

BIRDS THAT DESTROY GRAPES.

BY AMOS W. BUTLER.

In my report on the Birds of Indiana, 1897,¹ I referred to my observations concerning the grape-eating habits of the English sparrow. On another page reference is made to a similar reported habit which I have never observed myself of the Baltimore Oriole.² Also note is made of the grape puncturing habit of the Tennessee Warbler,³ which I have since had excellent opportunities several times to note.

The fall of 1911, while an invalid, I spent much time in a large porch swing beneath our grape arbor at my home at Irvington, Indiana. In this way I had an excellent opportunity to observe the birds found among the grapevines and note their habits. In the fall of 1912, I made some further observations. We had both years the following kinds of grapes in bearing, Catawba, Concord, Brighton, Worden, Moore's Early, Delaware and an unknown variety. In 1912 we had in addition Niagara fruiting. Those trained upon the arbor were all of two kinds, Concord, and the unknown variety—mostly the former. In 1911 the vines bore very heavily and generally both bunches and berries were undersized. In 1912 the Catawba and Concord upon the arbor bore fewer grapes, mostly of small size and ripened unevenly. The same varieties in other situations bore better fruit. The behavior of the birds too was different. While the first year mentioned there were a number of robins among the vines, the most notable visitors and by far the most destructive were two kinds of warblers, the Tennessee Warbler and the Cape May Warbler.

The second year these warblers were few and inconspicuous and there were more kinds of birds about the grapes. These included great numbers of robins, mostly migrants, together with many more English Sparrows and Bronzed Grackles, Flickers, and Blue Jays which feasted upon the fruit.

1911.

- Sept. 9. Cape May Warbler, one puncturing grapes.
 Sept. 10. Cape May Warbler, one puncturing grapes.
 Sept. 10. Tennessee Warbler, two.

¹ Report of state geologist, 1897, pp. 937-8.

² *Ibid.*, p. 904.

³ *Ibid.*, p. 1037.

- Sept. 11. Tennessee Warbler, number.
- Sept. 11. Cape May Warbler, two at grapes.
- Sept. 12. Tennessee Warbler, several at grapes.
- Sept. 12. Cape May Warbler, eating many insects about grapes.
- Sept. 13. Tennessee Warbler, two at grapes.
- Sept. 13. Cape May Warbler, one about grapes, catching many insects, pecking at bees among grapes that had been picked. Saw none caught. Does it puncture grapes to draw insects? Apparently it makes one incision in a grape, while the Tennessee seems to strike the berries with partly open bill, making two incisions at each stroke. The Cape May Warbler is a fighter, attacking Tennessee Warblers and driving them away. The latter show fear of it.
- Sept. 16. Tennessee Warbler, several.
- Sept. 16. Cape May Warbler, one at grapes.
- Sept. 17. Cape May Warbler, two, brighter plumage than those heretofore seen and more wary. Drove away a Tennessee Warbler.
- Sept. 18. Cape May Warbler, two.
- Sept. 18. Tennessee Warbler.
- Sept. 19. Tennessee Warbler, several at grapes.
- Sept. 20. Cape May Warbler.
- Sept. 20. Tennessee Warbler.
- Sept. 21. Tennessee Warbler.
- Sept. 23. Tennessee Warbler, several.
- Sept. 25. Tennessee Warbler, several.
- Sept. 26. Tennessee Warbler.
- Sept. 26. Cape May Warbler, last seen.
- Sept. 27. Tennessee Warbler, several.
- Sept. 29. Tennessee Warbler.
- Oct. 1. Tennessee Warbler, common.
- Oct. 2. Tennessee Warbler, common.
- Oct. 2. Robins. For several days they have been abundant in flocks in all phases of plumage and all these are among the grape vines eating grapes and grape seeds.

In 1912 the first bird seen eating early grapes was a Catbird on August 3d. August 23d the later grapes show evidences of birds' work, but have not been able to identify those engaged at it. September 15 the following birds observed eating Concord grapes: Robins, a number; Flicker, one;

English Sparrows, several. A Black Poll Warbler was catching insects among the grapevines and afterwards disappeared among the branches. Did not see it eat any grapes. The warblers were late in appearing about the grapevines this year. They were not in numbers except for a few days.

September 29 the following birds eating grapes: Flickers, Catbirds, Yellow Bellied Sapsucker (1), Tennessee Warblers, common, Cape May Warbler (1). These ate them on the vines, as did also many Robins here in all phases of plumage, young and old. These ate both from vines and ground, where berries had fallen, also berries of elder and poke. The Robins, Bronzed Grackles, English Sparrows, ate grapes on the ground. The Robins came in droves a week ago and have cleaned the vines of all ripe grapes. The Sapsucker seemed to eat insects as well as grapes. Today saw first Cape May and yesterday first Tennessee Warblers. Have suspected them for several days past from punctured grapes noted. The Cape May and Tennessee Warblers, when alarmed, fly to the thick foliage of some young maples, where they are quiet, and from whence they can overlook the grape arbors. The Cape May has less fear of man than the Tennessee, though both permit quite close approach. They descend from the top of the arbor or dart like an arrow from the maple trees to drive away the Tennessee. The latter evidently are much afraid of them. A Cape May Warbler was both puncturing the few remaining berries and sipping stale drops from old grape skins. It carefully observes the bees around the vines turning its head and bending its neck to look, but decides not to touch them. The Tennessee Warblers also fight among themselves. Today one drove another entirely away from the vines. About the vines, too, were Blue Jays in loud voice, the first real jaying this fall. An Olive-backed Thrush flew up from the ground beneath the trellis. A Blue-headed Vireo was active among vines on the arbor. There, too, was a black and yellow warbler looking for food. A Black-throated Green Warbler went among the vines where berries were thickest, catching insects, but was not observed to take a grape. The same may be said of a young Bay-breasted Warbler on another vine. The Sapsucker evidently was as interested in searching the joints in the arbor posts as the vines.

