## TEN ALL-DAY BIRD CENSUSES FROM DUTCHESS COUNTY, N. Y.

## BY MAUNSELL S. CROSBY

Arguments have been advanced in favor of and opposed to all-day bird censuses. Those in favor believe the results useful in showing the abundance of species and individuals during migration waves and at other times. They find that there is a certain zest in the attempt to get as high a total as possible and when one is to be more or less on foot for sixteen hours some such stimulus is useful, not only in routing one out of bed, but also during the latter part of the day.

Those opposed to this method of bird study insist that the desire to get as big a list as possible causes inaccuracy—a bird not well identified being written down rather than left out. They further claim, less convincingly, that such censuses cannot be representative on account of the number of species sure to be missed no matter how hard the observers work.

Even among those who believe in and enjoy census work there are divergent opinions as to the methods which should be employed. One has the idea that a census should be the record of birds found in an area covered on foot by one man in one day, or by two or more keeping together, more than one being preferable so as to corroborate identifications. Another thinks that it is perfectly proper for the party to split, for instance, in going through a wood or around a pond, to join forces later on. Still others select a given area and try to work it as thoroughly as possible, all of it if it is small, or the likeliest spots if it is large. This method has evoked the criticism that one might as well sit down and make a list of all the birds one knows should occur and then stay at home!

Nevertheless, for more than twenty years Bird Lore has conducted an annual Christmas Census and the accumulated data are of great value in showing how certain birds are present one year and absent another or common one year and rare the next. There is no question that this effort has met with continued and ever-increasing success and co-operative censuses taken at other times of the year might give even more important results.

The writer has joined the class which uses every means available to cover as much ground as possible, largely through force of circumstances and through his interest in an actual area, even though it is a large one, namely, Dutchess County, N. Y. Dutchess County is situated on the east bank of the Hudson River, its north and south boundaries being respectively one hundred miles and fifty-four miles north of the center of New York City. It averages twenty-odd miles in width,

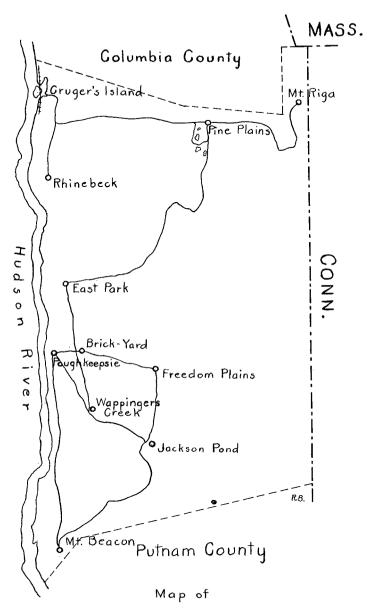
is somewhat mountainous in the east and south and contains many ponds and several creeks and marshes.

In May, 1919, Mr. Allen Frost suggested to me an all-day census. Starting at about six, a list of seventy species was made on my grounds at Rhinebeck. Then a motor was used to go to Cruger's Island and its marshes, eight miles to the north, and the trip was finally wound up at Wappinger's Creek and Brick-yard Swamp, Poughkeepsie, sixteen miles south of Rhinebeck. We were not at that time familiar with much other territory from the ornithological viewpoint and we were pleased to be able to pass the one hundred mark at our first attempt.

The next year there were four in the party, starting before dawn, and although we occasionally split for a short distance, we never really parted company. The ground covered was much the same, only in addition we visited Jackson's Pond, ten miles southeast of Poughkeepsie, so that the census fairly represented the best spots in western Dutchess County.

In 1921 we again followed this route, with occasional stops or detours to some new place on a chance of finding something worth while. Our ambition to cover more fully our self-assigned territory caused us to make up two parties in 1922, using two cars. One party worked the Rhinebeck and Cruger's Island regions and the other Wappinger's Creek, both meeting in the afternoon at Jackson's Pond and then proceeding to Brick-yard Swamp. This split, as well as our increased knowledge of the territory, helped to add to the number of species recorded.

