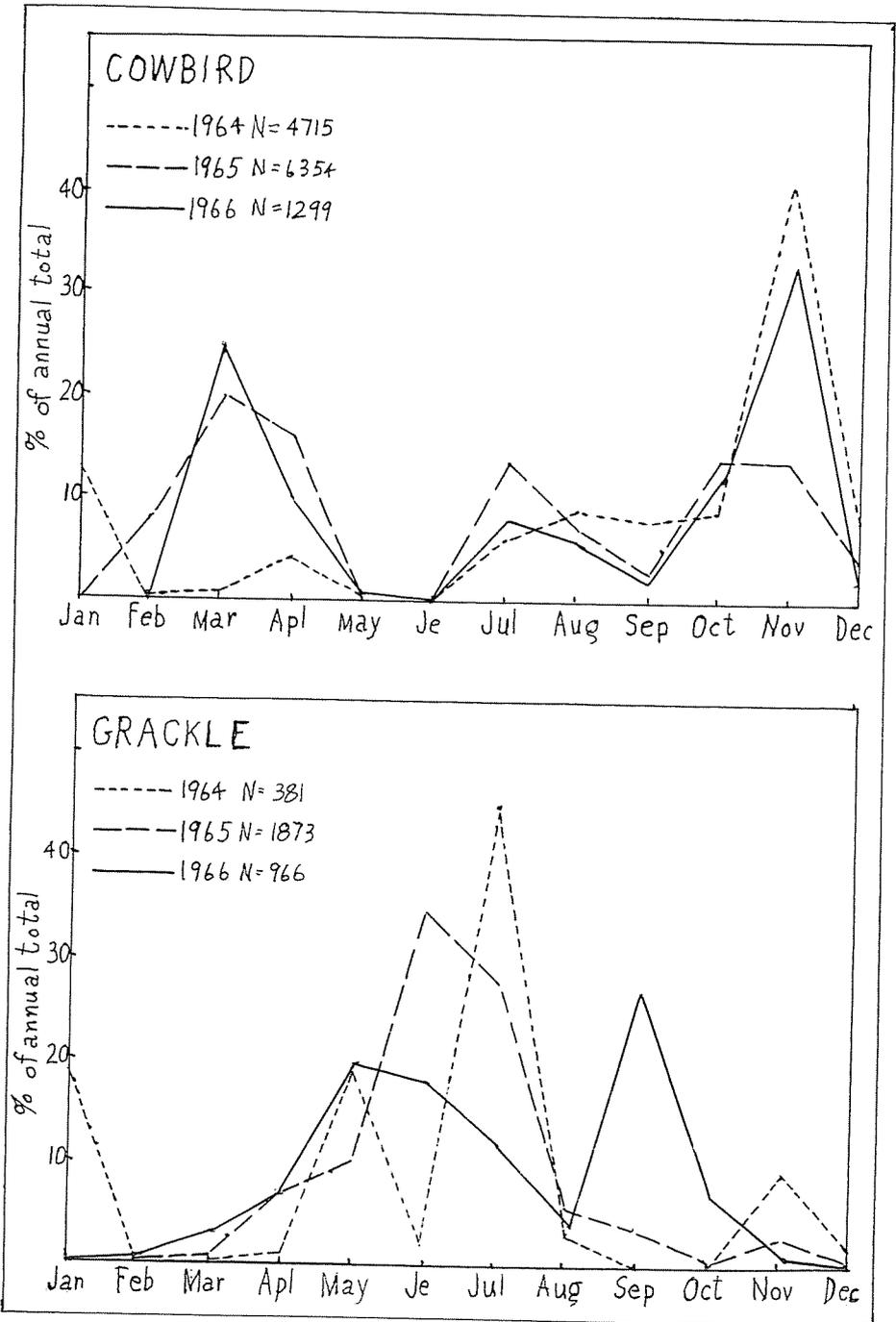
Some of the overall results appear in Table 1. It gives the number of each species banded in each year. Also these numbers are reduced to a percentage of the total number banded in a given year. For example of the 11,343 birds banded in 1964, 3% were Grackles. The last 2 columns combine all 3 years.

It is assumed that the number of a given species banded reflects the population of that species in the area. There is precedent for this assumption. It is basic to the widely used Lincoln Index for estimating bird population. (cf. Nunneley, 1964). There may also be some variation in the tendency to enter the trap.

The last column of the table indicates that the Grackle population is considerably smaller than that of the other 3 species which differ little among themselves. Whether this is true only of the local population or more general we do not know. We do not have access to comparable state-wide data. If we look at the trend for the 3 successive years the Grackles show a steady increase. The Cowbirds, on the other hand, have a consistent decrease. The

¹ Dept. Psychology, Ohio State University, Columbus, Ohio

² Dept. of Zoology, Ohio State University, Columbus, Ohio



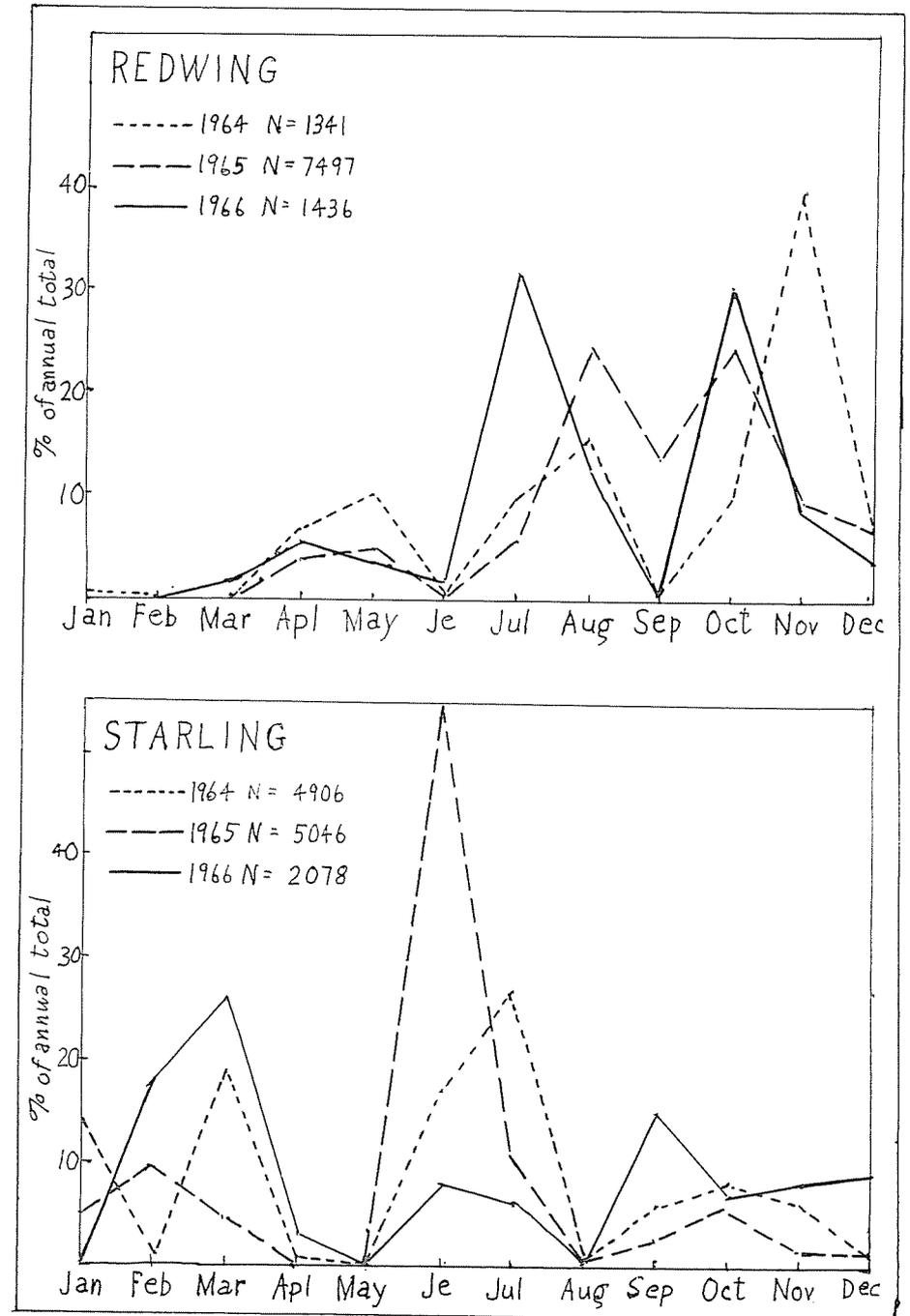
Redwings and Starlings do not manifest a consistent trend in this respect.

