AN HISTORIC COLLECTION OF BIRDS.

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For a forthcoming book on the birds of the Connecticut Valley in Massachusetts, a history of ornithology in the Valley seemed desirable. oldest document was the 'Catalog of the Birds found at Springfield, Mass., with Notes on their Migrations, Habits, &c.,' by J. A. Allen, communicated to the Essex Institute, of Salem, Mass., on May 2, 1864, and published the following September in Vol. IV, No. II, of the 'Proceedings of the Essex Institute.' A copy, still in its original paper covers, on which are written the names Otis Fuller, 1868, and E. H. Forbush, 1921, was luckily obtained and proved most interesting, both historically and as a source from which to quote under each species. Further research brought us the 'Autobiographical Notes' of Joel Asaph Allen published by the American Museum of Natural History in November 1916, from which we admiringly learned that in his 'teens, the early 1850's, Allen had shot, measured, weighed, described and provisionally named a great many of the birds about his father's farm near Springfield, before he knew that any books had been written about them and that they all had names already. "Latin as well as English." We wished we could examine those early note-books and the original names therein! Later, Allen obtained a copy of the Brewer edition of Wilson's 'American Ornithology,' and discovered Nuttall's and Audubon's works in the Springfield public library. He also learned to mount birds, and "during the years 1859-61, I collected and mounted some 300 birds representing nearly 100 species, as attested by my catalog, still extant." We wished we could examine that catalog too! Is it still, perhaps, extant, at the Museum or elsewhere?

But what became of this collection? Reading on, we found that while he was making it Allen was attending, in winter, Wilbraham Academy, and met there a pupil eager to study natural history under Agassiz at Harvard. In order to raise the money necessary to go and do the same, Allen in 1861–2 sold his collection to Wilbraham Academy. Is it, perhaps, still there? Exciting thought! A letter to the Academy brought answer that it actually was, and in August 1934 it was shown to me.

Alas, it had not been displayed or used for many years! The tall case, glass-doored on both sides, was stowed in a basement against a wall and behind piled up tables and junk. The latter however were moved for my benefit enough to admit me to most of the glass doors, and by stretching I was able to pull into view all the birds on the near side and crowd them together; then reach over the top of the terraced shelves and with blind feeling and fumbling extract the birds on the far side. A black dust of

age and neglect lay thickly over everything. The labels, little squares of paper inscribed in capitals, apparently by some old-fashioned type-writer. had mostly lost contact with their specimens and lay all over the shelves. sometimes in piles, so blackened on the upper surface that when that surface was the typed one its legend could hardly be read. There were far more labels than specimens, and many of the specimens that had not vet disappeared were falling apart or losing their tails. Except for a few Hawks. Owls, and "picarians" they were all passerine birds, which was a disappointment as I had hoped to find in this collection a basis for such striking entries in the Catalog of 1864 as "Crested Grebe, rare winter visitant" (in addition to Holboell's), "Buff-breasted Sandpiper, rare spring and autumn visitant" (there has been, since 1864, not one confirmatory record), and "Willet, spring and autumn visitant, not common; perhaps a few occasionally Spring visits of the Red-backed as well as the Buff-breasted Sandpiper, and of the Golden Plover, were mentioned in the Catalog, whereas (contrary to present-day experience) the Least and Pectoral Sandpipers were limited to an autumn season. But the only water birds in the collection were at the bottom of the case, where I unearthed the huge, hard-stuffed skin of a Rock-hopper Penguin, a standing pair of American Mergansers and male Hooded Merganser, the un-made-up skins of a Loon and a Snowy Owl, and the wings (only) of an immature Golden Eagle. These bore no numbers and had probably no connection with Allen. All his birds, except a male Hummingbird mounted beside a nest, were wired on T-perches, to which were tied small tags with numbers. The highest number noted was 358, so Allen's autobiographical "some 300" had been characteristically The labels fortunately bore these numbers as well as a date (month and year, never day) and the English and Latin names (no sexsigns) that Allen had given his birds; and where the specimen still existed. it could be checked against the label. And here began my discoveries!

