

BREEDING BIRDS OF THE MAUMEE STATE FOREST

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The Maumee State Forest is composed of several parcels of land located in Fulton, Henry, and Lucas Counties in Northwest Ohio. Most, if not all, of the forest lies in the sand belt known as the Oak Openings that stretches across Northwest Ohio from the Maumee River to the Michigan Line and beyond. The reader should realize that the Oak Openings does not simply refer to the park that goes by that name. The area is far more extensive and encompasses such sites as Irwin Prarie and Secor and Wildwood Metroparks, plus all of the area in between these sites and Oak Openings Park. The dunes then continue south and west of the park; this is the general location of the Maumee State Forest (see Fig. 1).

The habitat of the forest is very similar to that of Oak Openings Park with a few exceptions. I did not encounter any open dune areas or adjacent dry prairies and there are no man made ponds in the forest. Natural seasonal ponds were widespread, however. Vegetation consisted primarily of mixed-oak forest, pine plantations, maple swamp forest, second growth shrub and edge areas, and small meadows. A considerable amount of the forest is bordered by farmland, primarily corn and soy beans.

I censused 14 sectors of the forest and adjacent land during June and July, 1981 and 1982. My purpose was to try to determine density and diversity of breeding birds in this area. Singing males constituted the bulk of my data but individual sightings of birds (eg., green-backed heron) also contributed to the data. All but four small sectors of the forest were censused. I decided not to census after early July due to the decreased song activity of many species. Some species (eg. northern oriole) became very quiet after July 1 and were much harder to find.

There are several possible sources of error in my censusing technique and I list them here:

- (1) Time of day: most censuses were taken between 7:30 and 10:30 A.M. Earlier censuses would have found more activity.
- (2) Method: my method of censusing (wandering aimlessly through the forest) may have contributed to some birds being counted twice. However, this may have been balanced by birds that were missed at any given time.
- (3) Flocking birds (eg. blue jay, black-capped chickadee, American crow) were difficult to analyze due to the unknown number of breeding pairs and young of the year in the flocks. Breeding pairs of these types of birds may be slightly over-estimated.
- (4) Groups of birds in which both sexes vocalize (crows, jays, titmice, woodpeckers, etc.) may be slightly over-estimated.
- (5) Repeated visits to each sector would have produced a more accurate sample.

The results appear in Table 1. This table indicates the number of breeding pairs of birds in 14 different sectors of the forest. Suspected non-breeders (birds present but for which no local breeding record exists) are also included.

COMMENTS

A small colony (13 nests) of great blue heron was found in sector 8. This colony is only a few miles from the Maumee River and herons were seen flying back and forth in the direction of the river. Heron colonies in northwest Ohio away from Lake Erie are not unknown (Campbell 1968).

Other than the broad-winged hawks found in 5 sectors, diurnal raptors were scarce. Northern bobwhite were found in 5 sectors and are definitely increasing in Western Lucas County and adjacent Fulton County. Three years ago they were impossible to find. Woodcock are presumably present in greater numbers than indicated in the table. Black-billed cuckoos are quite scarce. I found only one in 14 sectors censused and noted only 2 others (both in 1981) in the Oak Openings. Campbell (1968) states that in Oak Openings, black-billed cuckoos outnumber yellow-billed eight-to-five. My data show a 27:1 ratio favoring yellow-bills. The status of the black-billed cuckoo should be closely monitored. I did no nocturnal censusing, but judging by the results of the Grand Rapids-Waterville Christmas Birds Counts for 1981 and 1982, screech owls and great horned owls are present in the forest in good numbers. Barred owls may be present. Whip-poor-wills are fairly common summer residents in Oak Openings Park. I assume they also occur in small numbers in the state forest.

Hummingbirds were scarce as were most woodpeckers other than downy. A bank swallow colony containing 17 nesting holes was found on land bordering the state forest. I believe brown thrashers are in trouble, at least in western Lucas County. Only 5 were found in 14 sectors of the forest and they were very hard to find in the remainder of Oak Openings. Wood thrushes were uncommon but veeries were present in good numbers. Blue-gray gnatcatchers were scarce.