In order to determine population trends throughout the year we determine the number of birds of a given species banded each month. However if we plot curves in terms of these numbers, species comparisons will be difficult unless we use a different scale for each species. Accordingly for a given species and given year we total the 12 monthly scores to get the annual total. Then we reduce each month's score to a percent of the annual total. In the accompanying charts we plot such percentages on the ordinate erected at the appropriate month on the abscissa. Thus any 2 curves are comparable because the total of the ordinates is 100.

Turning first to the Cowbirds, in 1964 they show a peak in January but it does not appear in the other two years. The wintering population in 1964 is a carry-over from a large roost of over 250,000 blackbirds that developed in a nearby woodlot in October 1963. The roost did not materialize in subsequent years and the number trapped in January was negligible. In 1965 and 1966 there is a considerable peak in March and April—doubtless migrants passing through. We believe that most of the cowbird migrants spend the summer north of us. During the May-June "trough" in the curves the females are busy watching nests of potential hosts. It is well known that they do this and sometimes remove an egg before the "parasitic" egg is laid. The males may stay near the females. We have observed male Cowbirds following the females during the day and both sexes roosting together in small groups during the breeding season. While they are thus occupied there is less probability of their exploring our trap. In July-August they are "free" of stimuli connected with reproduction and more likely to be attracted to the trap by the food and water and especially the decoys. Cowbirds are quite social as is apparent in the roosting just mentioned and in our trap they can be observed sitting a few inches apart on perches and seemingly "relaxed". Many juveniles also are available at this time. Then in November there is a sharp peak in two years—presumably as large numbers of migrants pass through. In 1965 this takes the form of a rise in October and November but without a pronounced peak.

The Grackles in 1964 show the same aftermath of the big roost. Unlike the Cowbirds they fail to show the March-April peak of transitory migrants. Perhaps proportionately more of them stop here for the summer but if so they get down to the business of nesting quite early so they are less inclined to explore the trap. Moreover they tend to nest in evergreens and there are few such trees in the vicinity. By May-June they have finished nesting and are moving around and encounter the trap. The young are also active at this time and in some instances may get in the trap and decoy the older birds. With the Grackles like the Cowbirds we have observed considerable social behavior which may make them susceptible to decoys. This ends in August when perhaps the residents are drifting out of the area or finding food sources elsewhere and presently migrating. We are not clear about the September peak in 1966 unless there may be a renewal of gregarious tendencies preparatory to migration. Finally there is no clear indication of Grackle migrants passing through in the autumn.

The Redwings are not very impressive as to spring migration but there is a perceptible rise in the curves in April-May. The last of this period coincides with the breeding season when we would expect them to be occupied. However there are large alfalfa fields in the vicinity and consequently large numbers nesting. (Giltz, 1963) At least some of these will find the trap nearby. We have also observed a tendency for the female Redwings to "pursue" the males during the breeding season. Hence they may be attracted by any males in the trap. It is not till July that we note a pronounced rise. This may be the same post-breeding behavior noted above. In two curves there is a pronounced drop in September. This is about the time when the corn is soft and the Redwings are doing the damage to the milky grain. This grain could be a stronger attraction than whatever the trap has to offer. However, at



some similar decoy traps that we are operating near Lake Erie the catch appears larger morning and evening while the corn is damaged throughout the day. There is also evidence in September of an influx of Redwings at the Lake Erie traps. This might include some Columbus birds and partly explain the Columbus drop in September although we do not have banding data to support this point. Finally in October-November the curves show the usual migrants passing through. Incidentally this same tendency is noted at the Lake Erie traps.

The Starlings in January 1964 have the same carry-over from the big roost as the Cowbirds and Grackles. Then in February-March the migrants pass through. In April-May breeding activities keep them occupied but when that is over they frequent the trap in large numbers except in 1966. At that time we were having trouble with holes developing in the chicken wire and the Starlings are more adept than the other species in finding such holes and escaping. The motivation of the starlings is probably the food rather than the social aspect. Incidentally the typical Starling enters the trap only once while Grackles and Cowbirds do a lot of repeating. This may be due to the wandering tendency of the Starling. A northeastward movement from Columbus in the spring has been demonstrated by data on band recoveries (Burt and Giltz, 1966). By August they have lost interest in the trap—there is no social motivation to hold them. Then such migrants as pass through are spread over a considerable period rather than peaked like some of the other species.

It would be interesting to compare our data with other studies of central Ohio populations. . . The only material available is limited to the month of June and may be compared with the June ordinates on our curves. A Breeding Bird Survey was conducted in June 1966 under the auspices of the Bureau of Sport Fisheries and Wildlife (unpublished). A total of 9063 birds of the four species under consideration was reported for Ohio. Grackles represented 16% of these, Cowbirds 3%, Redwings 50% and Starlings 31%. The percentages are about the same if we limit the data to a rectangle 2 degrees of latitude by 2 degrees of longitude and centered approximately at Columbus. The small percentage of Cowbirds corresponds well with the data on our charts. We banded practically no cowbirds in June. With Grackles and Starlings there is a fair correspondence. There is a marked discrepancy for the Redwings. In the Survey they represented 50% of the blackbirds whereas we trapped very few in June. At this period many young Redwings are being fledged in the fields, often flying up and hovering. In this way they may be seen and counted by Bird Survey personnel but cannot make a sufficiently extended flight to reach the trap. Similarly some parent birds attending the fledglings may be conspicuous to observers but remain in the immediate vicinity. So it is understandable that the Survey method yields a much higher proportion of Redwings than indicated by the trap data.

References

- Burt, H. E. and Giltz, M. L. Recoveries of Starlings Banded at Columbus, Ohio. *Bird Banding*, 1966, 37, 267-273.
- Giltz, Maurice L., The Redwing's Nest Must Be Near Water in Cattail Marshes or in Alfalfa Fields. *Wheaton Club Bulletin*, 1963, 8, 1-3.
- Meanly, B. et al. The Blackbird Banding Program of the Patuxent Wildlife Research Center. *Eastern Bird Banding Association News*, 1962, 25, 117-121.
- Nunneley, Sarah A., Analysis of Banding Records of Local Populations of Blue Jays and of Redpolls at Granby, Mass. *Bird Banding*, 1964, 35, 8-22.

TREE APARTMENT HOUSE, WASHINGTON COUNTY, OHIO Pat Murphy

One hundred sixty-five acre Veto Lake lies in western Washington County, Ohio. At its upper end the lake backwaters into the former Vincent fork of the eastern branch of the Little Hocking River. Several drowned snags, probably sycamore, stand in this backwater. Two such snags, 80 feet high, are the subject of this study, which was made between April 12 and July 7, 1965, and totaled about 30 hours of observation.