"No. 1, Winter Buzzard, Buteo hyemalis, October 1860." Buteo hyemalis (Gmelin) appeared in all three of Allen's authorities—Wilson, Nuttall, Audubon—but it has usually been identified with the immature Redshoulder, whereas this "No. 1" was a young Red-tail. The name is not in the 1864 Catalog, for by then Allen had straightened out all the Hawks but one: he still thought lagopus, the Rough-leg, different from sanctijohannis, the Black Hawk. Under Pigeon Hawk I see that he noted in the Catalog "Very rare: May 7, 1861, I obtained a male in perfect adult plumage," and that very Pigeon Hawk (it must be, though its label is missing), vivaciously mounted with wings half open, is one of the most beautiful, striking, and best-preserved birds in the collection. There are a few other attractive specimens (the big birds were at the top, where the least dust would accumulate)—an adult Goshawk, for instance, "quite common in

the winter of 1859-60" says the Catalog—but the most immediate attention is claimed by five Passenger Pigeons, all taken in May 1861, of which four are resplendent males, the fifth (No. 9) a female, notably pallid and doubtless faded but valuable because this sex is so much scarcer in collections than the male. Near them are a pair of the almost-as-extinct "Old New England Bob White." Also interesting, giving me pause as I move the specimens about, are the pair of Mockingbirds taken June 20, 1860, together with their nest and three fresh eggs (nest and eggs, if ever part of this collection, are so no longer), and the adult male Orchard Oriole secured in the same month. In June and July 1860, I see by their labels, were collected Parula Warblers Nos. 184-5,—substantiating Allen's statement in 1864 that this species, now among our rarest summer residents, then nested commonly,—and in July 1861 fell this Olive-sided Flycatcher. Missing, alas, is specimen 267, but its label speaks for it: "Red-headed Woodpecker, September 1859." In the Catalog of 1864 Allen said he had taken but two of these birds in five or six years. His vexing loss of a still rarer Woodpecker, the Redbellied, which escaped him after being shot, occurred later (May 13, 1863); but a third member of the family graces this collection—to me the most thrilling bird in it, for it was almost the last that I extricated from the dark far side of the case, and no label had fore-warned me of its presence. Leaning far over the grimy shelves, I felt and pulled out—an Arctic Three-toed Woodpecker. This was the bird recorded in the Catalog as shot in January 1860, but nowhere has it ever been recorded that its sex was female. Ascertaining this, I felt almost as much excitement as I might on discovering a live Picoides!

Blowing the dust off another label, I read "No. 254, Sharp-tailed Finch. Ammodromus caudacutus, May 1860." What's this? No Sharp-tail was included in the 1864 'Birds of Springfield'! None was recorded in our Valley till 1909, when on page 84 of Vol. 26 of 'The Auk,' R. O. Morris noted that a specimen of the Acadian Sharp-tail, now in the Springfield Museum, had been collected at Longmeadow on October 6, 1908. Where is specimen 254? Right under my hand! I carry it to the window, and recognize Lincoln's Sparrow. Of that species Allen in 1864 wrote "Shot one in May 1860 and another May 14, 1863. No account of its previous capture in New England." So the frail specimen I am holding is the first Lincoln's Sparrow ever taken in New England! And why unrecognized, mis-labelled? Why, because Allen was doubtless using Wilson and Nuttall.—so his books described no Lincoln's Sparrow! At least, he had seen that this was no Song or Swamp Sparrow, and on the strength of its finestreaked, buff-washed breast had called it Sharp-tailed—until, with more up-to-date book-knowledge, he shot the 1863 bird and recognized the With considerable emotion I placed the label back on identity of both. the T-stand, the unique bird back in the case.