Yellowthroats and ovenbirds were by far the most numerous warblers. However, blue-winged warblers made a good showing with 15 pairs found (including a mated pair of Brewster's warblers!). Blue-wings are certainly increasing, a trend noticed throughout their range. Campbell (1968) writing in 1967, states that at that time 4 singing males per season was the norm. On June 24, 1981, I found at least 9 singing males in Oak Openings Park on a bicycle roadside census. There are conceivably twice that many in the park. Considering the amount of suitable blue-wing habitat north and east of the park, I believe there to be at least 40 breeding pairs of blue-winged warblers in the Oak Openings. In my opinion, this appears to be the only warbler increasing in numbers at the present time. Scarlet tanagers were present in fair numbers and rose-breasted grosbeak, a bird presumed to be a scarce breeder in Lucas County, was found in five sectors in small number. Indigo buntings were ostensibly the most abundant breeding birds in the state forest, where 197 singing males were found.

Because numbers of breeding birds may vary considerably from year to year, this study can only serve as a base for future studies. Subsequent censuses can give us a better idea of exactly what types of fluctuations take place and a closer estimate of the numbers of breeding birds in the Maumee State Forest.

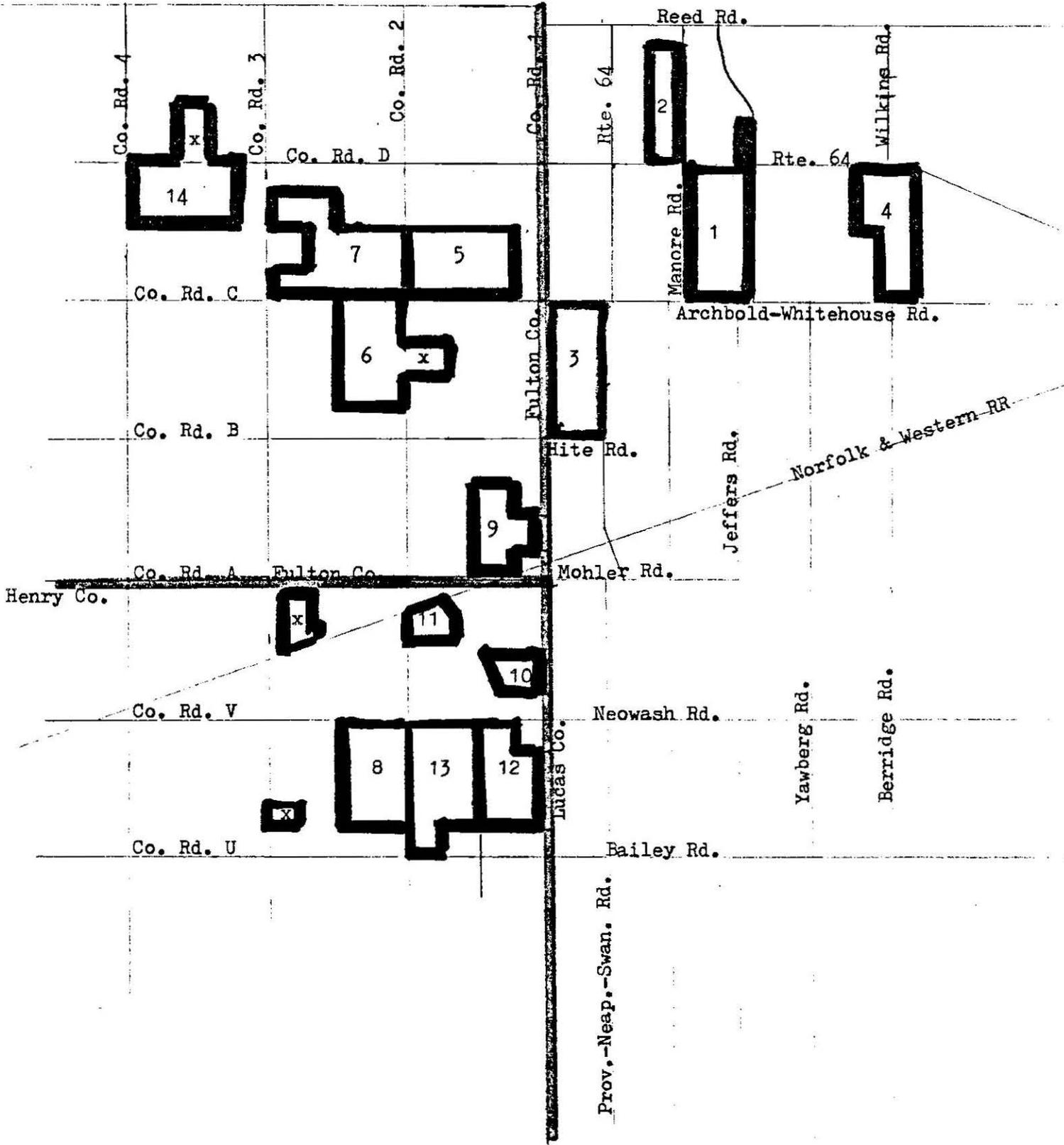


Figure 1. The Maumee State Forest. The plot numbers correspond to the sector numbers listed in Table 1. Areas marked "x" were not censused.

Table 1. Species list and numbers of breeding pairs of birds in the Maumee State Forest in the summers of 1981 and 1982. Numbers following each species refer to sectors (first number) and numbers of pairs per sector (parentheses). For example, there was 13 pairs of great blue herons in Sector B.

		<u>Total Pairs</u>
