The Cassin in *Cassinia*

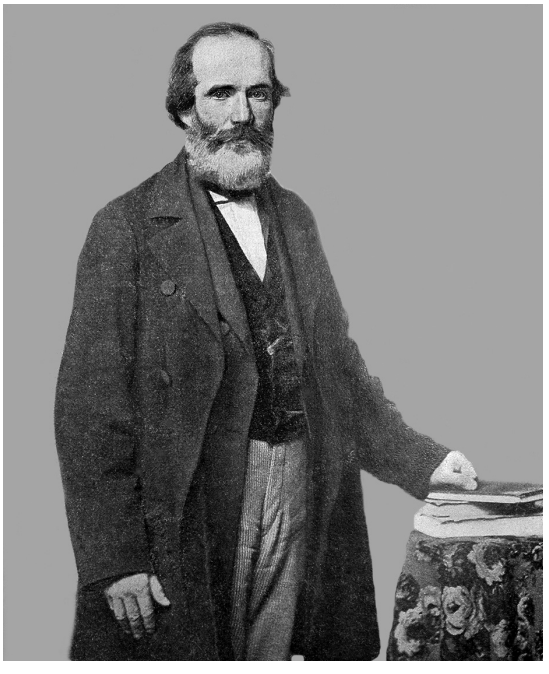
Jeff Holt

The first four issues of the journal you hold in your hands, covering the years 1890 to 1900, were titled *Abstracts of the Proceedings of the Delaware Valley Ornithological Club*. In 1901, starting with Volume 5, the name was changed to *Cassinia*. The first article appearing in that renamed publication, authored by Witmer Stone, was a short biography of John Cassin. As more than a century has passed since Stone's article, it seems appropriate to briefly revisit the man whose name is associated with this journal.

Cassin was born in Media, Pennsylvania on September 6, 1813 and was educated at the Westtown School in Chester County. (Other noted ornithologists who were taught at this boarding school include Thomas Say and John Kirk Townsend.) Cassin moved to Philadelphia at the age of 21 where he became a successful businessman. This success in business allowed him the luxury of devoting most of his energies to the honorary position of Curator at the Academy of Natural Sciences, a position to which he was elected in 1842, the same year he was elected a member. In July 1843, Cassin wrote of his labors as curator:

> It is hard work, this studying foreign birds – short, technical descriptions, half the time in bad Latin, or at least written by one who could not find Latin for half the colors; and then again nearly all our books are old, when writers scarcely took into consideration the possibility of other species being discovered similar to the one they so pithily characterize. But I intend to go on as far as I can, and would rather not stop until I know all the birds in the Academy (Stone, 1901, p. 3).

When he wrote those lines, Cassin had no way of knowing how the Academy's collection would evolve; for if he did, he might not have committed himself to such a Herculean task as knowing all the birds in the collection.



John Cassin 1813–1869

In 1846, a wealthy member of the Academy, Dr. Thomas B. Wilson, became interested in developing the ornithology department's collection. Between 1846 and 1850, Wilson purchased and secured in excess of 26,000 specimens from all points of the globe. By 1850, the Academy's ornithological collection "was not only far ahead of any other in America but was considered by such eminent authority as Philip Lutley Sclater to be 'superior to that of any museum in Europe and therefore the most perfect in existence'" (Stone, 1899, p. 166). It was Wilson's generosity that allowed Cassin to study and acquire the knowledge that would ultimately allow him to be termed "the only ornithologist this country has ever produced who was as familiar with the birds of the Old World as with those of America" (Stone, 1899, p. 176). By the time of his death in 1869, Cassin had described 194 new species of birds.

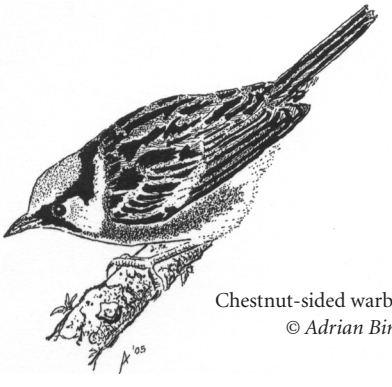
To paint a portrait of Cassin as simply a bookish monk would be unfair. Describing his time in the field (and bearing in mind that the most important tool for birders of his day was the gun):