Looking at Tree number 1, which was to be christened the "Tree Apartment House" for reasons we shall presently see, the creek winds away and to the right: ideal habitat for Wood Ducks, Green Herons, and Spotted Sandpipers. A steep bank on the right side of the road gives way to a pole-sized oak-hickory woods, suitable for such species as Wood Pewee, Yellow-throated Vireo, Cerulean Warbler and Scarlet Tanager. On the left, across the water, is an abandoned pasture growing up to shrubs and small trees: habitat for Field Sparrows, Kingbirds, Yellow-breasted Chat, Prairie Warbler and White-eyed Vireos. One of the shorter, broken down snags, surrounded by water, was the nest site of a pair of Eastern Bluebirds. Song Sparrows nest not far from the water's edge.

On April 12, the day the Apartment House was discovered, only a few of the tenants were observed. In the topmost hole of Tree Number 1, a pair of Pileated Woodpeckers was found nesting. Fifteen feet below this nest hole, the head of a gray-phased Screech Owl protruded from an old pileated hole. Four pairs of Yellow-shafted Flickers were present some already paired and excavating. Also, there were several Starlings present.

Forty feet away, in the other 80-foot snag was the nest of a pair of Kestrels, or Sparrow Hawks. There was Flicker and Starling activity here, too.

The nest day the first tree was sounded, and found to be unsafe for climbing. The sounding revealed the presence of another tenant species in the Apartment House: a pair of Flying Squirrels.) This meant that all observations of nesting success had to be made from the road. There was no access to the site by boat, for the ground across the water was unfit for a blind, and the place too public to leave equipment over a long period. Daily assembly and disassembly of equipment would be too time consuming.

On May 12, a month from the first discoveries, a new species, a Red-headed Woodpecker, was observed excavating a nest. Hicks (1935), gave the Red-headed Woodpecker a rating of "2". or "rare" for Washington County: and Harper, (1955), classed it as an "uncommon summer resident" in Southern Unglaciated Ohio. However, as a recent record, since 1960, this nesting stands as the only breeding record of a Red-headed Woodpecker for Washington County.

Because the known nesting success was limited to, in most cases, the observation of whether parents were feeding young, the study time was largely devoted to observing the various species present in relation to each other, and to producing a photographic record of all species possible.

That the community could be dominated by the presence of two species of raptors, the Kestrels by day and the Owls by night, was an intriguing possibility. For instance, there was the disappearance of the pair of Flying Squirrels, whose hole was taken over by a Pair of Starlings. The Starlings, too, come under suspicion. This outcome is unknown.

There was no inter-specific friction between the largest species, the Pileated Woodpecker and the Kestrel. Each pair carried out its incubation and feeding activities unmolested by each other or other species. The Pileateds were observed from May 13 feeding 2 vigorous young at approximately 20-27 minute intervals, although one interval was as long as 58 minutes and one as short as 7 minutes. The Kestrels' nest hole kept the number of nestlings secret, though the young were heard being fed from May 20 on. Frequent visits

TABLE I
NESTS IN APARTMENT HOUSE SNAGS

SPECIES	TREE NO. 1	SPECIES	TREE NO. 2
Pileated Woodpecker	75 ft.	Kestrel	75 ft.
Yellow-Shafted Flicker	70 ft.		
Screech Owl	65 ft.		
Flying Squirrels	60 ft.**		
Flicker	59 ft.**		
Red-Headed Woodpecker No. 1	55 ft.**	Starling	55 ft.
Red-Headed Woodpecker No. 4	54 ft.		
		Flicker	50 ft.
		Starling	45 ft.
Starling	40 ft.		
Flicker	10 ft.		

** — Displaced by Starling.

to the nest probably indicated insects were the staple of the young hawks, as the procuring and rendering of rodent prey would have consumed more time between visits. Incidentally, the male Kestrel is a faithful provider to the incubating female. He would appear at 17-24 minute intervals, perching on the tip of the Pileated snag, calling. She would emerge from the nest and grasp his offering, taking a perch near him, choosing to eat away from home. Once she missed the exchange, and in a spectacular, deft swoop, dove and recovered her meal before it hit the water, 80 feet below.

One might question why there were no objections from the big woodpeckers at the Kestrels' use of their snag. Whether it was good timing while the Pileateds were otherwise occupied, or whether they simply chose to ignore the Kestrels, is unknown. However, to Flickers, Red-heads and Starlings, the top and the skinny offshoot to the right were off limits when the Pileateds were on guard.

The Mountain Lake Brooks Bird Club Foray interrupted my observations, and upon my return, the young woodpeckers had left the nest, and the top of the Kestrel snag was blown off, the birds gone. However, in the field across the water, four Kestrels were observed flying and calling to one another. The outcome of the Screech Owl nesting is not known, if indeed there was a nesting. The owls were observed 6 different times: three times a red-phased bird and three times a gray-phased bird were observed using the cavity by day.

The real meat of the inter-specific interplay was found in the relationships between the Flickers and Starlings, the Flickers and the Red-headed Woodpeckers, and the Red-heads and Starlings. Of the three species, Starlings were dominant. Four pairs of Flickers and at least six pairs of Starlings were present. The exact number of Flicker excavations pre-empted by Starlings is unknown. The trees were huge and from only one side I may have missed something. For some time only two of the four pairs of Flickers were able to get nests underway. One pair succeeded in Tree number 2, at about 50 feet, and another in Tree number 1 at 10 feet. Between the other two pairs of Flickers there were constant fights, as though pairing had not been decided, and constant wickering and drumming took place. There were 5 observations of attempts at reverse copulation. One pair excavated very near what later was to be Red-head hole number 1. The Starlings pre-empted

and raised a family which fledged. A pair of Flickers, perhaps the original ones, returned to the hole, and apparently held it for about 4 days, all the while being viciously attacked by the Red-heads, who were in the 7th day of excavation of hole number 1, a mere foot away. The next day the Flickers had lost again to Starlings, and Starlings had taken Red-head hole number 1.

Upon my return from Foray, there were 3 Flicker nests, the two mentioned before, and a new one in Tree number 1, about 70 feet up and in the rear. The fourth pair of Flickers had disappeared.

The ousting of the Red-headed Woodpeckers by the Starlings didn't discourage them. Of the two woodpecker species the Red-heads seemed far better equipped to deal with Starlings than the Flickers. The fight over hole number 1 was vicious, the Red-heads literally diving on the Starlings. That the Starlings won out was one of the surprises of the study. On May 24, Red-head hole number 2 was begun, 70 feet up on the main trunk of Tree number 1. On May 28, they were excavating hole number 3, in the right fork. Neither hole was used by any birds to my knowledge. Perhaps the tree wasn't suitable at these sites. On June 6 the Red-heads had progressed far enough on hole number 4 that they were inside and throwing out chips. It was not until June 25 that I was able to return and learn that they were still in this, their fourth excavation. Both parents were present and apparently changing incubation shifts at this date.

On July 2 a family of Kingbirds entered the area, keeping one of the Red-heads busy apparently defending feeding territory. It dispatched the tyrant flycatchers quickly. This was the year of the Periodical Cicada emergence in our area, and the adult insects were everywhere. In procuring its food on the wing the Red-head proved what an expert flycatcher it can be. Its sallies were superb, and accurate.

