

should have been stated in the Check-List, or the treatment made uniform throughout. The ranges likewise should have been those of the *species* where the binomial is used. These discrepancies are however, not very serious in the case of these exotic species which some think have no place at all in the main text of the Check-List.

3. As regards geographical distribution Dr. Bishop seems to be just a little hypercritical. The writer undertook the preliminary revision of the ranges and was forced to limit his compilation to such works as Ridgway's 'Birds of North and Middle America,' Chapman's and Mrs. Bailey's 'Handbooks,' Bishop's list in 'The Water Fowl Family' and the latest state lists. The Index to 'The Auk' was not published at the time this work was done, and to have attempted any further research in the time at his disposal would have been impossible. Subsequently, as explained in the preface to the Check-List, Dr. Merriam and his assistants on the Biological Survey revised the ranges with the aid of the extensive records of the Survey. The fact that the writer was engaged upon this work was noticed in 'The Auk' and considerable unpublished data was submitted to him, all of which was utilized. It seems hardly fair however, to charge the Committee with failing to use unpublished material in the possession of individuals, or to search out every record of the casual occurrence of a species. Some at least of the records Dr. Bishop mentions were not published until after the Check-List appeared and the Alaskan Bald Eagle was not even shot until the Check-List was almost entirely in type!

However, it would be an admirable thing if Dr. Bishop's criticism should induce some ornithologist in each State to carefully study the ranges as given in the Check-List and supply any omissions or corrections that may be necessary, for the area with which he is familiar; in order that such material shall be available to the Committee in the future.

The more discussion and the more coöperation in this work the better.

WITMER STONE.]

Destruction of Sapsuckers.

TO THE EDITOR OF THE AUK:

Dear Sir: The Directors of the Massachusetts Audubon Society by letter, and Mr. C. J. Maynard in print,¹ have objected to the recommendation by the Biological Survey of the use of strychnine in destroying sapsuckers, because hummingbirds visit the drills to feed on the sap. I would much appreciate an allowance of space in 'The Auk' for a defense of our position.

In the first place Mr. Maynard apparently has formed his opinion from a perusal of Farmer's Bulletin 506 which contains only a brief abstract of the hundred page bulletin on 'Woodpeckers in relation to trees and wood products.' In that publication it is made clear that the greatest damage done by sapsuckers is not killing trees, but rendering defective the wood

¹ Records of Walks and Talks with Nature, VI. No. 10, Dec. 5, 1912, pp. 34-37

of valuable timber trees which they work upon year after year, but which are not seriously affected so far as health or external appearance are concerned. Mr. Maynard says: "Personally we have never seen any serious damage done to trees by sapsuckers in the eastern seaboard states from Maine to Florida." This comment means nothing; the writer has never seen hummers or other birds visit sapsucker pits, but he does not doubt the truth of observations on this point. In fact he is able to make out a much stronger case against himself than have the above mentioned persons.

Hummers probably make more of a practice of visiting sapsucker pits than any other birds, but several other species are known to do this occasionally. One species, the California Woodpecker (*Melanerpes formicivorus bairdi*) is recorded as so doing on the authority of Joseph Grinnell in Biological Survey Bulletin 39, p. 92. F. L. Gruntvig¹ states that in Wisconsin *Dryobates pubescens*, *Sitta carolinensis*, *Regulus calendula*, *Icterus galbula* and *Dendroica coronata* help themselves from sapsucker holes. N. B. Moore notes that on New Providence, Bahamas, *Cereba bahamensis*, *Dendroica tigrina* and *D. coronata* sometimes feed at sapsucker punctures. As to the ruby-throated hummingbird Frank Bolles gives a very full account in 'From Blomidon to Smoky', pp. 131-175, and 260-273. He also mentions the downy woodpecker.

Dr. Ned Dearborn in experimenting upon sapsucker poisoning in the Angeles Forest, San Bernardino Mts., Calif., picked up 7 hummers (*Calypte anna* and *Selasphorus rufus*) and one warbler (*Vermivora rubricapilla gutturalis*) killed by strychnine in sapsucker pits in two days. It seems evident that hummers habitually visit sapsucker holes, while several other species of birds do so occasionally. The former incur much danger therefore from poisoning operations; the latter little.

Some other factors also must be considered: few people will take the trouble to poison sapsuckers; it will be done only locally, for the preservation of especially valuable ornamental or fruit-producing trees; that is, when the money or time loss is apt to be large and in such cases relief cannot be denied; poisoning in any one place need be continued for only a few days; as soon as the poisoned punctures dry danger to birds is past; the yellow-bellied sapsucker damages trees throughout the eastern United States, but except in the extreme northern part, *i. e.* in its breeding range — usually at a season when the birds known to visit its pits most frequently are absent from the country.

The problem of sapsuckers among woodpeckers is very similar to that of the few injurious members of the hawk and owl family. The whole race of raptorial birds has been popularly condemned chiefly on account of the depredations of a small proportion of the species. This question has been scientifically investigated by Dr. A. K. Fisher and his recommendations as to denial of protection to the Goshawk, Sharp-shinned and Cooper's Hawks and the Great Horned Owl have been embodied in the laws of many States.

