RECENT LITERATURE.

Coues's 'Key to North American Birds,' New Edition.* —The 'Third Edition' of the 'Key' is a reprint of the second edition, from the same plates, with the addition of a new preface and an 'Appendix' of 30 pages (pp. 865-895) of new matter. A sketch of the general character of the second edition having already been given in 'The Auk' (Vol. I, No. 3, July, 1884, pp. 283, 284), it is necessary to notice in the present connection only the additions to the text now presented. The second edition was a great improvement upon the first, published in 1872, which was not only entirely rewritten but greatly augmented and made practically a new work, there remaining of the old little more than the general framework and plan. This plan was at the time unique — an attempt to apply in a manual of ornithology the analytical key system of botanical manuals. The much fuller definitions of the species and subspecies, with the added terse biographical notes, and better and more numerous illustrations, rendered the second edition much more satisfactory than was the first, which had, however, proved a most successful venture, both for the author and his readers. In the preface to the third edition the author expresses himself as so well satisfied with the second that it seemed "decidedly best to reprint from the same plates, and put what new matter has come to hand in the form of an Appendix." Whether this view of the case will be shared by his patrons, in view of the radical nomenclatural changes made since 1884, may possibly be questioned, yet the policy is doubtless sound, considered from a publisher's standpoint. Dr. Coues, however, cordially accepts and adopts the new nomenclature, and evidently and very properly, looks with much satisfaction upon his honorable share in the work of bringing about the 'new status.' Referring to the objects kept steadily in view by the A. O. U. Committee on the Classification and Nomenclature of North American Birds — namely, the establishment of "certain sound principles or canons of nomenclature applicable to zoölogy at large as well as to ornithology," and the application of "these rules consistently and effectually to the naming of North American birds" — he says: "Others must be left to judge how well or ill these purposes may have been accomplished, but the simple fact is that no sooner had the book [A. O. U. Code and Check-List] appeared than it became the standard

* Key to North American Birds. Containing a concise account of every species of living and fossil bird at present known from the Continent north of the Mexican and United States Boundary, inclusive of Greenland and Lower California, with which are incorporated General Ornithology, an outline of the structure and classification of birds; and Field Ornithology, a manual of collecting, preparing, and preserving birds. The Third Edition, exhibiting the new Nomenclature of the American Ornithologists' Union, and including descriptions of additional species, etc. By Elliott Coues, A.M., M.D., Ph.D. [etc.]. Profusely illustrated. Boston: Estes & Lauriat, 1887. Royal 8vo, pp. x + xxx + 895, 1 col. pl., and 563 woodcuts.

and, indeed, the only recognized Nomenclator in American Ornithology. That which the Committee had stamped with the seal of the Union become the current coin of the realm. . . ."

The nomenclature in the body of the new 'Key' being left unchanged, the adjustment of the old nomenclature to the new is made through the medium of the Appendix, where the two systems of names are arranged in parallel columns, thus not only presenting his readers with the new names, but at the same time affording a convenient means of collating the old and the new. In the same connection some sixty species and subspecies, with descriptions of the same, not included in the body of the work, are interpolated, bringing the subject down to date as seen from the standpoint of the author. This large number is partly due to the inclusion of Lower California within the area covered by the new 'Key,' in accordance with the boundaries of 'North America,' ornithologically considered, adopted in the A. O. U. Check-List, but mainly, of course, to birds added to the fauna since 1884.

In his preface to the new edition (p. iii) Dr. Coues records "an earnest protest, futile though it may be, against the fatal facility with which the system of trinomials lends itself to sad consequences in the hands of immature or inexperienced specialists," fearing that our excellent 'trinominal tool,' and "the whole system of naming we have reared with such care," be brought into disrepute. He, however, disclaims allusion "to anything that has been done"; the warning relates to what may happen in future if "more judicious conservatism than we have enjoyed of late be not brought to bear down hard upon trifling incompetents." "It may be assumed," he adds, "as a safe rule of procedure, that it is useless to divide and subdivide beyond the fair average ability of ornithologists to recognize and verify the results." This, in an abstract sense, is sound advice, much in line with sentiments and admonitions the present writer has given voice to on several occasions. In the sentence which follows the one last quoted (p. iv) we can hardly suppose the author intends to imply that when specimens of a named variety require to be 'compared with the types' for their satisfactory identification that such 'varieties' should be always ignored. He must know that words oftentimes fail to express differences which to the eye are not only readily appreciable, but appeal to us as of so tangible a character as to require nomenclatural recognition, presenting a fact to which it would be not only a great convenience to have a handle, but one of which our science must in some way take cognizance. Again, how often descriptions are faulty, falling so far short of what they should be as in many cases to prove practically valueless. It is not to be denied, however, that the splitting process may be, and in some cases perhaps has been, carried too far, and this, too, by those who would hardly fall into the category of "trifling incompetents." Just how far division may be profitably carried, or is even necessary, is a hard question to decide, and one which taxes alike conservatives and radicals. In the case of wide-ranging species, diffused over an area of greatly varying climatic and other physical

conditions, a common stock often runs into numerous well-marked offshoots, the extremities of which differ much from each other, and which, in their extreme phases, present no difficulties of recognition or characterization, but which insensibly merge together at certain points within the general habitat. These various forms are obviously the result of differences in the environment—incipient species, instructive facts, links in the chain of evolution, demanding a means of expression to which the trinomial system is readily subservient. Each well-marked physical region of a continent has generally a more or less well-marked form, which it seems profitable to recognize by name, the degree of differentiation of course varying with the placticity of the species. It at present seems sufficient to recognize such forms as are correlated with certain more or less definite or natural geographical and climatal areas.