Assessing the Starlings' success accurately is difficult. The stated 6 nests, some of which were possibly second nestings, may well be a fraction of the actual total. Every Starling nest hole that I could see eventually had several young peering out. The devoted parents brought food every 4 to 7 minutes. Adults carried food for some days to young which were fully feathered and as large as the parent birds. This devotion, combined with rearing their young in cavities away from the eyes of predators, and the complete feathering of the young before fledging, contribute to a lessening of mortality in the young (see Bent, 1950). This, together with the success of the Starlings in snatching nest sites from three species, i.e., the Flying Squirrels, Flickers and the Red-headed Woodpeckers, is illustrative of the ecological impact of this alien species on our native wildlife.

EPILOGUE: In 1966, a new excavation, Pileated in size and shape, was begun in Tree number 1. It was never completed. A pair of Kestrels was observed nesting in the top of Tree number 2, in spite of the fate of the top of the same tree the year before.

No further study was made.

References

- Bent, A. C., "Life Histories of North American Wagtails, Shrikes, Vireos, and Their Allies", *Smithsonian Bulletin* 197, 1950
 HICKS, L. "Breeding Birds of Unglaciaded Ohio", 1935
 HARPER, ARTHUR R., "Ohio's Birds, and Where to Find Them", 1955

Star Route, Reno, Ohio 45773

When the hummingbirds first appeared at our feeder late in July, 1966, there was often a great flurry. In the beginning, a full-throated male sat daily in a near by tree and drove all the other birds away. A second feeder on the other side of the house made his job tougher but he continued to attack every other hummer that came in sight. We saw him no more after about a month, and many of the other birds took turns "watching the feeder". All had the white outer tail feathers that identify females, but one appeared to be a young male. A small red spot over half the lower throat grew larger but never completely covered the throat. He left early also (about the first week in September). Females continued to fight over the feeder after he left, with one maintaining a sentinel post most of the time. One beautiful female had a pin-point spot of ruby in the center of the throat that flashed vividly in the sunlight. The spot never appeared any larger. Some females were plain grayish underneath, some were mottled with gray spots (uneven), some had heavily streaked throats (streaks running from chin toward breast), some were lightly streaked in the same area. All had the white outer tail feathers.

Sometimes the fighting appeared to be fun, with the sentinel darting in a perfunctory way at each bird approaching the feeder. At other times, there would be a savage clacking of bills and whirring of wings as the birds met head-on or fled beak to tail around the corner of the house. From the beginning the females fed more heavily than the males, remaining, when possible, to drive a half dozen air bubbles up the tube of the feeder. By the middle of September, the two or three females remaining often came to feed briefly, perch on the rail, feed again, perch, feed as often as half dozen to a dozen times, before leaving.

- 9-14-66 Female hummingbirds feeding much more frequently. Bellies greatly distended; appear at least one third larger than normal. We have seen no males since late in August.
- 9-15-66 3 females still coming to the feeder. One female was stunned when she flew into a window. Another female hovered over her as if concerned. When the first bird failed to move, second pecked at her eye. Intervention by humans prevented permanent damage. Stunned bird took off momentarily.
- 9-18-66 Saw only dark-bellied female.
- 9-21-66 Saw white-bellied female.
- 9-25-66 Three hummingbirds still with us: white front, streaked throat, and gray patches (2 on breast).

This was last date on which we saw hummingbirds.

Mrs. H. F. Hefner

THE GATHERING CAGE
Constance Katholi, Editor
930 Woodland Ave., South Charleston, W. Va.

SOUTH CHARLESTON, W. VA. Spring banding was generally uneventful here except for the unusual numbers of Cardinals and Towhees moving back north. The most interesting migrant was the White-crowned sparrow which I had never seen on Woodland Avenue before. I banded three between May 11 and 18, and one bird repeated for several days indicating a lay-over. But as they went readily into traps, there were evidently not many of them here. The species made news generally throughout the area being mentioned in several of the following reports. Ralph Bell wrote that he banded 33 in Pennsylvania.

I greeted a number of returning summer residents, for example, 4 Summer Tanagers (in good health) while a fifth one (banded in April 1963) was brought to me as a casualty. A Wood Thrush banded in May 1964 was another interesting return. Additionally I recaptured an impressive number of year-round residents dating from the beginning of my banding operation here; 2 Titmice, April and June 1963; 1 Carolina Wren, August 1963; 1 Red-bellied Woodpecker, November 1963; 1 male Cardinal, (#64-144301) April 1963. This bird wears the first band on my first string of 1A's, and is a very wary individual. The ledger shows that I rarely take him more than once a year, probably only after I initiate a drastic change of net-setting. Several of the above birds are a minimum of 5 years old.

And finally I had a record number of returns on Blue Jays. The prolonged rainy weather in May contributed to this as they went into traps with unusual alacrity. Four jays returned from the spring of 1963, 1 from 1964, 1 from 1965, and 8 from 1966. I welcomed this opportunity to examine the condition of the wings in comparison with known age, since knowledge of wing molts in jays will be most helpful in connection with the new age codes which go into effect July 1.

When one reviews the schedules for returns, etc., one realizes just how much data is stored within,—material for possible papers,—if one could only muster the strength, and find the key to retrieve the accumulated information.

HARTLAND FARM, LEWISBURG, W. VA. Charley Handley banded 298 birds at his station during March, April and May. We should all be so fortunate! He wrote, "The huge, spectacular flight of Song Sparrows which started March 3 was largely over by the 22nd. Sixty-three were taken plus a scattering of other sparrows, Savannah, Field, and Lincoln. The spring flight of White-crowns did not occur until the first of May. One bird lingered as late as the 18th. Three White-crowns which were present in my rosehedge at the end of March must have wintered nearby, although I did not know of the whereabouts of any during that period. One of these was a return which I had banded locally in August; it is quite a feat to take a bird in migration in both spring and fall—unless it winters a mile or so away! I banded 25 in all, and most of them had acquired their adult plumage. Only three retained one or two "tell-tale" brown feathers on the crown to mark them as sub-adults—or AHY's to use the new terminology from the Banding Office. There were three birds of the Gambel's race. The absence of the black lore in the Gambel's was quite noticeable when holding both a typical White-crowned and a Gambel's in the hand at the same time. The Gambel's sparrow is a bird which I have been on the lookout for at McClintic over the years, but not a single one of the hundreds of White-crowns handled there was of the Gambel's

race. The big pay-off on western species came on May 9 when a Lark Bunting was banded. Just prior to that a series of severe storms had prevailed over the north-central United States. "Bobolinks moved through the area on May 10, and I banded 5 of them. Unfortunately, I ran out of that band size at just the wrong time, and had to release 4 more unbanded!

"Common Grackles (mostly, if not all, of the Purple race) accounted for 152 of my total take. Their period of greatest abundance was from March 15 to April 15. The greatest number taken in a single day was 50 on April 1. Probably half of the summer residents are now banded. Grackles are definitely "trap-shy" once they have been banded, but enough repeat to check on their movements. Young birds are coming to the bait now. I was surprised to find that numbers of Grackles nested in the multi-flora hedge."

CLARKESVILLE, PA. "The spring of 1967 will be remembered (by me) as the year of the Bluebird nesting disaster. No doubt the same thing has happened before many times, but this year there are records to prove it. A base period from May 1 to 15 is used. During this period the weather was very cool with rain almost every day. As a result insect hatch was at a minimum. To qualify for the check each Bluebird box had to contain young sometime during that period.

