

TEN SPRING BIRD LISTS MADE NEAR WASHINGTON, D. C.*

BY W. L. MCATEE

Nearly every year since 1907, Edward A. Preble and the writer, sometimes in company with others, have made at least one trip during the height of migration, on which an effort was made to list as many species of birds as possible. Notes on some of these trips have been mislaid, but those for ten out of the fifteen years, are in presentable condition.

Before reproducing the lists it may be well to state the conditions under which they have been made. Preble and McAtee have consistently followed a definite set of rules in making their bird lists, in which most of their companions on these trips have acquiesced. All birds listed (with the single exception of the whip-poor-will) have been seen, by all members of the party † if possible, and species rare or difficult to identify have been collected. Sub-species have not been considered; these are scarcely a subject for field observation, and moreover, add nothing to a list of bird *species*. Observations have extended from daybreak to dark, and the standard (rarely deviated from) has been a continuous walking trip. Bird lists made under such

* The writer is obliged to E. A. Preble, Alex. Wetmore and W. R. Maxon for reading this paper in part or wholly and making useful suggestions.

† Witmer Stone (The Auk, Vol. 37, No. 3, July 1920, pp. 485-6) has stated that: "The plan practiced by certain careful observers of never recording a bird that both have not seen and satisfactorily identified is excellent. . . . Confirmation of other observers is an excellent feature and the person who always works alone and always sees the largest number of species can not help but arouse a doubt as to whether his enthusiasm has not carried him away." The writer would add that the spirit of competition in making bird lists, and the desire to record the largest number of species, does not appear to be for the best interests of ornithology. The participants in the trips here described have found their greatest satisfaction in searching for the best route in their vicinity for an all-day bird tramp, and in comparing its yield from year to year.

rules are far more comparable for different years and localities, than those in which other means of transportation are used. Skipping about from one faunula or life-zone to another by rapid transit may yield longer lists of species, but it introduces also elements which make for lessened reliability of records and puts standardization, and therefore comparability of lists, out of the question. Withal it is hopeless, whatever the equipment, to see all of the birds present in any region at a given time.

If there is one point more than another in these rules for making a bird list, that the writer would emphasize, it is *seeing* (or in case of doubt, collecting) the birds. Recording species on the basis of calls and songs alone certainly is unsafe. Few have ears keen and practiced enough to discriminate all of the multitude of avian chirpings and carollings and fewer still have an auditory memory reliable enough to name notes heard only a few times each year or perhaps in several seasons.

The risks taken in making sound records may be thoroughly illustrated without seeking examples outside the local avifauna. First we have several couples or other groups of birds that habitually utter one or more very similar notes. Among groups having similar and easily confused call-notes are the brown creeper and the kinglets; tufted titmouse and chickadee; and the robin ("seep" note) and cedarbird. The blue jay has a note that is an almost exact duplicate of the most common utterance of the red-shouldered hawk. Similarities among true songs are marked in the following groups: cardinal, Carolina wren and tufted titmouse; junco, chipping sparrow and pine warbler; purple finch and warbling vireo; and so far as fragmentary or typical songs are concerned the following also must be named: Baltimore oriole and rose-breasted grosbeak; and the redstart, yellow and chestnut-sided warblers.

Then there are the singers of medleys, as the catbird, brown thrasher and mockingbird, detached phrases of whose songs might be mistaken for those of various other species. Finally we have a number of actual, and some-

times very close imitations of notes by various birds. The mockingbird, its name gives evidence, is especially notable in this respect. Two of its common and nearly perfect imitations in this region are the ordinary calls of the bobwhite and killdeer. Dr. A. K. Fisher tells of hearing a mocker give in quick succession reproductions of calls or songs of the Carolina wren, tufted titmouse, flicker, robin and meadowlark. The mockingbird's congeners, the brown thrasher and catbird, also, are by no means lacking in imitative ability.