Here now is another label: "No. 256, Mourning Warbler, September 1860." In 1864 Allen wrote of the Mourning Warbler "Have taken two specimens about the middle of September." This had struck me as odd, since nowadays the bird is identified here fully fifty times as often in May as in fall, whereas the Connecticut Warbler is fairly common from mid-September to October 8. Of the Connecticut Warbler, Allen in 1864 could only write "may probably be found as an extremely rare species, but I have not known it detected here." Where, now, is specimen 256? cannot be found; but in the search I come upon specimen 358, an evident Oporornis, and take it to the window. An immature female Connecticut! A species Allen never knew he had shot, skinned and mounted! "Two specimens," he had written, of the Mourning Warbler had fallen to his gun in mid-September. One of them must have been this Connecticut I hold, for which no label can be found; the other has disappeared, leaving its label, and we shall never know which Oporornis it was; but we surely can suppose that if the two specimens had been of different species Allen would have perceived their unlikeness and not called both of them philadelphia: hence that it was really the Mourning, not the Connecticut, which until 1864 he had never "detected," and the Connecticut of which these specimens, or this surviving specimen, is the earliest ever taken in Massachusetts except for one recorded by Dr. Samuel Cabot, Jr. in the 'Proceedings of the Boston Society of Natural History' (Vol. II, p. 63) as taken at Berlin in the summer of 1845.

Two other Warblers, side by side, with labels still upright on their stands, are Nos. 158, April 1861, and 159, May 1861. Both are entitled Yellow Redpoll Warblers, but I can see a suspicious difference between them. I take them to the window:—yes, the May bird is a Western Palm! Its gray underparts cannot be due to fading (terribly as some of these specimens have faded!), because its companion, the April bird, is still yellow. Of course, the two forms were not separated until long after 1861, or the Catalog of 1864, but all the same we here behold the first (and until very recently the only) Western Palm Warbler ever taken in New England in spring! Those two dusty little specimens, still side by side, ought to be prominently displayed, with explanatory label, in the big Museum at Springfield.

Another species not subdivided until after these dates is Quiscalus quiscula, the Grackle; so I study with interest specimen 18, "Purple Grakle—J. C. Burke," apparently the only bird in the collection that was shot by another than Allen. It is a Bronzed Grackle but has traces of iridescent bars on the wing-coverts. Specimen 242 next attracts me, because though labelled Olive-backed Thrush it looks like a Gray-cheek. As a matter of fact, Allen contended stubbornly for years that these two Thrushes were "phases" of one species: two whole pages of his 1864 Catalog are devoted

"Detecting Turdus 'aliciae' among specimens I had to the problem. collected." he there wrote, "and many specimens intermediate in color between this form and strongly marked T. Swainsonii. I began to search for some more constant character than color to separate the two forms. and found by extensive measurements that both the largest and the smallest specimens occurred in the form recognized as T. Swainsonii. carefully studied the bills, feet, wings, size and proportions for specific differences, and find that, though there is more or less variation in all these. as there is among individuals of almost every species, there is nothing that approaches to constant specific difference. Indeed, the principal character that has ever been urged as separating them is that of color; but . . . I have had specimens before me during the last year exhibiting every gradation in the color of the breast, sides of the neck, eve circle, &c., from the strongly buff-tinted true T. Swainsonii to the pale gray of typical 'aliciae.' where the buff was scarcely perceptible or quite obsolete . . . The gradations from one extreme to the other are so minute and complete that the state described as T. aliciae can now be considered hardly 'a very strongly marked variety' "—and he goes on to say that parallel color-gradations are to be seen in the Veery. Well, as to the Veery, one specimen here, so labelled ("253, Tawny Thrush, Turdus fuscescens"), is unmistakably a Hermit, so we begin to doubt the ability of young Allen, before his studies under Agassiz at Harvard, to discriminate among Thrushes; but specimen 242 is too faded for me to feel certain which thrush it is: I put it aside, and two months later take Mr. Ludlow Griscom to view the collection. "Gravcheeked," he says of it at once—and nowhere among the remaining specimens can he find a single Olive-back!—so here again Allen has preserved for us, under another name, an early specimen, even possibly the earliest in the state, of a species he refused to recognize! As to the race of Gray-cheek, Griscom is in doubt. Its wing-length matches exactly that of an adjacent Veery, but this causes merely a presumption that it belongs to the larger The great variation in size of the Gray-cheeked and Bicknell's Thrushes that migrate through Springfield might well have confused Allen, but both the largest and the smallest of his specimens were assigned by him to swainsoni! What a pity that he took no notice of songs and calls, for by ear much more readily than by eye can the species of Thrushes be distinguished.