Total boxes containing young during period	73
Number of boxes in which young died	36
Total number of nestlings found dead	151
Additional young which probably died	11
Number of boxes which probably fledged young	37
Number of Bluebirds which apparently left safely	158

Considering the adverse weather conditions it is surprising that about 50% did live to leave the boxes. The parents usually tried to feed all the young, or else abandoned them entirely. The most critical period naturally was after they were half-grown, when the food demand was the greatest. Many died after they were completely feathered. Some were even able to get out of the boxes and were found dead on the ground. I have no actual proof, but I feel that the first-year adults did a poorer job of raising their young than the older birds. Some parents apparently kept their young alive by feeding them tent caterpillars, which are on the upswing this year. One box probably was successful because the property owner had the foresight to put garbage nearby which attracted flies and bugs. Boxes containing young that were fed an improper diet as a substitute were usually wet and unsanitary. If the nest and the dead young were removed immediately a new nest would often be started within 10 days." Ralph Bell

POINT PLEASANT, W. VA. Two offensives were mounted at McClintic Wildlife Refuge north of Pt. Pleasant this spring. The first (April 4 to 8) by Charley Handley with the part-time assistance of C. Katholi, was a special effort directed toward recoveries.—of old resident birds generally banded by local banders, and of White-crowned Sparrows in particular. The vicinity of Area Headquarters, where Bob Kletzly did his trapping, was saturated with nets and traps: 126 new birds and 26 returns were taken. In his report Charley wrote: "Of particular interest to me was a male Grackle very definitely of the Bronzed variety, and a Screech Owl, taken near the Barn at dusk on April 7. A White-crowned sparrow had been killed in that net lane on the previous evening, and another in the same net with the owl on the 7th. This was my first evidence of a Screech Owl robbing a net. Other net robbers with which I have had contact include a Marsh Hawk, Sharpshinned

Hawk, and Loggerhead Shrike." In his summary of this outing Charley commented that the returns were mostly run-of-the-mill. The most interesting were 2 Cardinals banded March 1960 and June 1961 respectively, and a White-crown, October 1960. The complete break-down on the sparrows was as follows: 1 from 1960, 2 from 1963, 4 from 1964, (3 of these were checked in during 1966 as well), and 10 from 1966. It was puzzling that more of the 1966 birds were not taken; perhaps, the date, 10 days later than a similar assault last year, was responsible. It is likely that some of the White-crowns and Cardinals had already left for their breeding grounds. In general birds appeared scarce on the Refuge in comparison with former years.

A second operation was staged in connection with "Little Foray or Sortie" 1967. C. Katholi and M. Kiff with the help of Tom Olsen set nets for a token sampling in support of the major effort,—the most complete coverage of the Refuge birdwise ever attempted. The nets produced only the normal expectancy, with the possible exception of a male Mourning Warbler. This was at first a new addition to the Camp list, but later 3 more were found. Eight returns were taken. Of interest was a Chat banded by Lloyd Kiff in 1962, another Chat banded by Katholi in 1963, and an Indigo banded in 1962 by Anne Shreve. Five cuckoo, 2 Yellow-billed and 3 Black-billed, were taken all in the same net,—which it seemed—was placed in front of bushes crawling with tent caterpillars!

COLUMBUS, OHIO "I am now knee-deep in a study of what I call "complacency" in blackbirds. It involves recording a lot of behaviors while the birds are in an observation cage, but it is too early for details. However, one incidental bit of behavior is worth mentioning.

A Grackle sitting on the perch in the observation cage suddenly notices the band on his leg. He reaches down to pick it up, grasps it firmly with his beak and lifts. The leg comes along also, so he loses his balance and flutters back on to the perch. One Redwing actually dropped ten inches and bounced on the floor of the cage before recovering himself. But what interests me is that the birds will do this over and over—for two minutes or longer in some cases. There is no indication of learning but rather an amazing lack of insight. Somehow the bird is unable to connect the sensation of his leg being pulled with the sensation in his neck muscles that do the pulling. This suggests the human infant who puts his foot in his mouth but seems unaware of whose foot he is chewing—he lacks self-identity.

I doubt that the bird is trying to get rid of the noxious band. In that case he would probably be aware of his leg and would grasp the perch with that foot while pulling at the band. On the contrary he appears to become suddenly aware of the band visually—a sort of "discovery". Picking it up may result from curiosity or even a hoarding tendency, although I have not heard of these species collecting trinkets the way crows do. Evidently the visual object dominates the situation, and although the picking-up response is unsuccessful, it persists. It is difficult for us to appreciate the relative importance of things to an organism that far distant from us on the phylogenetic scale." Harold Burr

SUMMIT LAKE, WISCONSIN "Somehow I always get back to Chickadees. One gets fond of them up here. The Boreal Chickadee is for months the only common bird in our climate. They would make interesting subject matter for a project, but they are almost uncatchable in sufficient numbers. They won't go into traps, and invariably wriggle out of nets. Black-caps I have to disentangle over and over, but the Boreals always get away,—I only banded 6 last year. It is my opinion that these birds are inaccurately depicted in the various field guides: most drawings show a chickadee which is like a Black-cap, but with a brown cap and back; actually there is little resemblance. They are distinguishable

as far as you can see them. The chief difference lies in the cheek; it is dark, not white; only the lores are white. They have a whistled song, too, which is not mentioned in the texts, but is among the loveliest in the northern woods,—a sweet, warbling sound not at all like a chickadee.

Is there a prenuptial molt in Chickadees? Whenever I catch one in spring, the feathers fall out at the least touch. When I process a Boreal, I have a whole pile of feathers on the desk. Chickadees do grow a great many extra feathers in fall to withstand the terrible cold of our winters, so it stands to reason that they must fall out in spring. A summer Chickadee looks about half the size of a winter one, and feels very bare. Their winter plumage is so thick that by November it is just about impossible to "skull" them. Chickadees are an easy species to learn "skulling" on, for their skulls are large for the size of the birds, and the spots show up very well." Carol Rudy

Two Western Migrants Banded in Greenbrier County, West Virginia

A series of successive severe storms over the north-central United States during late April apparently blocked the northward passage of several western migrants and carried them to the east as was evidenced by the appearance during early May of Gambel's White-crowned Sparrows and a Lark Bunting at my banding station (Hartland Farm) one and a half miles west of Lewisburg. In addition to the twenty-five typical White-crowned Sparrows banded were three birds of the Gambel's race. The first of these was taken on May 5 and two others on May 7. When I held a typical White-crowned Sparrow and a Gambel's Sparrow in my hand at the same time, the absence of the black line in front of the eye of the latter was quite noticeable. In so far as I know this is the first recorded appearance of this race of the White-crowned Sparrow in West Virginia. The Gambel's Sparrow is a bird that I have looked for at the McClintic Wildlife Station over the years, but of the several hundred White Crowns handled there, not one was a Gambel's.

It didn't rain on May 9, but the humidity was so high that you expected a downpour at any moment. I had set several traps and a net in my sister's garden for White Crowns. While visiting the traps in mid-morning I noticed a medium-sized black bird in a nearby small tree. My first thought was that it was a Bobolink of which there were many in the nearby meadow, but I did not recall ever having seen a Bobolink down among the branches of a tree. A quick look at the bird with my binoculars confirmed it to be a male Lark Bunting. When I visited the trap-site about an hour later, the bird was in a funnel entrance trap. The bird was banded and released.

This is the second occurrence of this western species in West Virginia. The first bird recorded was also a male. It was observed by W. R. DeGarmo on the weed-grown river bank near the glass plant in Kanawha City, Charleston on the 1948 Christmas Bird Count—January 1, 1949. I collected the bird a few days later and sent it to my son, Charles Jr., who preserved it as a scientific skin and deposited it in the University of Michigan Museum of Vertebrate Zoology.

Charles O. Handley, Sr.