Great Blue Heron	B(13), 11(2) ^a , 12(4) ^a (a-from sector 8 colony)	13
Green-backed Heron	3(1), 4(1), 14(1)	3
Turkey Vulture	4(1), 8(1), 12(1)	3
Buteo, sp.	4(1)	1
Red-shouldered Hawk	10(1)	1
Broad-winged Hawk	1(1), 2(1), 3(1), 6(1), 19(1)	5
Red-tailed Hawk	10(1)	1
Am. Kestrel	12(1)	1
Ring-necked Pheasant	1(1), 4(1)	2
Bobwhite	3(1), 4(4), 7(3), 9(1), 11(1)	10
Killdeer*	7(1), 8(1), 9(1), 12(1), 13(1), 14(1)	6
Lesser Yellowlegs	8(1) (migrant individual)	1
Spotted Sandpiper	10(1)	1
Common Snipe	7(1)	1
American Woodcock	8(1)	1
Rock Dove*	10(1)	1
Mourning Dove	1(5), 2(1), 3(3), 4(1), 5(4), 7(3), 8(1), 14(4)	22
Black-billed Cuckoo	7(1)	1
Yellow-billed Cuckoo	1(1), 3(2), 5(2), 7(4), 8(2), 9(3), 10(1), 12(2), 13(6), 14(4)	27
Great Horned Owl	8(1)	1
Chimney Swift*	3(1)	1
Ruby-throated Hummingbird	3(2), 4(1), 12(1), 14(1)	5
Belted Kingfisher	1(1)	1
Red-headed Woodpecker	3(1), 4(1), 9(1), 10(1), 11(2), 12(4), 13(1)	11
Red-bellied Woodpecker	3(1), 4(2), 8(1), 11(1)	5
Downy Woodpecker	1(1), 2(2), 3(3), 4(4), 5(6), 7(5), 8(7), 10(1) 11(1), 12(2), 13(5), 14(4)	41
Hairy Woodpecker	3(1), 4(2), 7(1), 8(1), 11(1), 12(1), 13(3), 14(1)	11
Northern Flicker	2(1), 3(2), 4(2), 5(1), 6(10), 8(2), 9(1), 10(1) 11(10), 12(3), 13(10), 14(3)	19
Eastern Wood-Pee-wee	1(3), 2(30), 3(70), 4(4), 5(3), 6(2), 7(1), 8(2) 9(1), 10(4), 11(4), 12(3), 13(5), 14(5)	47
Acadian Flycatcher	1(1), 3(1), 4(1), 8(6), 13(1)	10
Alder Flycatcher	14(1)	1
Willow Flycatcher	5(1), 8(2), 9(1)	4
Great Crested Flycatcher	2(4), 3(4), 4(4), 5(1), 8(2), 9(4), 10(3), 11(3), 13(1), 14(2)	25
Eastern Kingbird	4(10), 9(1), 10(1), 11(1), 12(1)	5
Horned Lark*	2(1), 11(1)	2
Purple Martin	1(1), 2(1), 3(10), 4(2), 5(1), 8(10), 9(1), 13(1), 14(2)	11
Tree Swallow	5(1)	1
Bank Swallow*	4(17), 8(1)	18
Barn Swallow*	1(1), 3(1), 4(3), 7(2), 8(2), 12(2), 14(3)	14
Blue Jay	1(12), 2(9), 3(7), 4(13), 5(8), 6(8), 7(9), 8(5), 9(7), 10(8), 11(3), 12(3), 13(6), 14(9)	107