> Bird collecting is the ultimate refinement – the *ne plus ultra* of all the sports of the field. It is attended with all the excitement, and requires all the skill of other shooting, with a much higher degree of theoretical information and consequent gratification in its exercise…Perhaps personal activity, coolness, steadiness of the hand, quickness of eye and ear will be of service, and some of them indispensable, to successful collecting. The main reliance is, however, on the ear for detection of birds by their notes. Whether in the tangled forest, the deep recesses of the swamp, on the sea-coast or in the clear woodlands, on the mountain or the prairie, it advises one of what birds may be there, and we recognize no more exquisite pleasure than to hear a note that we are not acquainted with (Stone, 1901, p. 5).

Cassin's ornithological work was not without conflict. In 1845, Cassin chanced upon John James Audubon in Philadelphia. That meeting devolved into an argument about whether a species of hawk was first named by Audubon eight years earlier. In a letter written to Spencer Fullerton Baird dated June 23, 1845, Cassin sums up his attitude towards Audubon thus: "Audubon has been here…[I] do not particularly admire him – [he] is no naturalist – positively not, by nature" (Cassin, 1856, p. I-3). As Robert McCracken Peck wrote in the Introduction to the 1991 reprint of Cassin's seminal work, *Illustrations of the Birds of California, Texas, Oregon, British and Russian America*, this encounter "In many ways symbolizes a mid-nineteenth-century change in scientific values" (Cassin, 1856, p. I-4).

However, Cassin was an acknowledged admirer of Audubon's artistry, and in producing his own works, he sought artists who could emulate Audubon's artistic style. Nevertheless, he viewed Audubon's approach to ornithology (and Alexander Wilson's before him) as out-dated. While Cassin would concede that he was not the equal of Audubon in field observation, he felt that as a scientist, he was Audubon's superior:

> It is by no means desirable, however, to be exclusively a naturalist of the woods, and in fact the greatest degree of accomplishment that can be acquired in this line, entitles one to but a humble rank as cultivator of Zoology. There must be a combination of theoretical and practical acquirements, and the gratification of the practical naturalist or collector will be exactly in proportion to his scientific or systematic information, to be obtained only in the museum and the library. There is an indescribably pitiful display of ignorance and meanness of idea arrogating, as some writers have done, a superior position for the 'field-naturalist' over the 'closet-naturalist.' As well might he who navigates a ship presume on being the greatest of astronomers, or the practical gauger pretend to be the only mathematician. Great is life in the woods, say we, and the greatest of all sports is bird-collecting; but, to become a scientific ornithologist, is quite another business, and a very much more considerable consummation (Cassin, 1856, p. I-22).



Chestnut-sided warbler
© *Adrian Binns*

Cassin's discussion on the abundance of warblers illustrates his attitude to the scientific accuracy of Wilson's and Audubon's respective works:

> Very erroneous impressions relative to the rarity of several species of Warblers, have been created by statements which have found their way into the works of both Wilson and Audubon. For instance, the former of these celebrated authors says of the Chestnut-sided Warbler: – 'In a whole day's excursion it is rare to meet with more than one or two of these birds;' — the latter, at the time of the publication of the

> first volume of his *Ornithological Biography* (1831), had met with this bird once only, and so it stands printed in his octavo edition of 'The Birds of America'. These rather extraordinary statements have caused the useless destruction of very many specimens of this little bird, particularly by young collectors, under a false estimate of its scarcity in collections, or value for the purpose of science. There have been few months of May in the last twenty years, in which any person of moderate skill as a collector of birds, could not have obtained, in the vicinity of Philadelphia, as many specimens of the Chestnut-sided Warbler as would have supplied all the museums in the world (Cassin, 1856, p. 280-281).[1]