FIELD NOTES

Mrs. Nevada Laitsch, Editor
MC 21, East Liverpool, Ohio

SPRING SEASON: MARCH 1 to MAY 31

The Spring season can scarcely be described as a typical one. It was mixed up with some warm weather in late March and early April followed by cold wet weather which lasted until the last week of May. Consequently it was a mixed up migration with some things early, some things late and some migrants still in evidence at the close of the period.

The waterfowl migration was confined mostly to flooded river valleys where observers had a few very good days. Observers commenting on Century Day counts reported record numbers of species although almost without exception these were made on a day of steady rainfall. The peak was apparent between May 10-14 when large numbers were noted at Charleston, W. Va. on May 10-12; a very heavy nocturnal flight was heard at East Liverpool, Ohio on May 13 and many birds moved through Morgantown, W. Va. May 14.

Loons, Grebes and Herons—Common Loons were scarce at Charleston and Morgantown, W. Va. The flight was poor at Marietta, Ohio. A few were found on Guilford Lake near Lisbon, Ohio in late April. Two Red-necked Grebes were seen at Seneca Lake near Barnesville, Ohio from March 25 through April 25 (C&E). A few Horned Grebes occurred at Morgantown, W. Va. beginning March 12 (GAH); found at McClintic Wildlife Station near Pt. Pleasant, W. Va. and at Kyger Creek ponds near Gallipolis, Ohio March 18 (GFH); at Seneca Lake, Ohio same date (C&E) and in Monroe County, W. Va. March 19 (PHB). A half dozen Eared Grebes were studied at length at Pymatuning Lake, Linesville, Pa. on April 1 (NL). A Double-crested Cormorant was listed near Marietta, Ohio May 7 (MAC). Great Blue Herons were mentioned by most reporters indicating about normal status. Common Egrets were recorded on several occasions by the Marietta, Ohio club. Also seen at Weirton, W. Va. May 7 (OJ), Seneca Lake, Ohio May 13 (C&E) and 3 in the Willoughby, Ohio area May 13 to 21 (MS). A Cattle Egret was seen and identified by several Charleston, W. Va. members on Coal River near St. Albans April 24 (AS). This was a state record for the species. Green Herons were considered scarce at Morgantown and Charleston, W. Va. They were quite common at McClintic Wildlife Station during the week-end of May 26-30. Two immature Black-crowned Night Herons were found at this location during the week-end. A Yellow-crowned Night Heron was seen at Seneca Lake, Ohio April 28 (MAC). An American Bittern was recorded at Huntington, W. Va. March 27 (TI), near East Liverpool, Ohio April 1 (NL), near Parkersburg, W. Va. May 3 (MAC) and at Lewisburg, W. Va. May 17 (COH). 3 were seen near Circleville, Ohio April 16 (MT). Paired Least Bittern were found on the pond study area at McClintic Wildlife Station during the work week-end May 26-30 and singles were seen on other ponds.

Waterfowl—No spectacular flights of geese or swans were reported. Numbers were disappointing at Pymatuning Lake, Pa. first week-end of April compared to the past two years on the same dates (NL). A Blue Goose was seen near Lakin, W. Va. (Mason County) on March 15 (NG). A Whistling Swan was seen in a flooded field near Petersburg, W. Va. March 17 (JS) and about 40 were seen between Cleveland and Youngstown, Ohio March 24 (MS). The duck flight was interesting and produced a few unusual records. A good flight was indicated along the Ohio, Muskingham and Sciota rivers in Ohio, the Big Sandy river near Kenova, W. Va., Moncove Lake, Monroe County W. Va. and in the South Branch Valley between Moorfield and Petersburg, W. Va. There was considerable flooding in these areas in Mid-March where the ducks found ample food supply so they remained longer than usual. Mallards appeared plentiful. Gadwalls were listed at Seneca Lake, Ohio March 25 (C&E) and at McClintic Wildlife Station on the same date (GFH). A nice flock of Pintails (36) was found at McClintic Wildlife Station March 18 (GFH). Green-winged Teals were at Seneca Lake, Ohio in good numbers March 29 (C&E). Blue-winged Teal were found at McClintic Wildlife Station May 26-30 and at Guilford Lake, Ohio May 31 (NL). Two records of European Widgeon were submitted. 2 were seen at McClintic Wildlife Station March 18 (GFH) and 1 was seen near Portsmouth, Ohio March 29 (MT). A good flight of American Widgeon was apparent with a few remaining until the end of the period. 10 Shovelers were found at McClintic Wildlife Station March 25 and a like number was at the Kyger Creek ponds across the Ohio river on the same day (GFH). Listed at Seneca Lake, Ohio March 24 (C&E) and 3 were at Guilford Lake, Ohio April 2 (NL). Many families of Wood Ducks were found at McClintic Wildlife Station week-end of May 26-30 and at Guilford Lake, Ohio May 31 (NL). A good flight of Redheads occurred at Morgantown, W. Va. March 12 (GAH). Canvasbacks were listed there that same day and on April 2. An unusual concentration of ducks was found on the Ohio river at Marietta, Ohio April 24. Pat Murphy reported an estimated 300 Buffleheads, some Red-breasted Mergansers and several Lesser Scaups plus 13 White-winged Scoters and 3 Surf Scoters. She points out that was the day following mid-western tornados. Oldsquaw was listed at Lake White, Pike County, Ohio March 18 (MT) and 8 were reported at Buckeye Lake, near Columbus, Ohio March 25 (HEB). Ruddy Ducks were not recorded at Morgantown, W. Va. this spring but were seen at several locations in the Marietta, Ohio area as well as Seneca Lake and Guilford Lake, Ohio. Hooded Mergansers appeared more common than usual and a late one was reported at Marietta, Ohio May 28 (MAC).

Vultures and Hawks—A Turkey Vulture was reported at Kenova, W. Va. March 10 (TI) and one was seen near Mt. Storm, W. Va. March 22 (GAH). Considered scarce in the Morgantown area but fairly plentiful in Cabell, Wayne and Kanawha counties, W. Va. A Black Vulture was seen at Dunlow, Wayne County, W. Va. May 11 (TI) and several were seen in the Eastern panhandle of West Virginia on May 27 (GAH). A Goshawk was reported at Brandy Camp, Elk County Pa. May 16 and one at Brockway, Pa. May 21 (TVS). Accipiters seemed scarce in most areas except Cabell and Wayne counties, W. Va. where they were considered fairly common (TI). The Red-tailed population appears stable in Ohio. Gluck reported lots of Red-shouldered hawks in the sky in Kanawha county, W. Va. first part of March and saw a good migration of Broadwings April 12. Broadwinged Hawks were the most common hawk in the Brockway, Pa. area (TVS). Marsh Hawks were seen at Brockway, Pa. March 15 (TVS) and at Marietta, Ohio March 24 (PM). There were more Osprey sightings in the Marietta, Ohio area than usual (PM) and a good number occurred at Seneca Lake, Ohio (C&E).

Gallinaceous Birds—The Ruffed Grouse population was considered very good in both Washington and Columbiana counties of Ohio. Termed scarce in Kanawha county, W. Va.

(NG). The Bobwhite population seemed about normal. A King Rail was found in Boaz marsh near Parkersburg, W. Va. May 9 (MAC). A Virginia Rail was found nesting in a small marsh near Clarksville, Pa. May 28 (RKB). This was his first record of the Virginia Rail in Greene Co. Soras were found at McClintic Wildlife Station during the May 26-30 work session. Recorded at most of the marshes reported on; however, they were not found at Altona marsh, Jefferson County, W. Va. where BBC usually finds them in late May. Common Gallinules were found at McClintic Wildlife Station May 26-30. Coots, which were fairly common throughout the region during migration were also found at this location the same week-end.