*probably nesting adjacent to State Forest.

		<u>Total Pairs</u>
American Crow	1(3), 2(20), 3(5), 4(5), 5(30), 6(3), 7(5), 8(2), 9(5), 10(4), 11(2), 12(2), 13(3), 14(1)	45
Black-capped Chickadee	1(8), 2(7), 3(9), 4(8), 5(60), 6(3), 7(8), 8(5), 9(6), 10(4), 11(2), 12(3), 13(8), 14(11)	88
Tufted Titmouse	1(3), 2(4), 3(4), 4(5), 5(3), 6(1), 7(1), 8(5), 9(1), 10(6), 11(3), 12(3), 13(4), 14(2)	45
White-breasted Nuthatch	2(1), 3(3), 4(3), 5(2), 6(1), 8(1), 11(1), 13(3), 14(4)	19
House Wren	1(3), 3(1), 5(2), 6(1), 9(1), 12(1), 13(3), 14(1)	13
Blue-gray Gnatcatcher	3(1), 8(1), 10(1), 11(1), 13(2)	6
Eastern Bluebird	9(1)	1
Veery	2(1), 3(10), 4(3), 5(4), 6(9), 8(5), 10(2), 11(4), 12(3), 13(9), 14(3)	53
Wood Thrush	1(5), 3(2), 4(2), 5(2), 8(1), 10(1), 11(3), 12(3), 13(6), 14(7)	32
American Robin	1(11), 2(4), 3(10), 4(7), 5(5), 6(5), 7(6), 8(7), 9(4), 10(1), 11(1), 12(6), 13(5), 14(7)	79
Gray Catbird	1(5), 2(1), 3(5), 4(2), 5(8), 6(1), 7(4), 8(7), 9(2), 10(3), 11(2), 12(1), 13(6), 14(8)	55
Brown Thrasher	1(1), 3(20), 5(1), 10(1)	5
Cedar Waxwing	1(2), 4(3), 6(5), 7(1), 8(5), 9(5), 10(2), 11(1), 12(5), 13(2), 14(8)	39
European Starling	1(1), 2(1), 3(3), 5(2), 8(1), 9(4), 11(1), 12(1)	14
White-eyed Vireo	5(1), 8(3)	4
Yellow-throated Vireo	1(1), 3(1), 8(1), 9(1), 10(1), 12(1), 14(1)	7
Warbling Vireo	3(2), 5(1), 9(1)	4
Red-eyed Vireo	2(2), 3(5), 4(4), 5(5), 6(2), 7(2), 8(8), 9(2), 10(3), 11(3), 12(4), 13(5), 14(6)	51
Blue-winged Warbler	2(1), 3(10), 5(3), 6(1), 8(1), 9(1), 10(1), 11(1), 12(3), 13(2)	15
Yellow Warbler	8(1)	1
Chestnut-sided Warbler	3(1), 5(1), 8(1), 9(1), 11(1)	5
Black-throated Green W.	5(1) (no local breeding record for this species)	1
Ovenbird	1(3), 2(5), 3(6), 4(6), 5(8), 6(4), 7(5), 8(12), 9(5), 10(5), 11(2), 12(9), 13(12), 14(10)	92
Kentucky Warbler	3(1), 14(1)	2
Common Yellowthroat	1(5), 3(8), 4(3), 5(9), 6(6), 7(11), 8(12), 9(8), 10(5), 11(5), 12(11), 13(6), 14(11)	100
Yellow-breasted Chat	1(1), 8(3), 13(1)	5
Scarlet Tanager	3(3), 4(3), 5(3), 6(1), 8(2), 9(1), 10(2), 11(4), 12(3), 13(2)	24
Northern Cardinal	1(5), 2(3), 3(9), 4(7), 5(6), 6(6), 7(9), 8(7), 9(5), 10(4), 11(1), 12(8), 13(6), 14(11)	87
Rose-breasted Grosbeak	3(2), 8(2), 9(1), 10(1), 13(1)	7
Indigo Bunting	1(15), 2(8), 3(12), 4(15), 5(15), 6(17), 7(15), 8(9), 9(13), 10(20), 11(5), 12(13), 13(18), 14(22)	197
Rufous-sided Towhee	1(2), 2(2), 3(2), 4(3), 5(8), 6(4), 7(6), 8(7), 9(2), 10(4), 11(2), 12(3), 13(6), 14(4)	55
Chipping Sparrow	1(5), 3(2), 4(3), 5(2), 6(5), 7(3), 8(2), 9(5), 10(1), 12(14), 13(2), 14(8)	52
Field Sparrow	1(8), 2(2), 3(13), 4(7), 5(6), 6(5), 7(10), 8(12), 9(6), 10(3), 11(4), 12(10), 13(6), 14(5)	97
Vesper Sparrow*	3(2), 4(1), 6(1), 8(1), 12(1)	6

