SPECIAL CORRESPONDENCE

REORGANIZATION OF CONSERVATION WORK IN MARYLAND

PURSUANT to an act of the Maryland Legislature, Governor Herbert R. O'Conor appointed the members of a new five-man Department of Research and Education on June 1, 1941. Those designated, to serve without compensation, were Dr. Lloyd M. Bertholf, dean and head of the department of biology, Western Maryland College; Dr. Julian D. Corrington, head of the department of biology, Washington College; Dr. Ernest N. Cory, head of the department of entomology, University of Maryland, and State Entomologist; John T. Handy, Crisfield, prominent seafood dealer and leader in this industry; and Dr. B. H. Willier, head of the department of biology, the Johns Hopkins University. At their organization meeting, Dr. Bertholf was elected chairman, Dr. Corrington secretary, and Dr. R. V. Truitt, professor of zoology at the University of Maryland, was appointed director of research and education.

There had been for some time an association of conservation agencies organized as the Board of Natural Resources and charged with the coordination of all official work of this nature. The new commissioners began their duties by appointing a director of research and education, as specified in the act, this appointee automatically becoming a member of the board, along with the director of the Department of Tidewater Fisheries, the State Game Warden, the director of the Department of Geology, Mines and Water Resources, the State Forester and six members-at-large.

Powers given to the new department were exceedingly broad, and it is proposed that they administer a comprehensive budget affecting all conservation agencies within the state. The department has supervision over all programs of research and education touching on the natural resources of Maryland, while their director, who sits with the five members at all meetings, has charge of executing their various recommendations. Dr. Truitt, chosen for this important post, has been for many years director of the Chesapeake Biological Laboratory at Solomons Island, a modern and well-equipped marine biological laboratory that has been productive of fruitful research on varied problems affecting Chesapeake Bay.[1]

The affairs of the Maryland Weather Service, a federal and state cooperative agency, are administered by the department. According to the enacting legislation the department is to select an assistant in charge of education, who is to prepare suitable material in curriculum form for use by the schools and colleges of the state, to present to the public by means of radio, lectures, motion pictures and articles the facts concerning conservation, news of what is happening to the natural resources of the state, what wasteful practices are being pursued, with suggested remedies therefor, and to cooperate with existing work carried on by the U. S. Fish and Wildlife Service and other Federal agencies, and with the institutions of higher learning of Maryland.

Maryland has unusual problems in the field of conservation. Bisected by the broad waters of the upper Chesapeake Bay, the largest estuary within the United States, this commonwealth has coastal plain, piedmont and mountainous districts that reach far to the west in the precincts of West Virginia. Seafood is an industry of great but declining importance, and one of Maryland's most urgent problems is that of rehabilitating her former enormous production of oysters, crabs, shad and other marine forms. Inland sections of the state have their difficulties to solve in relation to freshwater fisheries, upland game, forests and mineral wealth; while the different regions must cope with problems of geology, water utilization, exhaustion of non-renewable resources, industrial pollution, erosion, reforestation, pest control, animal rehabilitation and similar factors of economic well-being.

At the Chesapeake Biological Laboratory, cooperative work of biologists, chemists, hydrographers and others has established many hitherto unknown factors in bay life, affecting both commercial and purely academic studies on many species and environments. "Deserts" occur here and there on the bay floor, areas of low oxygen content with consequent reduced abundance in the biota; oysters will thrive in the comparatively fresh waters of the upper bay, but will not spawn there regularly; shedding crabs ("peelers") left on floats to complete molting, and not properly cared for by the watermen, die by the thousands and cause huge and needless wastage; starfish do not occur within the bay, which is too low in salinity for these wholly marine forms, but great havoc is done the oyster beds by boring sponges which, thus far, have not been affected by efforts for their eradication; Maryland crabs migrate to Virginia waters to spawn, and hence legislation established in the upper state will have little effect on crab rehabilitation unless corresponding and cooperative enactments and enforcement can be instituted by the lower state; populations and migrations of many species of fish give up their secrets to comprehensive tagging studies; new appara-

[1] SCIENCE, 85: 2213, May 28, 1937.

tus is devised to solve more readily both old and new problems.