Shorebirds—As per usual most of the shorebird records came from Ohio observers where there is much more shorebird habitat and a number of competent observers. Semi-palmated Plovers were seen May 7 in the Sciota river bottoms near Portsmouth, Ohio (MT) and near Marietta, Ohio May 8 and 22 (MAC). A Piping Plover was seen at Lake White, Ohio April 22 and another was seen near Portsmouth, Ohio in a flock of shorebirds on May 7 (MT). Killdeer populations appeared normal. 2 Black-bellied Plovers were recorded at Lake White, Ohio May 6 (MT). An unusual occurrence was the finding of 5 of this species in a flooded field at Upper Tract, Pendleton County, W. Va. on May 6 (JS). 2 Golden Plovers were seen by several members of the Marietta club at Seneca Lake, Ohio April 7 (PM). A Ruddy Turnstone was seen by several members of this group near Marietta May 22 (PM). Woodcocks were listed at Charleston, W. Va. March 9 (PHB). A good flight occurred at Marietta, Ohio and greater numbers than usual were found at East Liverpool, Ohio. They were very common at McClintic Wildlife Station during the week-end May 26-30. Common Snipe were listed at Charleston March 7, at Seneca Lake, Ohio March 19. An occasional was seen at Lewisburg, W. Va. during April and 3 were flushed May 11 (COH). Numbers were good in the Marietta, Ohio area between March 24 and April 26 (MAC). A Willet was seen at the Hebron Fish Hatchery east of Columbus, Ohio April 30 (MAC). Both species of Yellow-legs were recorded at Seneca Lake, Ohio April 9 (C&E). Their numbers appeared reduced at Marietta, Ohio and the only one listed at Lewisburg, W. Va. was a Lesser Yellowlegs (COH). A flock of 10 Lessers was seen at Guilford Lake, Ohio May 18 (NL). 6 Dunlin were at Seneca Lake, Ohio May 13 (C&E) and one was seen at Upper Tract, W. Va. May 14 (JS). The Marietta club had several sightings of Dunlin between April 27 and May 22. Semipalmated Sandpiper was seen near Marietta, Ohio May 7 (PM) and one was at Upper Tract, Pendleton County, W. Va. May 14 (JS).

Gulls and Terns—Herring and Ring-billed Gulls were not uncommon in much of the region and Bonaparte's Gulls were much more common than usual. Common Terns in flocks numbering up to 50 were seen on the Ohio River near Marietta, Ohio in late April and early May (MAC); a few were at Seneca Lake, Ohio April 22 (C&E) and one was seen at Huntington, W. Va. May 18 (TI). Caspian Terns were recorded at Seneca Lake, Ohio April 25 (C&E) and 3 were on the Ohio River at Marietta May 7 (PM). Black Terns were recorded in more locations than usual. A flock of two dozen was at Guilford Lake, Ohio on May 18.

Doves, Cuckoos and Owls—Mourning Doves appeared plentiful. Both species of Cuckoos remained scarce in most areas. A Barn Owl was found at Kanawha City (Charleston, W. Va.) April 13 (PHB). Screech Owls were mentioned by several reporters. A Great Horned Owl was heard at Barnesville, Ohio March 29 (C&E). Gluck found Barred Owls at Coonskin Park, Charleston and at Kanawha State Forest. Listed at McClintic Wildlife Station May 27.

Goatsucker, Swifts and Hummingbirds—A Whip-poor-will was heard at Charleston, W. Va. March 30 (PHB), in Morgan County, W. Va. April 14 (GHB) and arrived at Marietta, Ohio April 17. Common Nighthawks were first seen at Huntington, W. Va. May 1 (TI)

Morgantown, W. Va. May 4 (GAH) but were about two weeks later in other localities. Chimney Swifts arrived at Charleston and Huntington April 14-15 and about five days later in other localities. Several people commented on the scarcity of Hummingbirds.

Woodpeckers—A good flight of Flickers occurred last week of March and first week of April. Yellow-bellied Sapsuckers staged a pretty good flight with late dates at Clarksville, Pa. May 10 (RKB) and East Liverpool, Ohio May 11-13 (NL).

Flycatchers and Swallows—Eastern Kingbirds arrived at Lewisburg, W. Va. April 16. 2 found dead during May presumably died of starvation during the inclement weather (COH). The general arrival date at Marietta, Ohio was May 21. A migratory wave was noted at Morgantown, W. Va. May 7 (GAH). A Phoebe was listed at Charleston March 3 (NG). A good flight of Least Flycatchers occurred between May 5 and 12. Olive-sided Flycatchers (a rarity in our region) were found near Marietta, Ohio May 9-11-12 (MAC) and one was seen at McClintic Wildlife Station by several BBC people May 28. Most reporters considered the swallow numbers very good. Tree Swallows were at Seneca Lake, Ohio March 25 (C&E), at Pymatuning Lake, Pa. April 1 (NL), at McClintic Wildlife Station April 5 (NG). They were found nesting at this latter location May 26-30. Rough-winged Swallows were unusually scarce at Morgantown, W. Va. (GAH). A Barn Swallow at Clarksville, Pa. April 2 was considered quite early (RKB). They were seen at Seneca Lake, Ohio, Lewisburg, W. Va. and Morgantown on April 9. Purple Martins were generally late in arriving and populations appeared to be down.

Titmice and Wrens—Red-breasted Nuthatches were scarce during migration. One was seen at Morgantown, W. Va. May 14 where it is not a common migrant (GAH). A pair of Brown Creepers seen at Oglebay Park, Wheeling, W. Va. May 7 might mean that they are again nesting there (GHB). House Wrens had arrived by mid April in most places. A wave of Winter Wrens was noted in the East Liverpool, Ohio area April 6 (NL). They were seen at Charleston, W. Va. April 16 (PHB) and Barnesville, Ohio April 25 (C&E). Good numbers of Long-billed Marsh Wrens were found in the Lisbon, Ohio vicinity May 18-31 (NL). A Short-billed Marsh Wren was seen and heard at Prichard, Wayne County, W. Va. May 16 (TI).

Mimics and Thrushes—Catbirds arrived about on time and numbers were good. A Brown Thrasher at St. Albans, W. Va. March 18 considered early (GFH) and one appeared at feeder at Marietta, Ohio March 20 (MAC). Wood Thrush were at Charleston April 12 (NG) and Marietta April 17. A heavy migration was noted at Clarksville, Pa. and Morgantown, W. Va. April 30. Hermit Thrush records were sparse. Hall had one at Morgantown April 9 and another one April 30 but did not find them at Gaudineer on his yearly Memorial day count. Swainson's Thrush were found at Marietta, Ohio in good numbers May 5 to 17 (MAC) but did not appear in the East Liverpool area until May 20 when they were abundant for 5 days. Bell comments that he did not see a single Swainson's or Gray-cheeked at Clarksville, Pa. Several Veerys were seen at East Liverpool May 17-20 (NL); scarce elsewhere.

Gnatcatchers through Shrikes—Blue-gray Gnatcatchers were early at Marietta, Ohio and East Liverpool, April 8 and 12. Numbers very good. Both species of Kinglets staged a good flight after a winter of almost total absence. Good flocks of Water Pipits were found at Lisbon, Ohio March 16 (NL), Morgantown, W. Va. March 19 (GAH) and Marietta, Ohio March 20 (MAC) which points to a good flight. Cedar Waxwings were extremely scarce during the period. Many reporters commented "None". Unusual was the record of a Northern Shrike at McClintic Wildlife Station on March 20 (GFH) as was a Loggerhead Shrike in Garret County, Md. March 12 (GAH).