A species noted as a mocker in Europe and which since its introduction has become common here, namely, the starling, has as yet, in the United States, received little recognition for its powers as a mimic. However, it copies notes of the bluebird and wood pewee to perfection. I have on a number of occasions heard the call of the last-named species closely imitated also by the white-eyed vireo.*

Further illustration of the difficulties in identifying notes is to be found in the fact that some birds vocalize in dual roles (this includes all having flight songs), and rarely a species may sing entirely out of character. The grasshopper sparrow, and the Maryland yellow-throat are examples of species each having two utterly different types of songs. On the spring-bird trip of 1921 a song was heard from a bird perched on a wire along an open field with scattered bushes and small trees. The song seemed to be that of Bachman's sparrow, a steady trill followed by three distinct louder notes, and the habitat confirmed the impression. Before a good view was obtained the bird flew down to a small pine, and we cautiously approached, confidently expecting to add this rather rare finch to our list, but to our amazement the bird proved to be an *oven-bird*. It was in an entirely ab-

* Witmer Stone (The Auk, Vol. 38, No. 2, April 1921, p. 290) expressed doubt that such mimicry is very frequent among our birds, but the number of examples cited for one area indicates that for the United States a considerable showing of the phenomenon could be made.

normal environment and we watched it for some time as it repeated a song none of us had ever even dreamed an oven-bird could sing. Cases are on record of redstarts singing so abnormally as to cause collectors to pursue these individuals for a long time and even then find it necessary to collect them to determine the species.

Notes are of the utmost service, of course, in locating birds, and in some cases are a great help in making field identifications, as in the case of red-tailed and red-shouldered hawks, or almost a necessity, as in the case of the fish crow and common crow, and the species of *Empidonax*. Nevertheless, as a policy it is safer and surely it is a much greater pleasure and satisfaction to actually see every species. Finally, to show, by anecdote, the possibilities of blundering, in identifying notes, I may relate an experience of certain members of the Washington Biologists' Field Club. While seated on the porch of their house on Plummers Island, Md., one warm summer evening, they heard a sound from the direction of the canal back of them and distant some 300 yards. Guesses as to the source of the sound by various naturalists in the company, named the following animals: bullfrog, night-heron, and cow. Notes of the tree-toad also have frequently been mistaken for those of the red-bellied woodpecker. Is not the moral obvious? To be sure, see your bird!

The equipment found most useful on the bird trips here described has been 8-power prism binoculars, with a 30-power telescope in reserve for "long-shots," particularly at water-birds. One or more collecting pistols have always been accessible. Concluding the remarks on the manner in which these excursions have been conducted, we present, in tabular form, statements of the route of each trip, names of the observers, and the number of and names of species seen.

1907, May 15. Cleveland Park, Piney Branch, Rock Creek, Chevy Chase Circle, D. C., Glen Echo, Md., Georgetown, D. C., Roslyn and Four-mile Run Hill, Va., E. A. Preble, W. L. McAtee. Number of species seen, 83.

1908, May 14. Piney Branch, Rock Creek, by street car to Benning, by boat Eastern Branch, to Licking Banks, D. C., Bladensburg, Md., then on foot to hills to eastward and return to Benning,

D. C. H. C. Oberholser, W. L. McAtee. Number of species seen, 96.

1909, May 10. About same route as in 1907. E. A. Preble, W. L. McAtee. Number of species seen, 71, my own list only; my notebook states that Preble saw 7 others.

1912, May 9. Mouth of Four-mile Run to Munson Hill and Upton, Va. A. K. Fisher, E. A. Preble, W. L. McAtee. Number of species seen 85.

1913, May 12. Elkins, Mouth of Difficult Run, Mouth of Dead Run, upper Turkey Run, Langley, and Chain Bridge, Va., and D. C., by car to Foxhall Road, thence along Foundry Run to Observatory Heights, D. C. E. A. Preble, W. L. McAtee. Number of species seen 73.

1917, May 17. Mt. Vernon, Dogue Creek, Little Hunting Creek and Dyke, Va. Alex. Wetmore, W. L. McAtee. Number of species seen 95.

