

was sunk in the ground at the foot of a small oak tree in vicinity of some small jack pines (*Pinus banksiana*). The vegetation was very heavy, and the nest was well concealed by deer-vine grass and other weeds. It was composed of dry grass, weed stems and pine needles. The male visited the nest while I was watching. The eggs have very thin shells, with very little gloss, and are spotted and blotched, mostly at top, with pink and chocolate spots. Average size, .73 X .55 of an inch.

The song of the male as follows: *Trp, trp, terp, terp, terp, ser-wit, er, wer*, all but the first two notes uttered rapidly. Besides this song, the prevalent one, the male has two other shorter song-notes. The female has a chirp like that of a sparrow. The male is a beautiful bird and a fine, incessant singer during the breeding season. The female sits very close on her eggs and can be caught on the nest with the hands. The birds are not wild and will allow close observation. They inhabit the high jack pine ridges, and seem to feed principally on an insect that infests the jack pine, occasionally flying to the ground for other food. The bird is called the Jack Pine Bird in northern Michigan.

As the nests are well concealed, and the female is a close sitter, it is a very difficult matter to find them, as the male will sing a long distance from the nest. This set is, I believe, the first perfect set of this bird's eggs known to science.—EDWARD ARNOLD, *Battle Creek, Mich.*

An Interesting Variation in *Seiurus*.—A diagnostic character of this genus is the absence of white (or other colored) spots from the tail feathers. In all descriptions of *Seiurus*, and in all keys including it, this feature is set forth in practically the same language as in the following extract from Ridgway (1902, p. 429): "Inner webs of the lateral rectrices without white terminal spot." Thus it may be concluded that this character is essential to a definition of the genus, or in other words, is a generic character. It is this fact that lends a greater interest to the following record.

A specimen of *Seiurus noveboracensis notabilis* in the collection of the University of Indiana (No. 128) has distinctly marked, white, terminal spots on the outermost and next to the outermost rectrices of the right side, and indications of similar markings on their fellows of the left side, in the form of correspondingly placed narrow edgings of white. The facts that these markings are paired, and that they are in precisely the position of the blotches on the rectrices of most of our warblers with normally parti-colored tail-feathers, remove them entirely from the category of those irregularly shaped, white patches, which are often found on the primaries or on the tail-feathers, or in fact on any of the feathers of many species of birds.

This change from a character of its own genus to that of another must be considered as having a deeper, a phylogenetic significance. The color arrangement of *Seiurus* tends to the primitive or streaked type. The

only recognition mark thus far developed is the conspicuous superciliary line. The abnormal pattern of the rectrices of the specimen under consideration may be regarded therefore as identical in nature with those variations that must have taken place many generations ago, in the ancestors of species that now have a full complement of well-developed recognition marks.

Probably many, many variations of this kind have occurred, and have failed to be perpetuated, for one reason or another, but who can say at what moment such a variation will be seized upon by natural selection and developed into a new racial character!

The specimen discussed above was collected May 14, 1875, at Indianapolis, Indiana, by Dr. David Starr Jordan.—W. F. McATEE, *Washington, D. C.*

Warblers and Grapes.—At Bloomington, Indiana, during the fall of 1903, from the 24th to the 29th of September, I observed the Tennessee (*Helminthophila peregrina*) and the Cape May (*Dendroica tigrina*) Warblers piercing or 'sucking' grapes. The habit has been frequently recorded for the former, but I believe it is the first time it has been for the latter.

Prof. F. H. King has spoken of the trait in the Tennessee Warbler (*Wis. Geol. Rep.*, 1886), and has protested against condemnation of the bird for this practice which is prevalent for so small a portion of the year. It is this line of argument that I wish to support.

It is evident that the birds can do no harm to grapes in their summer homes. In the parts of their summer range where grapes are found, these are not ripe until the birds have begun their northward movement. Thus it is only during the limited period in which they are present as migrants in a given locality that it is possible for them to injure the grape crop. This period may be as long as six weeks, but in all probability it is generally shorter, and does not include, at the most, more than two weeks during which the species occurs abundantly. If noteworthy harmful, it is only during this very brief period that their depredations would be important.

Careful observations were made at all opportunities during the period mentioned. The behavior of the birds and the condition of the grapes both before and after the birds' visits were noted. Specimens were taken while in the vines and their stomach contents ascertained. Many of the grapes were preserved in alcohol, just as they were left by the warblers.

Both species were constantly busy catching insects on the vines, and on a walnut and some apple-trees near by. Frequently, however, they dashed into the vines and thrust their bills quickly into a grape. Sometimes they withdrew them quickly; again they poked around in the interior of the grape a little, and always after these attacks, they lifted their heads as in drinking. This action suggested a reason for piercing the grapes, that I am satisfied is the true one, that is, the obtaining of liquid refreshment.