In 1923, the Rhinebeck party went east on leaving Cruger's Island, to Pine Plains where there are several ponds and good warbler woods, thence to East Park, and did not meet the Poughkeepsie group until evening, at Brick-yard Swamp, where notes were compared and totals figured while we waited for the evening flight-song of the Woodcock. The census was taken twice that spring. In 1924 four separate censuses were taken, the last two because of the lateness of the migration. The first two were made by the same groups, in two cars, the first being more or less shortened by the weather, while during the second trip the northern party split temporarily at Pine Plains, the writer visiting a large swamp at Mt. Riga in the extreme northeastern corner of the county. He then returned to Pine Plains, and the usual route was resumed, a violent shower and a breakdown somewhat hampering mat-The southern group this time included Mt. Beacon, in the extreme southwestern corner of the county and Freedom Plains, near the center, in its area. The third trip was performed by only one group, via Rhinebeck, Cruger's Island, Pine Plains and Mt. Riga, and the



DUTCHESS COUNTY, N.Y.

- Routes taken in making Censuses

fourth, although made in two cars, was also carried on mostly as one, the party finally splitting at Pine Plains, two members proceeding to Mt. Riga and the third to Poughkeepsie.

Thus we have finally arranged that two groups can cover quite effectively the entire northern and western parts of the county. It would be desirable to have a third party work the southeastern part, as there is some excellent territory there along Swamp River and some day perhaps it will be done.

At present it is not possible to compare one year's list with another, since we have been steadily expanding. The limit for two cars has now been reached and henceforth there should be something worth while in the comparative records from year to year. One unlooked-for result has been the number of casual records, there being no less than twenty-three species out of one hundred and sixty-three that have only been recorded once. Such birds as the Bufflehead, Old Squaw and Brown Creeper are exceedingly interesting at this season and without the efforts put forth on the "big day" would no doubt be missed. Another interesting fact is that during the 1924 censuses fourteen species were recorded that had not been seen during the censuses of previous years. It is worth mentioning here that at least one hundred and twenty species breed or have bred in the county.

The possibility of overhastiness in identification is, of course, the one thing to fear. By trying always to have at least two in a group this danger is greatly reduced, and if an inexperienced person is in the party his word is never taken without corroboration. No unusual record is ever retained without a thorough review of the facts of the case by the whole party.

Although we made our record list on the first 1923 trip, we feel that we have not reached the limit of possibilities, as in 1924 there were no mid-May waves and the early and late May waves lacked too many species to produce a high total. It is much better to make four or more weekly censuses, as in 1924, but at least one a year, during the biggest May wave, is highly desirable. It would also be a good thing to make similar censuses in September, when the total number of species would, however, be a great deal less. So far we have only made one September attempt and our list was only eighty-one species, but one group making the effort.

Up to the present time we have been mostly fortunate in our weather, but not especially so in meeting waves of migration. As a matter of fact, when once the majority of species have arrived, it seems possible to make a representative list even on off days, provided it is not windy, although the number of individuals present may be very

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Great Blue Heron	ī	, -	_	İ	-	_	ĺ		-	ī	3	
Green Heron	1	1	1	1	] 1	1	1	1	]	] 1	9	*
Black-crowned Night Heron	1	1	1	1	1	1	1	1		1	9	*
Virginia Rail			1		1	1	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	1	1	1 1	7 3	*
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American Woodcock	i	l î	i	1	i	i	î	i	i	l î	9	*
Wilson's Snipe	_	-	ĺ		ī	_	ī	_	_	-	3	ĺ
Least Sandpiper	ĺ		1	] 1	1	1	)			] 1	5	]
Semipalmated Sandpiper				1			ĺ		١,		1	
SanderlingGreater Yellowlegs			1	1	1				1	İ	1 3	
Lesser Yellowlegs	İ		1	1	1					l	1	İ
Solitary Sandpiper	1	1	1	1	ĺi	1	1	Ì	1	ĺ	8	ĺ
Spotted Sandpiper	1	1	1	1	1	1	1	1	1	1	10	*
Killdeer	1	1	1	1	1	1	1	1	1	1	10	*
Semipalmated Plover				1 1	1	1					2	*
Ruffed Grouse		ĺ	i	1	1	 	1	1		1	5	*
Ring-necked Pheasant	1	1	1	1	ì	1	i	i	1	li	10	*
Mourning Dove		1	Ī	1	1	1	1	1	1	1	9	*
Marsh Hawk	1	1	ļ	1	1	1	1		1	1	8	*
Sharp-shinned Hawk	1	1 1	,		1	1	1	1 1	,	1 1	7	*
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Broad-winged Hawk	1			Ì							1	*
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Sparrow Hawk	1	1	1	1	1	1	1	$\begin{array}{c c} 1 \\ 1 \end{array}$	1	1	10	*
OspreyBarn Owl	1			1	1	1	1	1		1	7	*
Barred Owl	1	1	1	1	1	1	1	1	l	ł	7	*
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Black-billed Cuckoo	_	ļ _	1	1	1	1	_	1	1	1	7	*
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Red-headed Woodpecker	*	î	i	i	i	i	1	i	•	1	6	*
Northern Flicker	1	ī	ĺ	1	1	1.	] 1	1	1	] 1	10	*
Yellow-bellied Sapsucker			_		1						1	٠.
Whip-poor-will	<u></u>	<u> </u>	1	<u></u> _	1		1	1	<u> </u>	1	_5	