1918, May 11. Woodlawn, Dogue Creek, Dyke and New Alexandria, Va. Clarence Shoemaker, Alex. Wetmore, W. L. McAtee. Number of species seen 101.

1919, May 13. Woodlawn, Dogue Creek, Little Hunting Creek and Dyke, Va. A. K. Fisher, E. A. Preble, W. L. McAtee. Number of species seen 100.

1920, May 11. Same route as 1919. Alex. Wetmore, E. A. Preble, W. L. McAtee. Number of species seen 98.

1921, May 18. Woodlawn, Dogue Creek, Gum Spring, and Dyke, Va. Remington Kellogg, E. A. Preble, W. L. McAtee. Number of species seen 88.

Commenting on these trips, it is at once apparent that they are sharply marked off in two five-year groups. The average number of species seen on the first five trips was 81.6 and on the second 96.4. The explanation for this striking divergence may well be stated at once, leaving detailed comment to follow. It is that the excursions for the first half of the decade were mainly up-river from Washington, in less varied country, while the last five were distinctly down-river, bringing the observers through not only much territory like that up-stream, but also along the broad expanses and more extensive marshes of the lower river. Naturally, therefore, the most striking difference in the character of the bird lists for the two groups of trips is the greater prevalence of water-birds in the second set. Down the Potomac seems a better place to see also the marsh hawk, bald eagle, osprey, red-bellied woodpecker, bobolink, yellow-throated warbler, mockingbird and marsh wren. The presence of the starling in none of

