

most critical season of the year, or during the most critical year or years of a climatic cycle." Among his conclusions as to the practical bearings of this law, he gives this one: "In seasons or years of climatic extremes, more than ordinarily conscientious attention should be given to game protection, grazing by livestock, wild-life relations generally (including the influence of insectivorous birds and rodents, as well as of all other forms of wild life), fire protection, and similar problems. Land-use policies, range administration, forest conservation, and game protection should be adjusted not to average conditions, but to those poorer than average, if not to those that are extreme."—J. G.

Habits Research, Bureau of Biological Survey, and his associates spent several seasons in Oregon, California and Utah, studying conditions right on the ground where what was once often called "alkali-poisoning" was manifest. After a full presentation of his subject, Kalmbach states that the one practical remedial measure to be recommended when the disease begins to show itself is to flood the affected mud flats or shallow, stagnant-water areas with deep or flowing water, or else where this is not possible to withhold all water and let those areas completely dry up. The outlook is not encouraging; unless the increasing diversion of water-supply (for irrigation) from favorite wild-fowl areas can be checked—their normal water-supply restored—then "duck sickness will continue to take, even increasingly, its annual devastating toll of western wild fowl."—J. G.



Fig. 22. Margaret Morse Nice, author of the *Birds of Oklahoma* and of numerous papers on the behavior of Song Sparrows and Mourning Doves. Photograph by Bachrach.

PUBLICATIONS REVIEWED

HELLMAYR'S "PART VII" OF THE "CATALOGUE OF BIRDS OF THE AMERICAS" (Field Mus. Nat. Hist., publ. 330, zool. series, vol. XIII, November 15, 1934, pp. vi + 531).—In this exhaustive installment Dr. Charles E. Hellmayr, Associate Curator of Birds at the Field Museum, Chicago, deals with the crows, tits, nuthatches, creepers, wrens, thrashers and thrushes. It thus concerns the systematic status of many of our geographically variable western birds and consequently presses more than most currently appearing publications for detailed notice in the *Condor*.

The general plan of the series, the publication of which was begun by the late Charles B. Cory in 1918, remains about as originally adopted. The synonymies, especially for the South American species and races, are increasingly extensive. Greater pains have been taken to indicate type localities; and in the present installment the location of type specimens is given, whether pertaining to valid names or to synonyms. This must in itself have been a big task, and it has evidently been performed with scholarly care.

A valuable feature of the volume under review is the exhaustive system of footnotes. They occur on practically every page, not infrequently amounting to half the print on the page. In these, the user finds a great deal of critical matter, such as the author's clearly stated reasons why he accepts or rejects dubious forms; de-

Technical Bulletin No. 411, U. S. Department of Agriculture (May, 1934, 82 pp.), is an authoritative treatise which, as indicated by its title, "Western Duck Sickness a Form of Botulism," must prove of prime value to all westerners interested in game preservation. The chief author, Mr. E. R. Kalmbach, of the Division of Food

scriptions of imperfectly known or rare species; history of type specimens; and sometimes comment of more than systematic interest concerning collectors or describers.

Under the last category may be cited the comment concerning the *Regulus cuvieri* of Audubon, duly figured by this notable in 1829, that this was "probably a fictitious bird;" and the comment concerning *Parus cinctus alascensis* Prazák: "No type exists. The author, who was insane, probably never examined a specimen himself, and based his account solely on the figure in Turner's 'Contributions to the Natural History of Alaska', the locality 'Ochotsk' being in all probability fictitious. St. Michael, Norton Sound, Alaska (ex Turner), may be accepted as terra typica."

We are glad to see that Hellmayr is a technical systematist who is not above supplying vernacular names for each and every species and subspecies he treats of. This is very helpful to a North American, provincial bird student, for instance, who desires quickly to run down some insular or South American form in a group previously unfamiliar to him. True, the author has not been satisfyingly logical in constructing his set of vernaculars; but at least he has done no worse in this regard than the A.O.U. Committee did in its last Check-list!

In extending the artenkreis concept, admirable in itself, to nomenclature, Hellmayr, to my notion, has gone altogether too far. He trinomializes into new name combinations the designations of very many birds we have customarily dealt with in the binomial. For example, he puts the Florida Jay, the Woodhouse Jay and the Santa Cruz Island Jay all in one species with the California Jay. As a result, because the name of the Florida form happens in this series to have been given first, the southern California race becomes *Aphelocoma coerulescens californica* and the Santa Cruz Island bird becomes *A. coerulescens insularis*. He puts our Western Crow in with the European Hooded Crow, as being "clearly conspecific," so that our bird becomes *Corvus corone hesperis*. The Northwestern Crow becomes *Corvus ossifragus caurinus*, however, a double quirk which is not likely to find warm approval among certain of our west-American bird students who have already discussed this case at length. Our Yellow-billed Magpie becomes *Pica pica nuttalli*.

The Oregon Jay appears as *Perisoreus canadensis obscurus*, as long ago (1902) contended by Howe; and I am not so sure but that, in this case, this will prove the best course to follow. The Short-billed Marsh Wren of the East is placed conspecifically with the La Plata Marsh Wren, of South America, and thus becomes *Cistothorus platensis stellaris*. The San Lucas Robin is reduced to the trinomial, *Turdus migratorius confinis*, without any regard, apparently, to the relatively great gap in characters existing between it and the nearest race of American Robin, and to the further fact that not even a "hybrid" between the two has been recorded. The remark is made in a footnote that the San Lucas bird "obviously is merely an excessively pale race of the Robin"—a good demonstration, it seems to me, of what the ultra-trinomial trend will lead to.