Vireos—White-eyed Vireos were in Charleston, W. Va. March 16 (PHB) and at Marietta,

Ohio March 17 (PM). Were late and scarce at East Liverpool, Ohio and Morgantown, W. Va. Yellow-throated Vireos at Marietta, Ohio on April 17 was earliest record in five years (PM). About on time in other localities and numbers appeared good. More Solitary records were submitted than usual. Red-eye arrivals averaged around May 7 with very good numbers.

Warblers—Most reporters considered the warbler flight good some commenting that they had seen every species that they could expect in this region. The main flight appeared late peaking May 12-14. A few migrating species were still around at the end of the period. A Black-and-White Warbler was listed at Charleston, W. Va. April 4 (CK). Prothonotary Warblers were seen at Seneca Lake, Ohio April 25 (C&E), May 10 and 18 in Columbiana County, Ohio (NL). Numbers were good in Eastern Panhandle of West Virginia May 27 (GAH). Worm-eating Warbler listed at Charleston, W. Va. April 15 (PHB). Two different records of Brewster's Warblers were submitted from Marietta, Ohio May 5 and 8 (PM). A Tennessee was found at McClintic Wildlife Station May 29 (GFH). An Orange-crowned was listed at Seneca Lake, Ohio May 6 (C&E). A Nashville was found on Allegheny Front mountain near the Red Creek campground May 27 (JS). Interesting—Hall and Laitsch found this species at the same location first week in June 1965. Very plentiful at Cranberry Glades May 24 (CK). Unusually large numbers of Parulas were seen at Morgantown beginning April 29 and plentiful in the Eastern Panhandle of West Virginia May 27-28 (GAH). Yellow Warblers appeared very late but numbers were good once they came in. Rather few records of Black-throated Blues were submitted. However several were seen at Barnesville, Ohio May 16 (C&E). Black-throated Greens were in good numbers. A very early Cerulean was seen at Chesapeake, Ohio April 2 (TI). Blackburnians were plentiful and the flight stretched from May 6 to 21. More records than usual of Yellow-throated Warblers. They had moved into the Berry Hills section of Charleston March 30 almost two weeks ahead of schedule (CK). Found around Marietta and Seneca Lake, Ohio; seen in Wayne County, W. Va. (TI) and found at a new location in the Eastern Panhandle of West Virginia (GAH). There was a very good flight of Chestnut-sided Warblers. They were still in the Eastern Panhandle of W. Va. May 27 (GAH) and one was found near East Liverpool, Ohio June 2 (ERC). Blackpolls were late and lingered into first week of June. Northern Waterthrush were listed at Seneca Lake April 24 (C&E). Two late ones were found at McClintic Wildlife Station May 27 (NL). Numbers normal on breeding grounds in Cheat Mountains (GAH) and many were seen at Cranberry Glades May 24 (CK). A female Connecticut Warbler was banded at Morgantown, W. Va. May 20 constituting Hall's first spring record there. More records of Mourning Warblers than usual. Still in Eastern Panhandle May 27-28 (GAH). One was banded at McClintic Wildlife Station May 27 (CK) and several others were heard and seen. One was singing in Coonskin Park, Charleston, W. Va. May 30 (NG). This appeared to be a banner year for Wilson's Warblers as reports came from many places of good numbers. A June 2 was a very late record for a Canada at Charleston, W. Va. (PHB) Redstarts were a little late but numbers appeared good.

Blackbirds—Bobolinks had appeared in most places during first week of May. However were not seen at Brockway, Pa. until May 21 (TVS). Blackbirds moved in with the warm weather in early March in ever increasing numbers. A nice flock of Rusty Blackbirds was seen in Garret County, Md. March 12 (GAH). Orioles turned up about on time—Orchards a little better than a week ahead of the Baltimores. A male Dickcissel was recorded at Clarksville, Pa. May 3 for Bell's first spring record. One was seen at Kanawha State Forest near Charleston May 6 (AS) and one that wintered at Marietta, Ohio was last seen at the feeder April 10 (MAC). Scarlet Tanagers were first listed at Charleston April 15 and Summer Tanagers April 17. There was an unusually large migration of Scarlets through Morgan-

town, W. Va. beginning May 12 (GAH). Numbers of both were about equal at McClintic Wildlife Station May 26-30. Rosebreasted Grosbeak records were spotty and appeared down in numbers with exception of Katholi who regarded numbers good at Charleston. Indigo Buntings were in the southern part of the region by the end of April and were found in good numbers most places during first week of May. Not listed at Brockway, Pa. until May 26 (TVS). Purple Finch and Pine Siskins were almost totally absent.

Sparrows—A good early flight of Savannah Sparrows was seen in Eastern Ohio. A Grasshopper Sparrow at Marietta, Ohio April 14 was earliest record in five years (PM). Henslow's were found near East Liverpool, Ohio April 27 (NL) and at Morgantown, W.Va. April 30 (GAH). Juncos had moved out of most localities by April 15. However a straggler was banded at Charleston May 4 (CK). The White-crowned flight was one of the best in years. Many reporters commented on both abundance and song. A late one was found at McClintic Wildlife Station May 28. A Harris Sparrow was found at Charleston, W. Va. March 30 (NG) and was seen by many Charleston birders. One came to a feeder near Portsmouth, Ohio regularly from March 5 to April 21 (MT). Few records of Fox Sparrows were submitted. A Lincoln Sparrow appeared at feeder at Marietta, Ohio May 11-14 (PM). One was banded at Clarksville, Pa. May 17 and one seen near East Liverpool, Ohio May 18 (NL). There appeared to be a heavy migration of Song Sparrows throughout most of the region.

Contributors: Polly H. Ballowe, PHB; Ralph K. Bell, RKB; George H. Breiding, GHB; Harold E. Burt, HEB; Everett R. Chandler, ERC; Mary Chapman and Mabel Edgerton, C&E; Norris Gluck, NG; George A. Hall, GAH; Charles O. Handley, Sr., COH; George F. Hurley, GFH; Tom Igou, TI; Oliver Johnson, OJ; Constance Katholi, CK; Nevada Laitsch, NL; Marietta Audubon Club, MAC; Pat Murphy, PM; Tom and Violet Shields, TVS; Merit Skaggs, MS; John Smith, JS; Anne Shreve, AS; Marie Trowbridge, MT; — Mrs. Nevada Laitsch, MC 21, East Liverpool, Ohio

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REFERENCES. References should be listed alphabetically by author and referred to in the text by author and year.

TABLES. Keep tables simple and easy to follow so they may be understood without reference to the text.

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DATA. The actual results of the investigation along with the methods used for collecting the data.

CONCLUSIONS. Interpretation of the data.

FUTURE WORK. As a result of the investigation, what work remains to be done.

SUMMARY. For longer articles it is desirable to present a brief summary of the work.

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Many papers will not fit this type of presentation. Sometimes a simple sequence-of-events arrangement will serve.

BROOKS BIRD CLUB MEMBERSHIP

The Brooks Bird Club is a non-profit organization whose objective is to encourage the study and conservation of birds and other phases of natural history. Membership includes subscriptions to the REDSTART and MAILBAG and entitles one to all the privileges offered by the Club. Classes of membership are: Student, \$2.00; Active, \$5.00; Family, \$7.00; Sustaining, \$10.00; Life, \$100. Checks should be written payable to the Brooks Bird Club and mailed to 707 Warwood Avenue, Wheeling, West Virginia.