It is perhaps interesting to note that one species credited to Cassin for its discovery was also the centerpiece of an anathema to him, scientific inaccuracy. In 1851, Cassin read a paper before the Academy of Natural Sciences where he described a new vireo. He collected this new species, which we now know as the Philadelphia Vireo (*Vireo philadelphicus*) in September 1842. In 1854, Thure Kumlien, a Wisconsin ornithologist, sent Thomas Brewer a number of vireo specimens he had collected and recognized as differing from the Warbling Vireo (*Vireo gilvus*). After showing the specimens to Cassin and Spencer Baird and obtaining their opinions, Brewer replied to Kumlien in March 1855 that the specimens were Bell's Vireo, a bird first described by Audubon in 1844. However, Kumlien did not have access to Audubon's work, his only reference book being an 1840 edition of Wilson's *American Ornithology*. Kumlien sent additional skins of the subject species to Brewer in 1855. In January 1856, Brewer sent a letter to Kumlien identifying the new specimens as being Warbling Vireos in "unusually fresh plumage" (Schorger, 1946, p. 113). Undeterred, and perhaps puzzled by the replies from Brewer, Kumlien wrote back "In regard to the Vireo which I sent you last being *Vireo gilvus* 'in an unusually fresh plumage', I beg your perusal of the following remarks. You may think it bold of me, but so far as I read Wilson I am not satisfied in regard to this vireo matter" (Schorger, 1946, p. 113). Kumlien's letter apparently caused Brewer to rethink his earlier replies. In a letter dated April 14, 1856, Brewer wrote: "I am in hopes you may thus be able to clear up the present mystery, though the facts of your last letter satisfy me that Mr. Cassin must have been a little hasty in the examination of your specimens" (Schorger, 1946, p. 114). Then on December 28, 1856, Brewer again wrote Kumlien to inform him that:

> I showed him [Cassin] what you wrote me about that Vireo. We consulted together about it and have no doubt that you are quite right about it. It is a new species described by Cassin…as Vireosylvia Philadelphica. Its genuineness has been disputed but now you have verified his correctness and I have prepared a paper for our Boston society in which I mean that you shall have all due credit. Get all the skins of this that you can. I think I can get some tall prices for them out of Bell and others (Schorger, 1946, p.114).

Thus, while Kumlien wasn't the first to describe the Philadelphia Vireo, his careful observations and persistence caused Cassin to reconsider the accuracy of his earlier judgments. This in turn "convinced eastern ornithologists that the vireo was a good species" (Schorger, 1946, p. 116).

Cassin was a prolific author who wrote dozens of scientific articles on new species of birds from Africa, Asia, and South America:

> Cassin's great pleasure was not in writing up the life-history of a bird, but in ascertaining all that had been published about it and its near relatives, and in preparing a monograph of the group, with full technical descriptions and synonymy — just the sort of work, in fact, that was most distasteful to Audubon! (Stone, 1901, p. 2).

[1] In April of 1858, Cassin became co-owner and president of the J. T. Bowen Lithography Company in Philadelphia. In an ironic twist, despite the obvious disdain he held for Audubon, Cassin nevertheless reaped financial success from Audubon's work as the Bowen firm produced the lithographed prints for the second through seventh editions of the octavo edition of *The Birds of America*, from 1856 through 1871.

However, his most notable publication dealt with the western avifauna of North America. *Illustrations of the Birds of California, Texas, Oregon, British and Russian America* was published between the years 1853 to 1855. Like those authors who preceded him, Cassin's *Illustrations* was to be produced in a series of parts and sold by subscription. As Peck noted, despite Cassin's distaste for Audubon as a scientist, "he had enough business sense to know that since Audubon had set the standard for American bird books, anything he might do to augment or improve Audubon's work would have to be in some way associated with *The Birds of America*" (Cassin, 1856, p. I-11).

Hence, in the prospectus for Cassin's *Illustrations*, he ambitiously stated that he was "prepared to add about one hundred and fifty species to the Birds figured by Mr. Audubon, in his octavo edition of 'The Birds of America,' which contains about five hundred species" (p. I-15). Further recognizing the value of the Audubon name, Cassin approached Audubon's sons, Victor Gifford Audubon and John Woodhouse Audubon in June of 1851 about producing a combined work consisting of ten volumes with seven being a revision of *The Birds of America* and three being Cassin's work.

However, an agreement with the Audubon brothers could not be reached. The main point of contention was apparently Cassin's desire to correct errors in Audubon's nomenclature. Audubon's eldest son Victor "insisted that they retain Audubon's nomenclature, that he and John do 'portions' of the text, and that the pictures include 'plants, trees &c. from the localities where the birds are found,' just as Audubon had always done" (Tyler, 1993, p. 109). Thus, in early 1852, Cassin embarked on the production of *Illustrations* as a solo project.

