extensive correspondence and encouraging others to collect for him besides mastering language after language even to Danish and Italian, and reading all the scientific works upon which he could lay his hands.

The community of interest between Spencer F. Baird and his elder brother William, as shown in their correspondence, at once attracts the sympathy of the reader, and the generosity of the older brother when he found himself able to extend financial assistance to the younger to aid his advance in a field which he himself had been forced to abandon, is very touching.

The correspondence with Audubon is extremely interesting, forming, as it were, the connecting link between the leading figure of one epoch of American Ornithology and that of the next. Also the numerous exchanges of letters with John Cassin especially those of Christmas, 1853, wherein they reckoned the number of years that they had been friends and the high value that they placed upon this friendship! Later amid increasing cares we trace Baird's career at Washington, his establishment of the International Scientific Exchange, the development of the Museum and the fatherly interest in the many young naturalists who made the Smithsonian the centre of their activities and organized the Megatherium Club.

Finally the development of the Fish Commission and its numerous activities. But it is useless to try to present a synopsis of such a life; one must read it in its entirety, and suffice it to say that every ornithologist — indeed every scientific man — should read this biography. It is instructive in its mass of historical details, inspiring in the example that it sets and the possibilities that it opens up, and fascinating as a piece of literature. The illustrations are good and well selected, and the book is in every way a credit to both author and publisher.— W. S.

Baynes' 'Wild Bird Guests.' 1— When interest in the preservation of wild birds first developed in this country, our efforts were almost entirely directed to stopping their killing, and to keep all disturbing agencies away from their haunts. Of late years however this work has advanced along quite different lines and it has been shown that it is possible not only to make the birds' haunts more suitable for their needs but also to attract birds to places where they were almost or quite unknown before. In the fore front of this movement Mr. Ernest Harold Baynes has been the most conspicuous figure, and in the volume before us he tells of his methods and results, placing before a larger audience the facts that are familiar to the many who have heard his lectures or have been associated with him in 'bird club' work.

¹ Wild Bird Guests. How to Entertain Them. With Chapters on the Destruction of Birds, their Economic and Æsthetic Values, Suggestions for Dealing with their Enemies, and on the Organization and Management of Bird Clubs. By Ernest Harold Baynes. With 50 photogravure illustrations from photographs. New York. E. P. Dutton & Company, 1915. 8vo. pp. i-xviii + 1-326. \$2 net.

Mr. Baynes' book is more than this however. It passes in review the whole subject of bird destruction — by man, by natural enemies and by disease, — presenting the subject in an entertaining way, not as a list of dry statistics, and quoting his facts from a wide range of reliable authorities. He admirably differentiates the "true" and "so-called" sportsman. The former "is fond of the woods and fields and streams and lakes and who when game and fish are plentiful likes to get a little for himself or a friend, but who, when game shows signs of decreasing, does his best in every way to protect it and insure its increase." The latter "shoots all the birds the law permits him to, even when he knows the law is unfair to the birds. If there is no law to stop him he kills all the birds he can, and resorts to the use of automatic and pump guns, because it is not 'sport' but birds that he is trying to get."

Economic, æsthetic and moral reasons for protecting the birds are next reviewed, and finally in the last six chapters the author launches forth in his own particular field, that of attracting the birds, upon which topic he is easily our leading authority. The chapter headings give a good idea of the method of treatment; 'Entertainment in Winter,' 'Hospitality the Year Round,' 'Bird Lovers as Landlords,' 'Bird Baths,' 'Problems Confronting Beginners,' and 'Bird Clubs.' Under these headings we learn of the best foods for wild birds in winter time and methods of distributing them during time of heavy snow. Feeding boxes and winter shelters are also exhaustively considered. Then come lists of trees, shrubs and vines attractive to birds, and plans for nesting boxes, drinking basins and baths of all kinds. Mr. Baynes advocates shooting of English Sparrows and Red Squirrels but adds: "it is not for children. It is hard work — unpleasant work – and should be done by real men who know the bird from all others." He says further, "I know one man, who with a twenty-two calibre rifle, has for years kept his home farm of a hundred acres, clear of red squirrels, house cats and European Sparrows." The task of ridding a given place of bird enemies becomes increasingly easy. In one case "200 squirrels were shot the first year, perhaps 50 the second and now the shooting of half a dozen a year is all that is necessary." The cat problem Mr. Baynes recognizes as a most serious one. He says "no sensible person would advocate the extermination of cats, but I do believe that a serious effort should be made to get rid of unnecessary ones"....and people should "take care of such cats as they consider worth keeping....It is unneighborly to kill one's neighbor's cat, but just as unneighborly to permit a cat to kill one's neighbor's birds."

Mr. Baynes' wonderful success with bird clubs at Meridan, N. H., and elsewhere in New England is well known and here he offers helpful suggestions for others who would follow his method.

Mr. Baynes gives the scientific ornithologist full credit for his large share in the work of bird preservation, an acknowledgment too often ignored in these days of "conservationists." He argues that the scientific collector should be allowed to go about his work unhampered by petty Vol. XXXII 1915

restrictions and says that the complaint against the scientific man "is usually the cry of some conservationist who wishes he were scientific but is not." He adds "one of the strongest arguments in favor of preserving birds, is that they have great economic value; the facts which support this argument have been ascertained, not by the men who shout them from the housetops but by quiet, modest ornithologists who sit in their laboratories and whose names are seldom seen in the newspapers. Other men 'on the firing line,' do wonderfully effective work but sometimes they do not seem to realize that this work is made possible, not so much by the noise of their own big guns, as by the ammunition supplied to them by the scientific men who work without making any noise at all."

All in all this book of Mr. Baynes' is just what hundreds of people are looking for, in every part of the country, to help them in establishing closer relations with their wild bird neighbors. The illustrations are very attractive and the text well gotten up.— W. S.

Job on Wild Fowl Propagation.¹ -- Like Mr. Baynes, Mr. Job has developed a branch of wild bird preservation which is peculiarly his own ---that of the propagation of wild species. The need of Quail and Ruffed Grouse for stocking purposes has long been recognized and for some years past their artificial propagation has been successfully carried on in various places. In the case of wild ducks however the possibilities are only just beginning to be appreciated and undoubtedly their is a great future for the development of this work. In the two bulletins before us Mr. Job describes his experience and that of others, presenting in detail such information on the various phases of the problem as prospective breeders will require. Speaking of the breeding of ducks he says "It is coming to be a source not only of pleasure but of great practical good, to breed wild water-fowl by such methods as I have described. Every state should propagate and liberate wild ducks of such species as it is found are likely to breed in its domain, since it is proved that young wild ducks are strongly inclined to breed near where they were reared." The Wood Duck which a decade ago was called a "vanishing game-bird" is now being reared by thousands and the species is being reestablished and made abundant. Many owners of large estates, we are told, are already interesting themselves in propagating wild ducks on native swamp lands, and in this way it seems quite possible to offset the reduction in the numbers of many species, caused by the draining and cultivation of their former nesting grounds in the Dakotas, Manitoba, Saskatchewan, etc. Mr. Job's timely 'bulletins' will meet the needs of a constantly increasing number of wild-fowl breeders. - W. S.

¹ Propagation of Upland Game-Birds. By Herbert K. Job. Bulletin No. 2, Nat. Asso. Audubon Soc., 1974 Broadway, N. Y. City, April, 1915. Price 25 cents. (pp. 33–72).

Propagation of Wild Water-Fowl. By Herbert K. Job. Bulletin No. 3. Nat. Asso. Audubon Soc., 1974 Broadway, N. Y. City, May, 1915. Price 25 cents. (pp. 73-104).