Ten Spring Bird Lists

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Date of Trip	May 15 1907	May 14 1908	May 01 1909	May 9 1912	May 12 1913	May 17 1917	May 11 1918	May 13 1919	May 11 1920	May 18 1921
Goldfinch.....	x	x	x	x	x	x	x	x	x	x
Vesper sparrow.....										
Savannah sparrow.....							x	x	x	
Grasshopper sparrow.....	x			x	x	x	x	x	x	x
Ilfenslow's sparrow.....						x	x	x	x	x
White-crowned sparrow.....						x	x	x	x	
White-throated sparrow.....	x			x	x	x	x	x	x	
Chipping sparrow.....	x	x	x	x	x	x	x	x	x	x
Field sparrow.....	x	x	x	x	x	x	x	x	x	x
Song sparrow.....	x	x	x	x	x	x	x	x	x	x
Swamp sparrow.....				x	x	x	x	x	x	
Chewink.....	x	x	x	x	x	x	x	x	x	x
Cardinal.....	x	x	x	x	x	x	x	x	x	x
Rose-breasted grosbeak.....	x	x			x	x	x	x	x	x
Blue grosbeak.....	x									
Indigo bunting.....	x	x	x	x	x	x	x	x	x	x
Scarlet tanager.....	x	x	x	x	x	x	x	x	x	x
Summer tanager.....	x									
Purple martin.....		x		x		x	x	x	x	x
Cliff swallow.....						x				
Barn swallow.....	x	x	x	x	x	x	x	x	x	x
Tree swallow.....			x	x	x	x	x	x	x	x
Bank swallow.....		x	x	x	x	x	x	x	x	x
Rough-winged swallow.....	x	x	x	x	x	x	x	x	x	x
Cedar waxwing.....	x					x			x	
Migrant shrike.....					x	x		x		
Red-eyed vireo.....	x	x	x	x	x	x	x	x	x	x
Yellow-throated Vireo.....	x	x	x	x	x	x	x	x	x	x
White-eyed Vireo.....	x	x	x	x	x	x	x	x	x	x
Black and white warbler.....	x	x	x	x	x	x	x	x	x	
Worm-eating warbler.....	x	x	x		x		x	x	x	
Blue-winged warbler.....						x		x	x	
Golden-winged warbler.....				x				x		
Parula Warbler.....	x	x	x	x	x	x	x	x	x	x
Cape May Warbler.....		x			x	x	x	x	x	x
Yellow warbler.....	x	x	x	x	x	x	x	x	x	x
Black-throated blue warbler.....	x	x	x	x	x	x	x	x	x	x
Myrtle warbler.....	x	x	x	x	x	x	x	x	x	x
Magnolia warbler.....	x			x	x	x	x	x	x	
Chestnut-sided warbler.....		x	x	x	x	x	x	x	x	
Bay-breasted warbler.....		x	x	x	x	x	x	x	x	x
Black-poll warbler.....	x	x	x	x	x		x	x	x	x
Blackburnian warbler.....		x				x	x			
Yellow-throated warbler.....		x				x	x		x	
Black-throated green warbler.....	x	x	x			x	x	x	x	x
Pine warbler.....		x				x	x			
Prairie warbler.....	x	x		x	x	x	x	x	x	
Oven-bird.....	x	x	x	x	x	x	x	x	x	x
Water-thrush.....	x	x								
Louisiana water thrush.....	x	x		x	x		x		x	
Kentucky warbler.....	x	x	x		x		x		x	
Mourning warbler.....				x						
Maryland yellow-throat.....	x	x	x	x	x	x	x	x	x	x
Yellow-breasted chat.....	x	x	x	x	x	x	x	x	x	x
Hooded warbler.....		x			x	x	x	x	x	x
Wilson's warbler.....	x	x		x			x	x	x	
Canada warbler.....	x	x	x	x		x	x	x	x	x
Redstart.....	x	x	x	x	x	x	x	x	x	x
Mockingbird.....				x	x	x	x	x	x	x
Catbird.....	x	x	x	x	x	x	x	x	x	x
Brown thrasher.....	x	x	x	x	x	x	x	x	x	x
Carolina wren.....	x	x	x	x	x	x	x	x	x	x
House wren.....	x	x	x	x	x	x	x	x	x	x
Long-billed marsh wren.....	x	x	x							
White-breasted nuthatch.....	x	x	x				x			
Tufted titmouse.....	x	x	x	x	x	x	x	x	x	x
Carolina chickadee.....	x	x	x	x	x	x	x	x	x	x
Ruby-crowned kinglet.....										
Blue-gray gnatcatcher.....		x		x		x	x	x	x	x
Wood thrush.....	x	x	x	x	x	x	x	x	x	x
Wilson's thrush.....	x	x		x				x	x	x
Gray-cheeked thrush.....	x	x								
Olive-backed thrush.....	x	x	x	x	x	x	x	x	x	x
Robin.....	x	x	x	x	x	x	x	x	x	x
Bluebird.....	x	x	x	x	x	x	x	x	x	x
Total Species Seen	83	96	71	85	73	95	101	100	98	88

the first but in all of the second five lists is a phenomenon of time rather than of locality. The up-stream country seems to have hardly a point (other than that already mentioned) of superiority over the lower, although from general experience it may be said that at least the worm-eating warbler is more often seen there.

Of the birds seen on only one of the ten trips, it may be said that the grebes and ducks, the coot and strictly migrant shorebirds are of decidedly irregular occurrence at the season in point; the bitterns are elusive; and the woodcock and hawks locally restricted species in this their breeding season; the black-billed cuckoo, vesper sparrow and blue grosbeak are not only local but rare breeders; the purple finch and ruby-crowned kinglet are near the end of their spring stay; and the mourning warbler is a rare migrant, one certainly not apt to be seen more than once in ten trips.

As to species not seen, but which reasonably might have been expected, the following may be mentioned: ring-billed gull, wood duck, ruffed grouse, screech owl, great horned owl, yellow-bellied flycatcher, warbling vireo, and the Tennessee warbler. In addition to these the red cross-bill, siskin, junco, Bachman's sparrow, Lincoln's sparrow, solitary vireo, yellow palm warbler and red-breasted nuthatch certainly are possibilities. The composite list of birds actually seen on the ten trips is 146 species; 8 probabilities and 9 possibilities (great rarities absolutely excluded) have just been mentioned, so it may be seen that on a day in the very height of migration in a good year, with all luck attending, an exceedingly good bird list might be compiled.