*probably nesting adjacent to state forest

		<u>Total Pairs</u>
Savannah Sparrow	7(2), 9(1)	3
Song Sparrow	1(5), 2(1), 3(4), 4(3), 5(5), 7(8), 8(6), 9(7), 10(8), 11(5), 12(4), 13(2), 14(5)	63
Swamp Sparrow	8(6), 13(1)	7
Bobolink*	7(1), 14(2)	3
Red-winged Blackbird	1(4), 2(2), 3(5), 4(2), 5(3), 6(3), 7(7), 8(7), 9(4), 10(11), 11(9), 12(2), 13(4), 14(3)	66
Eastern Meadowlark	7(1), 8(1), 12(1)	3
Common Grackle	1(8), 2(4), 3(16), 4(8), 5(5), 6(2), 7(4), 8(3), 9(8), 10(6), 11(6), 12(3), 13(4), 14(10)	87
Brown-headed Cowbird	1(2), 2(1), 3(6), 4(1), 5(4), 7(3), 8(4), 9(6), 10(1), 11(2), 12(6), 13(7), 14(4)	47
Northern Oriole	1(7), 2(4), 3(6), 4(1), 5(1), 6(1), 7(2), 9(1), 10(3), 11(4)	30
American Goldfinch	1(4), 2(2), 3(5), 4(2), 5(3), 6(3), 7(3), 8(3), 9(6), 10(6), 11(4), 12(8), 13(6), 14(4)	66
House Sparrow*	1(2), 2(1), 4(1), 5(6), 6(2), 7(2), 9(5), 12(4), 14(5)	28

Total Pairs = 2156

*probably nesting adjacent to state forest

LITERATURE CITED

Campbell, L. W. 1968. Bird of the Toledo Area. The Toledo Blade Co., Toledo, Ohio.

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ANNOUNCEMENT

A new Christmas Bird Count is being started in Southwestern Ohio. This new circle includes Caesar's Creek State Park, Spring Valley Wildlife Area, Fort Ancient State Memorial and a 15 mile section of the Little Miami Scenic River Trail. Interested persons should contact Frank Renfrow 8442 River Drive, Maineville, Ohio 45039, 513-683-7219.