The new department should be an effective tool in the direction and supervision of the combined agencies of the state for conserving her natural resources and for the arousing and educating of the public to the necessity of enlightened and cooperative action. Results from this reorganization should put Maryland in an advanced group of states looking to full preservation and wise use of the heritage that makes nations and peoples great, a heritage of the type we are now fighting to defend and to keep intact for future generations.

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SCIENTIFIC BOOKS

PHOTOGRAPHY

Photography—Its Principles and Practice. By C. B. NEBLETTE, F.R.P.S. 4th edition. New York: D. Van Nostrand Company. $7.50.

THE number of printings and editions of this work since it was first published in 1927 is ample testimony of its wide acceptance. It is a book which appeals to advanced amateurs, some professionals and particularly to those who use photography in connection with scientific work. The book is primarily practical with emphasis on processes, but also discusses underlying theoretical considerations so that the reader is given both a broad understanding and practical working directions in the many phases of photography.

The new fourth edition is 50 per cent. larger than the previous edition, the expansion being devoted largely to recent developments. Several new chapters are devoted to color photography; a large section on the theory of the photographic process is made up mostly of new material, and a chapter on tone reproduction embodies the latest published work on the subject. Almost the entire book has been rearranged and much of it rewritten. A distinctly better grade of paper has been used than in former editions; consequently, the illustrations are much improved, as is the entire appearance of the book. One very valuable feature is the thoroughness with which significant literature and patent references are given.

The author of a book on photography who attempts to cover both the scientific and the practical aspects of the subject faces a most difficult task. In the first place, his basic material is widely scattered and usually not well organized. This is particularly true in the present state of color photography. A great deal has been written within the past five years on the subject, very little of which can be used in a book of this sort. While the section on color photography was actually written by the author's associate, Howard C. Colton, the same clarity that is evident in the rest of the book has been maintained. Particularly in the new sections of the book, the only source material in many cases has been the patent literature, and a great deal of credit must be given the authors for their clear condensation.

The varied training of potential readers of a book such as this present a second formidable problem to the author. Many advanced amateurs have quite a substantial background in science; for example, some are organic chemists, some are physicists, and others are engineers. Still other amateurs have no scientific background and are interested only in pictorial results, and it is hard to write a book which will satisfy the requirements of such varied readers. Yet, in so far as this is possible, this book will do so. The pictorially minded amateur will find many sections of the book entirely understandable, dealing as they do with specific directions for carrying out one process or another. At the same time, the scientifically trained photographer will find the theoretical aspects of photography quite thoroughly covered; in fact, the organic chemist should revel in the chapter on color sensitizing dyes. Actually, this chapter goes into the subject almost too deeply, considering the broad nature of the book as a whole. The same may be said of other but shorter sections of the book. The chapter on photochemistry, while it has its place in a book of this sort, is presented in a much too condensed form to do justice to the subject. It would be much better to present the material from a more elementary view-point rather than to go into the equations of the Bohr atom. The last chapter, that on the accuracy of color reproduction, will undoubtedly be rather difficult for most readers, but this is perhaps justified, since many color workers may not even be aware of the existence of chromaticity diagrams, and merely by pointing out that a great deal of work has recently been published on color vision and its relation to color photography, the authors have achieved a worthwhile result.

There has been a criticism of previous editions, which unfortunately carries over into the present edition—that a number of typographical and other minor mistakes have been allowed to appear. For example, on page 675 the word "brief" is used where the word "relief" is meant. Mistakes of this sort, while readily recognizable, are apt to detract from one's estimate of the caliber of the work. Formulas of organic compounds are not too carefully checked,