

"The Way to Study Birds."

EDITOR OF 'THE AUK'

After reading several of the reviews of my recent book, 'The Way to Study Birds,' I have been tempted to write a few words in explanation. Apparently in my preface I rather failed in my attempt to give an adequate idea of the book's purpose. In this connection, however, I have perhaps my best clue furnished by a reviewer in 'The Nation,' who writes that I have given "a handbook to the study of a handbook." This then was my object: to make clear the way for the beginner so that the many ornithological "handbooks" could be of use to him; so that he can be brought to the viewpoint where he is able to advantageously employ them. To continue, as 'The Nation' amits, my book is "no substitute for the amply illustrated manuals by Chester Reed and others." I have used very much these same words myself, as perhaps anyone who has really read my book will remember. It is to make possible an understanding of the "manuals", and to give a course of study, which followed throughout holds good, that I wrote my book. But I did not consider it necessary to give more than fifty examples of my plan. By that time, an *average* person is able to understand the work and continue by self-instruction.

Unfortunately, in their review of my book, 'The Nation' made two scientific errors of fact. The Turkey Vulture or "*buzzard*" is a common summer resident throughout the area covered by my book and is not "entirely unknown" in any part for which it was written. This is similarly true of the Starling. It is, I hope, unnecessary to refute the other fact, as expounded by 'The Nation,' that, for example, an English Sparrow is no more abundant than a Belted Kingfisher. These are, however, minor mistakes, and my book was written, as so well expressed, with the object of being a handbook for the study of a handbook.

J. DRYDEN KUSER.

Bernardsville, N. J., August 30, 1917.

Concealing Coloration.

EDITOR OF 'THE AUK':

Here is Henry Drummond's paragraph on the concealing power of zebras' stripes, with a perfectly correct analysis of the thing's principle. I should have drawn attention to it long ago had I before now learned of its existence.

"When we look, for instance, at the coat of a zebra with its thunder-and-lightning pattern of black and white stripes, we should think such a conspicuous object to court, rather than elude, attention. But the effect is just the opposite. The black and white somehow take away the sense

of a solid body altogether; the two colors seem to blend into the most inconspicuous grey, and at close quarters the effect is as of bars of light seen through the branches of shrubs. I have found myself in the forest gazing at what I supposed to be a solitary zebra, its presence betrayed by some motion due to my approach, and suddenly realized that I was surrounded by an entire herd which were all invisible until they moved.

"The motionlessness of wild game in the field when danger is near is well known." (Henry Drummond, D. D., in 'Tropical Africa,' 1888.)

This antedates all my writing on concealing coloration, and is the only publication that I know that does so.

Those European armies' universal adoption of concealment-by-pattern of snipers, autos, tanks, tents, etc., adds interest to the study of this universal animal-world principle, which the English and the Swiss naturalists assure me these armies have all got from my book.

It is somewhat amusing that while Europe's naturalists all read, and ultimately accepted my book, as I have heard from the English and the Swiss, and while thirty million or more soldiers are practicing it to save their lives, the American naturalists mainly continue in ignorance even of what it is that I state. Because I naturally dwell on the tremendous evidence that this practically universal concealing effect of animals' patterns *is no accident*, the American naturalist refuses to accept this inference and misses my SCIENTIFIC POINT. The artist's science is that of the laws of visibility; and all the artists in the world will tell him that my scientific point, viz. that patterns on an object *inevitably lessen its distinguishability* is straight goods.

Add to this, nature is practically always doing these patterns in colors that counterfeit, beyond all human painter-power, one or another of the wearer's typical backgrounds.

Must one believe that the average American is so much less intellectual than Europeans that while those millions of soldiers are all protecting themselves with this vast concealing device, the American naturalist can not even see the absolutely antipodal difference between *detecting* an object and identifying it by its particular form of concealment-pattern *after* he has detected the object itself!

Yours truly,

ABBOTT H. THAYER.

Monadnock, N. H., June 21, 1917.