¹ Trans. Wis. Acad. Sci., Arts and Letters X. July, 1894, pp. 113-114.

So it is with woodpeckers. The whole family has had a black name chiefly on account of the damage committed by the sapsuckers.

It has long been known that sapsuckers do some damage to trees but the subject was never properly investigated until the Biological Survey took up the work, the results of which appear in our Bulletin 39. As a consequence of this investigation it was apparent that the damage committed by these birds is very great. Manifestly it would be absurd to publish an account of such damage without making some recommendations for the relief of persons suffering loss. Even as it is, we are so far unable to recommend anything practicable to protect trees in forests, and it is here that the bulk of the damage is done, namely, the production of defects in wood which cause a lowering in the grade of lumber from the affected trees. The protective measures recommended by the Biological Survey are available for use only in orchards and ornamental plantings. This in itself tends to limit the danger to other species of birds.

The only known alternative to poisoning as an aggressive measure against sapsuckers is shooting, and of these two, we chose the lesser evil. If no recommendations as to methods of combating the birds were made, no doubt the majority of people would take the gun. We have advised against this method and in favor of poisoning because if attempts to shoot the birds were made, practically all other species of woodpeckers would suffer severely. It is well known that there is a great confusion in the popular mind regarding the identity of sapsuckers. The poisoning method itself selects the species responsible for the damage, and this is a thing which would never be done in shooting unless a competent ornithologist were hired to do the work. The Downy and Hairy Woodpeckers especially would be shot on sight. They are now very widely known as sapsuckers and they are very much more valuable birds than the hummingbirds and warblers that visit sapsucker holes. Moreover, they would be subject to shooting at any time while the other birds, with the exception of hummers, will suffer much less by reason of the use of strychnine, because their visits to sapsucker holes are only of occasional occurrence. We feel certain that we have made the recommendation involving least danger to beneficial species.

Some criticism has been elicited also by the unavoidable killing of certain birds in the campaigns against destructive rodents in the west, but we may be sure these complaints are made by people who have not suffered heavy losses from the depredations of prairie dogs, gophers, and ground squirrels. So also persons who have valuable trees ruined will not be greatly concerned if in destroying the sapsuckers they kill also a few hummingbirds. The latter in the words of Professor F. E. L. Beal,¹ really have "but little economic interest and that little is mostly in the wrong direction."

The study of the relations of woodpeckers to trees in connection with Professor Beal's study of their food habits, really for the first time made clear the economic status of these birds. The fixing of blame upon the true

¹ Farmers' Bull. 506. 1912, p. 17.

offenders, and freeing the others from the stigma of guilt is a benefit to the useful species. Moreover it advances the cause of bird protection as a whole. If the protection of birds is to rest upon an economic basis the truth must be learned and told or the whole movement receive a setback. If bird protection, on the other hand, is to be based upon æsthetic principles, the writer will agree and support the cause, if only the pleading be on that basis. But in the scientific study of economic values, utilitarianism must prevail, and the rule of the greatest good to the greatest number be uncompromisingly applied.

W. L. McATEE.

NOTES AND NEWS.

'THE AUK' is indebted to Mr. Louis Agassiz Fuertes for the admirable drawing of the Great Auk which with the present issue replaces the cover design that has done service for the past thirty years. While it may be true that our familiarity with living Great Auks has not increased in this period, it is equally true that in that time an artist has been developed, whose ability in depicting bird life, has enabled him to make what is unquestionably a far closer approximation to the actual appearance of this famous bird, than was possible for any of our bird-artists of a quarter of a century ago.

Mr. Fuertes has moreover had the benefit of suggestions from Mr. D. G. Elliot, Dr. Frederic A. Lucas, and Mr. Frank M. Chapman; while the rocky islet upon which his birds are shown, is based upon a photograph of Funk Island, where Dr. Lucas in 1887 procured a large collection of Great Auk bones.

In the first number of 'The Auk' January, 1884, Dr. Elliott Coues in commenting upon criticisms of the name of the journal, hoped that instead of becoming extinct like its namesake, 'The Auk' might long flourish, and that in it the bird might live again — or as he put it "*in pennis ALCA rediviva.*" In the 28 years of Dr. Allen's guidance this hope has been amply fulfilled, so far as the text is concerned; and we can now say the same thing of our cover, or following Dr. Coues — "*in pennis Fuertesi ALCA rediviva!*"

BRADFORD TORREY, a Member of the American Ornithologists' Union and widely known as a writer of outdoor sketches, died at Santa Barbara, Cal., October 7, 1912, after a short illness. He was born at Weymouth, Mass., October 9, 1843, a son of Samuel and Sophronia (Dyer) Torrey, and was educated in the public schools of his native town. After completing his school course at the age of eighteen, he worked for a short time in a shoe factory, taught school for a year or two, then, after occupying positions with two business houses in Boston, entered the office of the