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Nighthawk	1		1	1	1	1		1	1	1	8	*
Chimney Swift	1	1	1	1	1	1	1	1	1	1	10	*
Ruby-throated Hummingbird		) ;	1	1	1	1	1	1	1	1	8	*
Kingbird	1	1	1	1	1	1	1	1	1	1	10	*
Crested Flycatcher	1	1	1	1	1	1	1	1	1	1	10	*
Phoebe	1	1	1	1	1	1	1	1	1	1	10	*
Olive-sided Flycatcher		ĺ	1	1			·		1	1	3	1
Wood Pewee	1	1	1	[ 1	1	1	1	1	1	1	10	*
Yellow-bellied Flycatcher						[1]	1	1	1	1	5	l
Acadian Flycatcher	1	1	1	i	1	_	1	1			6	١.
Alder Flycatcher	_	1	ļ	]		1	ļ		1	1	4	*
Least Flycatcher	1	1	1	1	1	1	1	1	1	1	10	*
Blue Jay	1	1	1	1	1	1	1	1	1.	1	10	*
Crow	1	1	1	1	1	1	1	1	1	1	10	*
Starling	1	1	1	1	1	1	1	1	1	1 ,	10	*
Bobolink	1	1	1	1	1	1	1	1	1	1	10	*
Cowbird	1	1	1	1	1	1	1	1	1	1	10	*
Red-winged Blackbird	1	1	1	1	1	1	1	1	1	1	10	*
Meadowlark	1	1	1	1	1	1	1	1	1 1	" I	$\begin{array}{c c} 10 \\ 2 \end{array}$	*
Orchard Oriole	,	١,	٠,	1	,	1	1		1	1	10	*
Baltimore Oriole	1	1 1	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	$\begin{array}{c c} 1 \\ 1 \end{array}$	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	1 1	$\begin{array}{c c} 1 \\ 1 \end{array}$	1		£ 	5	1
Rusty Blackbird	1	1	1	1	1	ı	1	1	1	1	10	*
Purple Grackle	1	1	1	1	1	"	l	1	1	1	4	*
Purple Finch	1	1		1	1	1	Ι'n	1	1	1	8	
House Sparrow	i	l i	1	i	1	ì	i	i	1	ĺi	10	*
Goldfinch	i	i	i	i	î	î	iî	ĺi	ı î	ì	10	*
Pine Siskin	1	i	1	} *	1	ìî	ĺ	i	1	1	4	ì
Vesper Sparrow	1	î	1	1	1	l î	ī	ī	1	1	10	*
Savannah Sparrow	-	1	1	1	ĺ	ĺ		_	-	1	4	*
Grasshopper Sparrow	1	1	1	1	1	1	1	1	1	1	10	*
Henslow's Sparrow		j	Ì	Ì	Ì	Ì			ļ	1	1	*
White-crowned Sparrow	Ì	1	1	1	1	1	İ		1		5	
White-throated Sparrow	1	1	1	1	1	1	1				7	
Chipping Sparrow	1	1	1	1	1	1	1	1	1	1	10	*
Tree Sparrow	[				1			}			1	Ι.
Field Sparrow	1	1	1	1	1	1	1	1	1	1	10	*
Junco	_	1_					1		_			*
Song Sparrow	1	1	1	1	1	1	1	1	1	1	10	7
Lincoln's Sparrow		1	١.	1	,	1	١.,		1	١,	4	*
Swamp Sparrow	1	1	1	1	1	1	1	1	1	1	10	*
Towhee		1	1	1	1	1	1	1	1 1	$\begin{array}{c c} 1 \\ 1 \end{array}$	10	*
Rose-breasted Grosbeak		1	1	1	1	$\begin{array}{c c} & 1 \\ & 1 \end{array}$	1	1	1	1	7	*
Indigo Bunting		}		_	1	1	1	1	1	1	9	*
Scarlet Tanager			1	1	1	1	1	1	ì	1	9	*
Purple Martin		1	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	1	1	1	1	1	1	1	7	*
Cliff SwallowBarn Swallow		1	1	1	1	1	1	1		1	10	*
	1	1	1	1	1 1	1 1	1	1	1	1	10	*
Tree Swallow	. =	i	1	1	1	1	i	l	1	ĺ	10	*
Bank Swallow	1	1	1	1 1		1	1	1 1			1 8	*
Rough-winged Swallow			1	1	1	1	1	1	i	i	6	*
Cedar WaxwingRed-eyed Vireo		1	li	1	1	i	i	1	î	i	10	*
Warbling Vireo		i	1	ii	1	1	1	İ	i î	i	1 9	*
Yellow-throated Vireo	Ϊį	Ì	l i	11	$\frac{1}{1}$	1	1	l î	1	1	10	*
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Blue-headed Vireo	1	1		1	1	1	1	1			7	*
