PLUMAGES OF THE YOUNG OF THE BARRED OWL.

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(Photos from Life by the Author.)

Ornithologists in this country have, as a rule, paid but little attention in their writings to the characters and coloration of the plumage of the nestlings of birds, or during the various stages of their sub-adult life. This fact I have pointed out in various articles published during the past twenty-five years or more, and especially in one entitled "The Study of Nestling Birds," which appeared in *The Atlantic Slope Naturalist* in 1903 (Vol. 1, No. 4, Sept. and Oct., p. 37–44), and another which appeared in *Natur und Haus* during the same year, entitled, "Das Studium der Nestlinge" (Jahr. xii. Heft, 4, p. 49–53).

In the present article this important subject will be further illustrated by selecting the first plumages of the Barred Owl (*Strix varia varia*) as an example of the extent of the attention ornithologists have bestowed upon such matters.

For instance, if we choose Wilson as an authority we find he states in his own account of that bird that he "At another time, in passing through the woods, perceived something white, on the high shaded branch of a tree, close to the trunk, that, as I thought, looked like a cat asleep. Unable to satisfy myself, I was induced to fire, when to my surprise and regret, four young Owls, [Strix nebulosa] of this same species, nearly full grown, came down headlong, and, fluttering for a few moments, died at my feet." Here was an excellent opportunity to describe in a few lines the plumage of the young of this Owl, but he never availed himself of it. That these four young owls looked like a "white cat" in the tree goes for little, especially in view of the fact that there were probably plenty of black cats in Wilson's time.

Audubon, who enjoyed for many years abundant opportunity to study the Barred Owl, makes no reference whatever to

the young of that species in his *Birds of America*, and his description of the plumage and its color in the adult is extremely vague and unsatisfactory.

Coues in the Fifth Edition of his Key to North American Birds, has nothing to say about the young of any of the Barred Owls, at any stage of their development.

Ridgway in his Manual of North American Birds, under the description of the Barred Owl (S. nebulosum) offers us one of the plumages of the young of this species, with respect to color and character of markings. This description evidently refers to the young at the time of leaving the nest, although the author does not so state. This I take to be so from the fact that he says of the "Young: Head, neck, and entire lower parts broadly barred with rather light umberbrown and pale buffy and whitish, the brown and lighter bars about equal in width." Now if Figs. 1 and 2 of the present article are compared, it will be observed that in the nestling the markings consist of very irregular lines, and by no means definite bars (Fig. 1), while in the young bird-of-the-year, the lower parts are marked by broken longitudinal stripes. (Fig. 2). Hence, Ridgway's description, to say the least, is rather faulty. As a matter of fact the lower parts in the nestling are both irregularly "barred and spotted with shades of brown," as I state in my Chapters on the Natural History of the United States (1897, p. 240).

In the work referred to I give a full-page plate of a nestling of the species, which is a reproduction of a photograph from life made by myself. The markings are here beautifully shown, and these instead of being transverse bars, are, in reality, short, irregular, broken lines and, in some instances, spots.

So it goes for the most part throughout ornithological literature,— the descriptions of the plumages of the nestlings or the sub-adult forms of most species of birds have been either entirely omitted, or else incorrectly, shiftlessly or insufficiently recorded. In nearly all instances, a knowledge of such matters is of the greatest importance as shedding light upon the



Fig. 2 Barred Owl: young bird of-the-year (Syrnium varium)
Photo. from life by the author.

subject of the ancestry of birds and their affinities within the Class, and to this truth the Owls form no exception.

I have made and published numerous photographs from life of the Barred Owl and other species of the *Strigidæ*, but the figures illustrating the present article have never heretofore appeared in any ornithological publication, and, in the case of Figure 2, anywhere at all.

BIRDS OF A CANADIAN PEAT BOG.

BY C. W. G. EIFRIG.

A Canadian peat bog is a thing at once sought and delighted in, and on the other hand shunned and abhorred. It is shunned and avoided by nearly all classes of human society, that know of nothing but work, the amassing of money, and of pleasure in the old, accepted sense of the word. Such people cannot understand why a person should go to such an uninviting place, where one is drenched from underneath by water, visible or invisible in the deep moss, and also by the perspiration, wrung out of a person by the hot sun, under which one has to wade through the deep vegetation, without being able to walk in the shade. Add to this the hordes of mosquitoes, lack of drinking water, the distances one usually has to tramp, often enough in wet clothing, etc., makes a condition of things which to invade without necessity, yes, even to find pleasure and profit in, seems to them nothing short of a sign of a serious affection of the brain. And yet, naturalists of several kinds, the botanist, entomologist, particularly the ornithologist, congratulate themselves, when they have such a bog in their neighborhood, and go there as often as they have an opportunity.

Six miles east of Ottawa, the beautiful Capital of Canada and the former place of residence of the writer, there is such a bog of ample dimensions and bogginess, called the Mer Bleue. It is about ten miles long by one to four miles wide,