From the beginning, *Illustrations* was beset with problems. Initially, Cassin employed artist Henry Louis Stephens to create the plates, and, while Cassin was pleased with Stephens' work, the results from the printer/lithographer were not to Cassin's liking. So dissatisfied was Cassin with the printed results that he suspended the project after only five plates had been produced. Thereafter, having been initially unsuccessful, Cassin was able to convince the pre-eminent lithographer J. T. Bowen to undertake the project. However, by the time an agreement between Cassin and Bowen had been reached, Stephens was no longer available. Thus, Cassin engaged George Gorgas White as artist. Instead of using Stephens' earlier work, Cassin decided to begin the project anew, eventually re-releasing the first parts in March of 1853. Unfortunately, the work of White was also not without problems. Unlike Stephens, who drew his work directly on the lithographic stone, White drew his pictures on paper. This then required Cassin to employ a second artist, William Hitchcock, for the job of transferring White's drawings to the lithographic stones. This extra step eventually resulted in Cassin giving the illustration job directly to Hitchcock, thus bypassing a production step and reducing cost. The delays and problems encountered by Cassin may have been a contributing factor in the downfall of the project, as he was only able to secure 67 subscribers, a number short of the 250 he needed to make the project financially viable.[2] In fact, the abandonment of the project was foretold in the first volume of 50 plates:

> Though we hope and fully intend to proceed with a second series of this work, as materials accumulate, especially as the present volume has met with a degree of patronage much greater than we had a right to expect, we have to say to our friends and patrons, that at present we have no definite prospect of such continuation. Should we be favored with life and health, we hope to present two additional volumes or series, each, like the present, complete in itself, for which very nearly a sufficient number of birds are now known as inhabiting the United States, and which are not given by former authors on North American Ornithology. At present, our engagements, we regret to say, render such an undertaking quite impossible (Cassin, 1856).

In what was likely a last-ditch effort to see volumes two and three become reality, Cassin again approached the Audubons in mid-1855 about publishing a com-

[2] It is interesting to note that while Cassin and the Audubon brothers did not enter into an agreement to produce a joint project, Victor Gifford Audubon was a subscriber to *Illustrations*, along with one of his father's closest confidantes, Edward Harris.

bined work. However, Cassin's continued insistence at being allowed to correct Audubon's nomenclature doomed his overture. (On December 15, 2005, a first edition of Cassin's *Illustrations* was sold at auction by Christie's for $6,000.00. In the auction catalog, the rarity of Cassin's book is noted by the statement that "only one copy has appeared at auction in at least thirty years" [Christie's, 2005].)

The written text of *Illustrations* bears comment. Cassin provided the life histories of each of the fifty species depicted. In addition, Cassin included chapters titled "Synopsis of North American Birds." The birds that made it into print included the Chickadees, Vultures, Swallows, Goatsuckers, Kingfishers, Falcons, Hawks, Eagles, Kites and Owls. Had *Illustrations* remained financially viable, the completed work would have contained 30 parts, covering 150 species plus additional synopses. Describing these life histories in the preface, Cassin wrote:

> One object of our work is to present a general revision of the Ornithology of the United States, endeavoring to bring our subject nearer to the true state of the science than has been previously attempted in this country. In our Synopsis, the student will find many corrections and additions, and will himself, too, very probably be introduced to names both American and European, of the connection of which with North American Ornithology, previous records are silent, quite unjustifiably. Our predecessors have not been well versed in the history and bibliography of Ornithology, nor indeed have they professed such information. It is in fact a description of knowledge to be attained with difficulty in any country, so great, indeed, that no one Ornithologist has ever yet completely acquainted with the bibliography of his science (Cassin, 1856, p. v).

Peck wrote that the writing style of *Illustrations:*

> …while interesting in parts, was far more dry than Audubon's, which, like his paintings, contained an artistic dimension never achieved by Cassin. Finally, the ornithological synopses that did so much to establish Cassin's reputation in the scientific community were far more technical than most laymen were willing to read (Peck, 1991, in introduction to reprint of Cassin, 1856, p. I-21).