White-eyed Vireo	_	1	1	1	1	1	_	1	1	1	8	*
Black and White Warbler	1	1	1	1	1	1	1	1	1	1	10	*
Worm-eating Warbler	1	1	1	1	1	١, ١	1	1	1	1	9	*
Blue-winged Warbler		1			1	1	1	1			5	*
Brewster's Warbler Lawrence's Warbler					1	1		1			3	*
Golden-winged Warbler	1	1	1	1	1	1 1	1	1	,	1	10	*
Nashville Warbler	1	1	1	1	1	1	$egin{array}{c c} 1 & 1 \\ 1 & 1 \end{array}$	1	1	1	10 8	*
Tennessee Warbler	1	1	1	i	i	1	1	i	1		9	
Northern Parula Warbler	i	ĺ	i	i	i	i	i	î	i		9	
Cape May Warbler	î	l i	i	i	li	•	i	i	i		8	
Yellow Warbler	ī	li	ĺi	ΙîΙ	î	1	î l	î	î	1	10	*
Black-throated Blue Warbler	۱ĩ	l ī	i	î	î	î	ī	î	î	i	10	*
Myrtle Warbler	1	1	1	1	1	1	1	1	ī	-	9	
Magnolia Warbler	1	1	1	1	1	1	1	1	1	1	10	
Cerulean Warbler		[		1	1	1		1	1	1	6	*
Chestnut-sided Warbler	1	1	1	1	1	1	1	1	1	1	10	*
Bay-breasted Warbler	1		1	1	1	1		1	1	1	8	
Blackpoll Warbler	1	]	1		1	1		1	1	1	7	
Blackburnian Warbler	1	1	1	1	1	1	1	1	1	1	10	
Black-throated Green Warbler	1	1	1	1	1	1	1	1	1	1	10	*
Pine Warbler	1	1						[		1	3	*
Yellow Palm Warbler		ł		ĺ		[	1	_			1	
Prairie Warbler	١.					١.		1		١.	1	
Ovenbird	1	1	1	1	1	1	1	1	1	1	10	*
Water-Thrush	1	1	1	1	1	I   1	1	1	1	1	9	*
Louisiana Water-thrush	1	1	1	1	1	1   1	1	1 1	1   1	1	10	
Mourning Warbler  Maryland Yellow-throat	1	1	1	1	1	1	1	1	1	1	10	*
Yellow-breasted Chat	i	i	1	1	1	1	1	1	1	1	10	*
Hooded Warbler	1	1	1	1	1	1	1	1	1	1 1	10	*
Wilson's Warbler	1	1	1	1	1	1	1	1 1	1	1	9	l
Canada Warbler	i	i	i	l i	i	i	1	1	lî	i	9	
Redstart	ì	ì	î	l î	i	l î	1	î	i	î	10	*
Pipit	1	1 -	i	1	1	i *	1	i	i	Ì	Ĭĭ	İ
Catbird	1	1	1	1	1	1	1	1	1	1	10	*
Brown Thrasher	1	ĺ	1	1	1	1	1	1	1	1	9	*
Carolina Wren	1	Ì	İ	1	İ	ĺ	Ì	Ì	İ	Ì	1	1
House Wren	1	1	1	1	1	1	1	1	1	1	10	*
Short-billed Marsh Wren				1	1	1	1	1			1	*
Long-billed Marsh Wren	1	1	1	1	1	1	1	1	1	1	10	*
Brown Creeper	1_	1_		1	]		1	]		1	1 1	*
White breasted Nuthatch	. 1	1	1	1	1	l I	1	1	1	] 1	10	*
Red-breasted Nuthatch		_	_	1	_			1	_	_	2	.
Chickadee	1	1	1	1	1	1	1	1	1	1	10	*
Ruby-crowned Kinglet		1	1	١.	1	.	1	-	١,	,	4	1 .
Wood Thrush		1 1	1	1	1	1 1	1	1	1		10	*
Veery		1	1	1	1	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	1	1	1 1	1	10	"
Gray-cheeked Thrush		1		1	,	1 1	1	1 1	1 1	1,1	8   10	1
Olive-backed Thrush	1	1	1	$\begin{array}{c c} & 1 \\ \hline & 1 \end{array}$	$\begin{array}{c c} & 1 \\ & 1 \end{array}$	1 1	1 1	$\begin{array}{c c} & 1 \\ \hline & 1 \end{array}$	1 1	1	10	*
Bluebird	li	1	1	1 1	1	1	1		1 1	1 1	10	*
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low. We have not been sufficiently methodical in counting individuals but hope to perfect this phase of the census.