Another group with which Allen had trouble (and in which a discriminating ear might have helped him even more) was the genus Empidonax, for here again his early books misled him. They told him only of the Acadian Flycatcher. All four—acadicus, Traillii, minimus and flaviventris—are included in his 1864 Catalog, and the authority for each is "Baird," following a custom then prevalent of citing the authority for the full name

instead of for the specific name only. Allen's annotations are fullest on acadicus ("Under Muscicapa querula, Small Green-crested Flycatcher, Wilson . . . has very correctly indicated the habits and notes of this species" etc.), but as he afterwards acknowledged, all his own vivid annotations were really based upon, and refer to, what we now term the Alder Flycatcher. In 1861 when the Wilbraham collection was made he knew even less about the genus than in 1864; three of the specimens, taken in April 1861, are Chebecs but are labelled, as from his books we might expect, Acadian. A fourth, No. 351, for which no label turned up, is an Alder (on Mr. Griscom's authority: it was too far gone for me to identify). The odd puzzle is a label "No. 205, Yellow-bellied Flycatcher, Empidonax flaviventris, May 1861." The specimen tagged 205 is a Yellow Warbler a Yellow Warbler with the tip of its bill broken, giving it a blunt, slightly Flycatcherish contour—vet the Warblers of the collection are so well understood and identified that I cannot believe this error was Allen's: if not mere accident, perhaps some friend who knew that the Bairds had distinguished a Yellow-bellied Flycatcher, but no more about it than that, persuaded Allen into accepting as such this Summer Yellowbird.

Scanning label after label, I note some arresting dates. A Tree Sparrow is labelled June 1861, but presumably the typist misread Allen's "Jan." as Unusual but believable are: Bluebird February 1861. Marsh Hawk March 1861, White-throated Sparrow March 1861 (perhaps a mistake for May), Rose-breasted Grosbeak April 1860, and Crested Flycatcher September 1860. Of the Richardson's Owl recorded in the Catalog as obtained in December 1859 neither specimen nor label turned up; and the Raven collected in the same phenomenal fall belonged to C. W. Bennett, not to Allen. The winter of 1859-60, already noticed under Goshawk and Arctic Three-toe, must have been rich indeed with northern visitants. Specimens of both kinds of Crossbill are here, labelled January 1860, and Mr. Griscom on his visit spotted one (No. 115) whose long, gross beak marked it as the Newfoundland subspecies, L. c. percna. We know of no other evidence that this race of Crossbill has ever visited our valley. the Catalog, the winter of 1853-4 is given as bringing Red and Whitewinged Crossbills to Springfield, and that of 1859-60 as a Pine Grosbeak The Pine Grosbeak specimen here, however, (of undetermined subspecies) is dated November 1860. A Snow Bunting is here, without label, but there is no trace in this collection of such frequent winter visitors as Shrikes and Larks. The Migrant Shrike and Prairie Horned Lark, coming as they both did from the West, are not at all likely to have reached Springfield by the early '60s, yet a specimen of either family might have been interesting. There are many other species, even of song-birds, which appear in the 1864 Catalog but not in the 1861 collection, though there

remain in the old case, even now, at least 104 species, not the modest "nearly 100" mentioned in Allen's autobiographical notes. The dismal neglect into which the collection fell will likely now be remedied, and perhaps the more important specimens, historically speaking, can be rescued and enshrined in the Springfield Museum. At any rate, it was a stirring experience to rediscover them, identify among them races and species unsuspected by their collector, and feel in handling them the work of the patient, enthusiastic fingers of one who was destined to lead American ornithology. How could he have dropped this early work, those 'prentice years, so far behind as never to return to his old school, see once again his lovingly prepared collection, and note in it himself the misidentifications or since-separated subspecies for which we, so long afterwards, here bespeak attention? Let those who knew him find an answer to this query in his character; we shall at least pay homage to his memory as the pioneer ornithologist of our Valley, and credit him with these new, early records.

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