Arguably, Peck's overall assessment may be accurate; yet, *Illustrations* offers glimpses of a literary soul. Cassin's chapter on Kirtland's Owl (Northern Saw-whet Owl) provides a perfect example. Instead of beginning this chapter with a detailed description of the species and its habits, Cassin instead immediately launched into a discussion of owls in mythology and literature, going so far as to liberally quote Shakespeare. Another example of a man trained in the classics can be found in his chapter on the Curved-billed Thrush (California Thrasher):

> The poets have found in birds the most attractive of animals. There is scarcely one from the great Grecian era of taste and poetry to the present day, in whose productions passages do not occur, recognized as beautiful and deriving their essential character from this class of objects. Hebrew and Greek were alike in this respect, whether in the derivation of sacred symbols or of imagery in poetic allusion; the Dove of the former is of the same general character as the Peacock of Juno, or the Sparrows of Venus, poetic and truthful to nature and of the same origin. The Greek poets found in birds suitable accompaniments for the most sublime creations of their genius, the Deities. The greatest of Hebrew poets rejoices in the assurance that 'the time of the singing birds is come, and the voice of the Turtle is heard in the land' (Cassin, 1856, p. 260-261).

Cassin's comment on the place of guns and hunting in the history of this nation provides an interesting historical comment to an issue that modern American society continues to debate:

> Experience in hunter life, and the incidental influences of its occupations and associations, are no inconsiderable features in American education; and the invigorating and healthful pursuits of the youthful hunter or trapper have always appeared to us to be no unimportant agents in the development of his physical and of his intellectual constitution. In large por-

> tions of every State of the Union, the gun or the rifle is the favourite companion of almost every boy from the earliest period of his competency for its management; and we have seen abundant instances, in our early days, of very considerably forced presumption of competency. In fact, the stranger, in very many of the rural districts of the United States, might also be tempted to conclude that the famous ancient formula of early education had been adopted, with an addition: 'Learn to speak the truth and to swim' - and to shoot (Cassin, 1856).

The written work of Cassin was not limited to ornithology. Clearly he was a man with a sense of humor. In a letter dated March 12, 1851, Cassin wrote "Stephens and I are very busy getting up a lot of the greatest nonsense you ever saw, a 'Comic Natural History of the Human Race'" (Stone, 1921, p. 286). A lengthy 216 pages long, this book included 40 color plates "representing human heads on the bodies of various birds, mammals, fish, etc. Some of these are portraits of individuals, others simply of types" (Stone, 1921, p. 287).

Cassin's attempt to learn all the birds in the Academy's collection was likely a factor that contributed to his death on January 10, 1869 at the age of 55. In the mid-1800's, arsenic was the primary ingredient used in the preparation of bird skins. For almost 20 years prior to his death, Cassin exhibited the effects of arsenic poisoning resulting from the constant exposure to arsenic dust.

So, as you thumb through this edition of our club's oldest continuous publication, let us not forget the man for whom this journal is named.

Literature Cited

Audubon, J. J., 1844. *The Birds of America: From Drawings Made in the United States and Their Territories.* J. B. Chevalier, Philadelphia.

Audubon, J. J., 1839. *Ornithological Biography, or an Account of the Habits of the Birds of the United States of America.* A. Black, Edinburgh.

Cassin, J., 1856. *Illustrations of the Birds of California, Texas, Oregon, British, and Russian America.* Texas State Historical Association, Austin. Reprinted 1991 with an introduction by R. M. Peck.

Christie's, 2005. *Fine Printed Books and Manuscripts.* Catalog of Christie's Sale #1587, Thursday, December 15, 2005. Christie's, New York City.

Schorger, A. W., 1946. Thure Kumlien and the Early History of the Philadelphia Vireo. *Wilson Bulletin* 58: 113-116.

Stone, W., 1899. Some Philadelphia Ornithological Collections and Collectors, 1784-1850. *Auk* 16: 166-177.

Stone, W., 1901. John Cassin. *Cassinia* 5: 1-7.

Stone, W., 1921. An Anonymous Work of John Cassin. *Auk* 38: 286-287.

Tyler, R., 1993. *Audubon's Great National Work: The Royal Octavo Edition of Birds of America.* University of Texas Press, Austin.

Wilson, A., 1831. *American Ornithology; or The Natural History of the Birds of the United States.* Constable, Edinburgh.

Additional Sources

Steiner, B., 2003. *Audubon Art Prints: A Collector's Guide to Every Edition*. University of South Carolina Press, Columbia, SC.

Jeff Holt
1215 Taft Ave.
West Deptford, NJ 08096