These remarks are suggested by the large number of species and subspecies of late described from the southern border of the United States and the contiguous region southward. A conservative person, judging these forms by the descriptions, feels naturally some bias against them, and is inclined to consider them as cases of too fine splitting, but later, when confronted by the evidence afforded by the actual specimens, is obliged to admit that the alleged differences are not imaginary, and that we have, in short, really a new 'fact,' requiring a 'handle.' This is an experience to which even the writer of this notice is willing to confess. In some instances the 'types' of newly described forms have been in some of our leading collections for a generation, awaiting the accumulation of material sufficient to reveal the significance of certain differences, perhaps long before recognized but not understood. The true explanation of the recent increase of new forms is in part the accumulation of material from hitherto imperfectly explored fields, or from localities not before examined, and the careful collation of the spoils thus gathered. The work of Mr. Sennett in Texas is strikingly in point, where novelties never dreamed of are rapidly coming to light, and quite revolutionizing our notions of the Texan ornis; while Mexico comes into view as almost an ornithological El Dorado.

In the Appendix to the new 'Key' Dr. Coues perhaps intends to enforce the lesson of his preface, as well as to record his dissent (see p. iii of preface) respecting the status of certain forms admitted to the A. O. U. Check List, and as his judgment on forms since described. The revision thus made, we are compelled to say, strikes us as rather off-hand, and as made in the library, rather than with specimens of the forms in question actually under examination,—a rather unsafe proceeding in the present state of the subject, and one tending to inconsistency in results. About twenty species included in the 'Check-List' are not recognized in the 'Key,' three or four of which appear to have been rejected as being doubtfully North American, and the rest as not entitled to recognition. On the other hand, about ten are included which the A. O. U. Committee deemed it best to omit, and about seventeen others which they relegated to the 'Hypothetical List,' with which reference we presume Dr. Coues

still concurs, although they of course appear (necessarily) in the comparative lists of the Appendix.

The 'Key' is still entitled to the high favor it has hitherto received, and will prove, as it ever has, a work of the greatest utility. It has, of course, its short-comings, but they detract little from its usefulness. Some of its statements about the nesting-habits of certain species or groups of species are a little too sweeping, and the descriptions of the eggs, as to number and color, not always above criticism, while there are a few lapses of a graver sort. When the fourth edition is called for, as it doubtless ere long will be, the author may then find it expedient to once more recast and perfect a work which has not only proved a great boon to the ornithological public, but has had unquestionably a marked influence upon the progress of ornithology, and done more than any other to make the subject popular and comprehensible to the general reader. — J. A. A.

Townsend's Field-notes on the Birds of Northern California.*— Mr. Townsend's 'Field-notes' were based on observations made in the counties of Siskiyou, Shasta, Tehama, and Lassen, April 1, 1883, to July 15, 1884, and in Humboldt County, Nov. 15, to Dec. 17, 1885. To make the list of birds as complete as possible for that portion of California north of the fortieth parallel, he has added to the two hundred observed by himself some sixty additional species made known by others as inhabitants of the region, making 261 in all. The list is copiously annotated and contains interesting biographical matter. His account of the nest and eggs of the Black-throated Gray Warbler (*Dendroica nigrescens*) is especially noteworthy as the first for the species. The bird portion of the paper closes with a table illustrating the vertical range of birds of Northern California, modelled after a similar one in 'The Auk' (Vol. II, 1885, p. 11) by Mr. F. M. Drew on the birds of Colorado.

The 'Field-notes' on the mammals and reptiles are equally full and interesting, but of course call for no special remark in the present connection. A useful sketch-map of the region accompanies the paper, and several pages of introductory matter describes the topographical features of the country under notice. — J. A. A.

Shufeldt's Contributions to Avisection.† — Dr. Shufeldt continues his admirable avisections. His latest article reviews some of the taxonomically important musculatures. These are, namely, five pectorimyons;‡

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*Field-notes on the Mammals, Birds, and Reptiles of Northern California. By Charles H. Townsend. Proc. U. S. Nat. Mus., 1887, pp. 159-241. (Birds, pp. 190-237.)

†A Review of the Muscles Used in the Classification of Birds. By R. W. Shufeldt, M. D., C. M. Z. S., Captain Medical Corps, U. S. Army, etc. Journ. Compar. Med. and Surg., Oct. 1887. 24 pp.

‡*Myon*, any individual unit of musculature; what Dr. Coues formerly called a "muscular integer." — *Pectorimyon*, any myon of the pectoral arch or shoulder girdle proper. — *Pelvimyon*, any myon of the pelvic arch or hip girdle.