

CORRESPONDENCE
BENT'S 'LIFE HISTORIES'

May 19, 1942.

EDITOR OF 'THE AUK':—

Now that fourteen of my Bulletins on the Life Histories of North American Birds have been published, your readers may be interested to know what progress is being made on future volumes. The manuscript for the fifteenth, on the Corvidae and Paridae, has long since been completed and is in the hands of the publishers in Washington. My work on the sixteenth, containing all the birds on the 1931 Check-List from the nuthatches to the thrashers inclusive, is now practically done, except for a few minor details. I am now starting work on the seventeenth volume, which is planned to contain all the birds on the 1931 Check-List from the thrushes to the vireos inclusive. It is planned to accumulate manuscript in advance of publication, which may be retarded under the present war conditions.

I wish to take this opportunity to thank all those who have contributed material for previous volumes, to remind them that this is a co-operative work, and to ask them to send me, as soon as possible, contributions of notes, data and photographs relating to birds to be included in the seventeenth volume; the sooner these are received, the easier it will be for me to use them.

A. C. BENT

Taunton, Massachusetts

THE SENSE OF SMELL IN BIRDS

EDITOR OF 'THE AUK':—

Much discussion of this subject is based upon the assumption that this important fact-finding sense in other animals is the same as our olfactory reactions; that it is exercised through the nose is not conclusive evidence that their nasal sensations are identical with ours. The phenomena may be quite different between species. What is readily distinguished by us often passes unnoticed by others and, vice versa, we fail to appreciate effluvia that are patent to other noses. That the stimulating agent is the same in both cases is not too certain. The difference may be one of quality as well as of degree or of association. Unfortunately we have no exact scientific classification of odors but dogs seem to pay not the slightest attention to many perfumes that are perfectly obvious to us or to unirritant smells that fall without certain ranges of qualifications. The same dog that noses his mistress's shoe with excitement fails to pay the slightest attention to a strong perfume that she has been in the habit of using and which to our senses has become notably associated with her.

A similar unwarranted assumption is that other animals taste as we do. One tastes an advertisingly colored insect, says that there is nothing repugnant about it, and draws the conclusion that the color is not warning against ill-flavor. We see birds eat red pepper that would scorch our mouths and gullets and other animals enjoy tastes that are abhorrent to us. Birds devour with gusto dry seeds without the possibility of such oral taste as we know. They may possibly obtain pleasurable or other reaction as the food softens in the crop but their whole reaction is obviously different from ours.

In the same way most of our theories of animal coloration assume that all eyes have the same range of color perception as ours whereas the facts of the case may be, and probably are, quite the contrary. A shifting of color sensitivity in the eye up or down the wave scale may materially alter the whole appearance of things.

A hunting friend who is color-blind in the red end of the spectrum complains that he cannot see blood upon green leaves. To such eyes, the brilliant Scarlet Tanager would be protectively colored. If such variations in color sensitivity are specific and common many of our coloration theories may fall to the ground or require considerable modification.

There is opportunity for some nice laboratory experimentation in these fields. Color perception in insects has been investigated to some extent and has revealed some remarkable limitations and perceptions. I do not know that other lines have been seriously investigated. They may be difficult subjects but it is time they were tackled. Here is a chance for some ingenious and ambitious post-graduate seeking fame and new worlds to conquer!

P. A. TAVERNER

*National Museum of Canada
Ottawa*

BIRDS AND WIND

EDITOR OF 'THE AUK':—

Mr. McAtee in a letter in last October's 'Auk' contends that Mr. Neil T. McMillan oversimplified matters in his paper 'Birds and the Wind' ('Bird-Lore,' 1938). He is probably right. Probably in his anxiety to get over to his readers his idea of the use birds make of the wind, Mr. McMillan emphasized the help they get from it and minimized the hindrance. He states, for instance, that "a flying bird, which is essentially a part of the wind, cannot be struck by it any more than a man can be struck by the automobile in which he is sitting." This I believe to be literally true, but remember that a man *can* be struck by the automobile he is riding in if the brakes are put on too suddenly, and, similarly, a bird can be struck by the wind if he suddenly runs into a violent counter-current. McMillan does not forget the turbulence characteristic of high winds, but very likely he underrates its importance. However, he seems to have made an interesting contribution in showing that if a human aviator can use the wind as an aid, such expert aviators as the birds may well be in the habit of making similar use of it in their migrations. Instead of minimizing 'the importance of the wind in the bird world,' as Mr. McAtee seems to assume, this conception really increases it by showing that the wind can be a friend as well as an enemy.

In citing two specific statements of McMillan's for criticism Mr. McAtee seems to have taken him too literally. When McMillan wrote of a bird as 'suspended in air' he surely thought of it as suspended, or held up, by that very 'muscular exertion' that McAtee speaks of. The expression seems to be entirely appropriate. And so when McMillan wrote of a flying bird as 'essentially part of the wind' his meaning should be obvious. The cherry—or, if you prefer, the olive—though solid and differing widely in nature from the circumambient liquid, is nevertheless an essential part of the beverage. Perhaps the example of a goldfish in a bowl would be even more apt. In either case the contained is moved about with the container, and just so the bird is moved about with the air in which it flies.

Of course, birds are often driven off their courses by the winds, and birds as well as aviators know the dangers of landing and taking off, but these facts do not go to prove that they cannot and do not take advantage of the winds when they are favorable.

FRANCIS H. ALLEN

West Roxbury, Massachusetts