The following have made one or more censuses with the writer: Allen Frost, George W. Gray, Charles W. Moulton, Robert Cushman Murphy, Leonard R. Donne, Ray Guernsey, Laidlaw Williams, Jackson Ketcham, Walter Granger, Edmund Platt, and Ludlow Griscom.

In the following table the validity of the semi-domesticated Mute Swans may well be questioned. They are included pending a decision as to their status. Both subspecies of the grackle are given as if they were separate species and Brewster's and Lawrence's Warblers are included as being of interest. Strictly speaking, neither of these last two should be counted when both the Blue-winged and the Goldenwinged Warblers occur on a list. There are at least eleven other possible species not yet listed, either local breeders or else transients which have at one time or another been recorded between May 11 and 30, but not on a census day: Least Bittern, Coot, Pectoral Sandpiper, Hungarian Partridge, Long-eared Owl, Great Horned Owl, Prairie Horned Lark, Fish Crow, Philadelphia Vireo, Kentucky Warbler and Hermit Thrush.

RHINEBECK, NEW YORK.

## STATISTICS ON THE HOUSE WREN

BY O. M. BRYENS

Much is being said nowadays about the misdemeanors of the House Wren, and I wish to state that I am in favor of the House Wren.

The houses which are being put up for these wrens have an entrance hole one inch in diameter. This is to protect the wren from the English Sparrow. In the cities and towns where there are many bird house boxes, I find that they are surrounded by hordes of English Sparrows. It is my opinion that were it not for the House Wrens there would be very few native birds nesting in bird houses where the English Sparrows are not driven away.

In 1915, while residing at McMillan, Michigan, I put up my first bird house, and kept adding until I had thirty-nine of them in 1924. The following table shows the number of bird families which nested on my premises year by year since 1915. It also shows that there was no decrease in the native birds which could be attributed to the presence of the House Wren.

The totals in the bottom line indicate the number of families, or nests, of all kinds for each year. And it will be seen that the number of families increased regularly, notwithstanding an increasing number of House Wrens.