The artenkreis concept is helpful to bionomic understanding, but when projected into taxonomic expression it is dangerous for nomenclatural stability—just as the genus concept is; for each is a matter of personal opinion, subject to great variation with the individual worker in accordance with individual experience, temperament and "hunch"! We've got to stick, as nearly as we can, if permanence in names is to be approached closely, to objective criteria for designating species versus subspecies. The criterion of *intergradation proven to exist* is objective, and it can be used by practiced avian systematists with consensus of decision: in most cases, it will be agreed that two given forms intergrade or they do not—they are to each other as subspecies or as full species. Difficulties remain, of course, on the score of the nature of intergrades, whether hybrids or "true" intergrades; in the latter case whether geographic "blends" or the result of overlapping range of individual variation (illustrated by some island forms).

Curiously, after all the many cases of trinomialization of American forms with related European forms our author balks at our Brown Creeper, calling its races *Certhia americana americana*, *C. a. montana*, etc. In explanation, it appears that there is doubt as to which of the Old World creepers, *C. familiaris* and *C. brachydactyla* (really these are quite close to one another), our bird is derived from. It shares some of the characters of each!

I note that Hellmayr accepts Swarth's recent revision of the Galapagos Island mockingbirds (genus *Nesomimus*) practically without taking any exception. Ap-

parently Swarth quite unconsciously had anticipated the Hellmayrian tempo.

Of more than local interest is the statement (footnote, p. 455) that "the specimens [of *Hyllocichla guttata sequoiensis*] recently recorded [in the *Auk*] . . . from Illinois . . . prove, on reexamination, to be worn spring birds of the Eastern Hermit Thrush (*H. g. faxoni*)." This should sound caution to inexperienced bird students against recording supposed subspecies from far outside the normal ranges of those races—without the most authentic determination of them. The more extralimital a subspecific "record," the more dubiety must pertain to it, and the more care must be exercised before launching it.

"Part VII" is edited, I note, by Dr. Wilfred H. Osgood. He has done a difficult job very well—for there can be nothing worse in the proofreading line than long synonymies. I have scrutinized some of these, concerning forms whose literature I know, looking for mistakes—with no satisfaction! Mistakes of any sort, throughout this work, insofar as I have been able to determine, are exceedingly few.

Hellmayr's attitude toward genera is refreshingly conservative. For example, he suppresses *Corthylio* under *Regulus*—very reasonable, it strikes me—with this comment: "The structural differences separating *R. calendula* from the other kinglets seem to me good specific characters, but do not call for generic distinctness [=distinction]." He likewise quashes *Penthestes* and *Baeolophus* under *Parus*, which is pleasing to "oldsters" because it brings us back to the nomenclature of the cheerful 90's. (Incidentally, our Gray Titmouse will have to be called, again, *Parus inornatus ridgwayi* Richmond, because of preoccupation of the name *Parus griseus*.) The only alternative in this group I can see, would be to recognize a genus for each species and be altogether done with the genus-splitting! *Telmatodytes* is submerged in the genus *Cistothorus*, for all the Marsh Wrens. And *Nannus*, for the Winter Wrens, is put back into *Troglodytes*.

Hellmayr's "Part VII," I am probably quite safe in saying, is the most important single work treating systematically of North American birds since the appearance of Part VIII of Ridgway's "Birds of North and Middle America," in 1919.—J. GRINNELL.

MINUTES OF COOPER CLUB MEETINGS

NORTHERN DIVISION

DECEMBER.—The regular monthly meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, December 20, 1934, at 8:00 p. m., in Room 2003, Life Sciences Building, University of California, Berkeley, with about fifty members present and President Pickwell in the Chair. Minutes of the Northern Division for November were read and approved; minutes of the Southern Division for November were read.

The Chair announced the appointment of a nominating committee to present at the January meeting of the Northern Division names of officers to serve the division during 1935; the committee named consisted of Mrs. James T. Allen, chairman, Mr. W. I. Follett, Miss Emily Smith.

Among field notes offered were the following: Dr. George Haley read an item from a Portland, Maine, newspaper describing the discovery of a living Yellow-nosed Albatross beside a Fryeburg pond, the bird's normal habitat being the ocean in the vicinity of the Cape of Good Hope. Mr. Grinnell reported the fact that recently, during a short circuit in Modoc County, Mr. Donald McLean had observed thirty individuals of the Northern Shrike and suggested that Club members be on the alert to detect any stragglers of this species that might reach the San Francisco Bay region. Mr. James Moffitt stated that he had often seen the Northern Shrike in winter in northeastern California, the latest date being the 10th of March, in Honey Lake Valley.

Mr. Dyer asked for suggestions as to the identity of a large black bird with pointed wings which flew slowly and steadily across his view in Piedmont on November 21. The bird was high in air and, soaring in a wide circle, it disappeared. Its call was "kruk, kruk." The several members who ventured opinions were inclined toward the raven as identity of Mr. Dyer's bird, a stranger in our region. President Pickwell mentioned a successful method for the photography of shore-birds, stating that recently while on the shore at Santa Cruz he set up his camera for photographing godwits which were scattered along the tide line. His companion circled down the beach and literally herded the birds to the desired point.

The evening was devoted to a discussion