But luck in all directions never does occur simultaneously. At the end of a long day's tramp it generally is true that some more or less common birds have not been seen; the list is poor in woodpeckers, or hawks or water-birds, or thrushes; conditions are seldom right for all groups of birds on one day. Some fairly common species even are elusive, especially those breeding at this season. Pairs are scattered here and there at their nesting sites, and one must actually enter their domain to find them.

Examples are the hawks, Henslow's sparrow, the butcher-bird and the white-breasted nuthatch. However, the localizing of birds has its advantages when the observers have become well acquainted with the country. They are able to call upon certain birds, as it were, and the regularity with which representatives of the species are found in a given area, year after year, is remarkable.

In the earlier years, it was by no means the easiest thing in the world, to get a robin or crow blackbird on the list of birds seen. But since that time these species have become decidedly more common; other breeding birds which have shared this tendency to a greater or less degree, are: the orchard oriole, migrant shrike, and mockingbird. Among strict migrants the Cape May and Tennessee warblers have been seen more frequently in recent seasons than they were ten to fifteen years ago. The European starling has been steadily increasing in numbers since its first appearance in our region in 1913. Decrease in numbers within the period of the lists here presented, can hardly be ascribed to any species except the English sparrow; although in a period of about twice as long, hawks and owls in general are known to have become much scarcer.

Consideration of the bird lists here presented brings up the question among others as to what evidence they give as to the height of migration in the District of Columbia region. The ten annual excursions here cited represent every date from May 9 to 18 except the 16th. The days on which more than the average number of species were seen were 11, 11, 13, 14 and 17. The longest two lists were obtained on 11 and 13. These data confirm the usual impression among bird students here that the height of migration is apt to occur from May 10 to 15.

The peak of migration then occurs at a period when some of the later migrants normally are just beginning to arrive, as the least bittern, yellow-bellied and alder flycatchers, Connecticut and mourning warblers and the gray-cheeked thrush. In the average season, therefore, most of these species are not likely to be seen on a trip taken during the actual height of migration. If the date is post-

poned until these birds are in full migration numerous earlier migrants will have passed through or will be represented merely by stragglers. Occasionally migration is delayed in such a way that ordinary migrants are here in numbers at the same time as the later ones. Theoretically, such conditions afford the greatest opportunity for a long bird list. The writer has made only one trip at such a time, and not realizing the opportunity in advance, the route taken was entirely in one type of country where there was little chance of seeing marsh and aquatic birds. This was on the 30th of May, 1917 (valley of Patuxent, above Laurel, Md., in company with Alex. Wetmore and Douglas C. Mabbott) and 73 species of birds were seen. Among them were four species not recorded in any of the lists here discussed, namely, Lincoln's sparrow, the Tennessee warbler, Philadelphia vireo, and yellow-bellied flycatcher. The last-named was actually common, 17 individuals being seen. On the annual spring excursions here analyzed only one mourning warbler had been observed, but on this day we saw six. Specimens of this species, the yellow-bellied flycatcher and Philadelphia vireo were collected. A very good list (20 species) of warblers was made, the records being very late for the Cape May, black-throated blue, myrtle, magnolia, chestnut-sided, bay-breasted, and Canada warblers, and the olive-backed and gray-cheeked thrushes. Taking advantage of the revelations of this day various observers made bird trips in the next few days, with the result that the year 1917 furnished a larger number of latest dates for migrants than any other. With a delayed (and therefore condensed) migration realized, an all-day trip made over the best route in the region should give most gratifying results. What an opportunity there was, for instance, during the "tidal wave" of birds as described by Coues and Prentiss* for the second and third weeks of May, 1882, when even the trees in the city parks and streets were swarming with warblers and other brightly colored migrants. If such a phenomenon occurs again let us hope that Washington observers make the most of it.

* *Avifauna Columbiana*, 1883, pp. 31-32.