

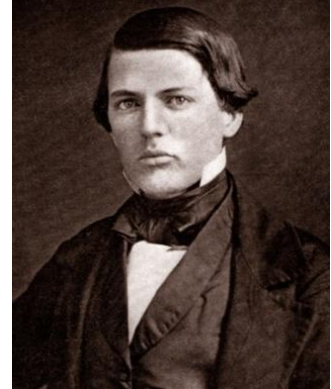


Spencer Fullerton Baird: Natural Born Naturalist

by Rebecca Solnit

<http://housedivided.dickinson.edu/sites/journal/2010/07/02/spencer-fullerton-baird-natural-born-naturalist/>

At age 17, Spencer Fullerton Baird wrote America's leading ornithologist, John James Audubon. Though Baird had begun collecting birds and other natural specimens around his home in Carlisle, Pennsylvania when he was only eight, he asked Audubon for advice on two undocumented flycatchers, writing: "I am but a boy and very inexperienced." However, Audubon quickly recognized Baird's natural talent and dedication, replying, "your style and the descriptions you have sent me prove to me that an old head may from time to time be found on young shoulders." Baird would develop from an amateur collector into one of the foremost nineteenth-century authorities on the scientific collection of natural specimens.



Spencer Fullerton Baird
(1840)

"Spencer Fullerton Baird"

p. 2

After graduating from Dickinson College in 1840, Baird began taking private lessons with his mentor Audubon. During this period, Spencer made sure to take advantage of his brother's residence in Washington, DC, where William Baird collected birds native to the Potomac region. "Try and get me heads of all the birds which cannot be procured here," Spencer wrote, "by pulling off the skin, taking out the eyes, and extracting the brain or some of it, and putting them in the sun." The brothers' correspondence documented their increasing collection, and in 1843 they published their first paper in the scientific journal: *Proceedings of the Academy of Natural Science*. The Baird brothers' shared passion for the natural world sustained Spencer's and William's close relationship even as Spencer began his professional career.



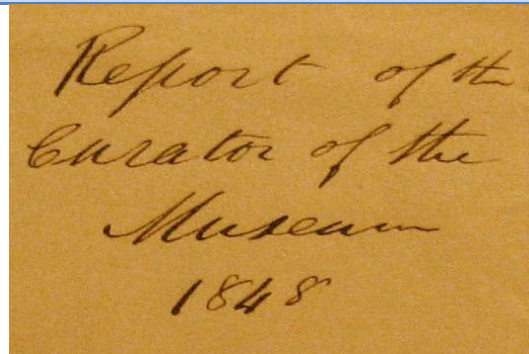
Dickinson College
circa 1845



"Spencer Fullerton Baird"

p. 3

In July 1845, Dickinson College offered Spencer Baird an unsalaried position as an honorary professor of natural science and curator of the school's Natural History Cabinet, which was the first step to Baird's appointment as a full professor only one year later. As a professor Baird introduced innovative field excursions to supplement the classroom. Baird's student, Moncure Conway, wrote of his professor's enthusiasm for the natural world, which captivated his students. Baird was responsible for the expansion of the school's collection not only by adding his own specimens, but also by sparking scientific interest in his students. During Baird's short tenure as a professor and curator at Dickinson College, the Cabinet needed a new building to accommodate its exhibits.



Report of the Curator, 1848

"Spencer Fullerton Baird"

p. 4

Baird and his personal collections traveled to Washington, DC in 1850 where he secured the position of assistant secretary and curator of the Smithsonian Institution. The U.S. Senate incorporated the Smithsonian Institution on August 10, 1846 under the provision that the organization should include a library, museum, and art gallery for the expansion of public knowledge. However, the Smithsonian's first secretary, Joseph Henry, did not believe a museum should be the institution's focus and so transferred the growing Smithsonian collections to a separate United States National Museum in 1858, to be curated by Baird. Within Baird's first decade at the Smithsonian, the Institution's natural science specimens increased from 6,000 to 150,000 catalogued items. Though tension in the rest of the country finally exploded on April 12, 1861 with the bombardment of Fort Sumter and the beginning of the Civil War, Baird merely put his egg collection in storage and moved to collecting in northern states to wait out the war.

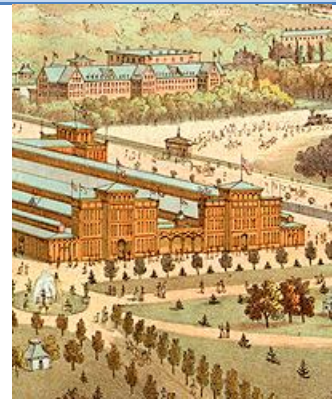


Smithsonian Institution, north front
June 1862



"Spencer Fullerton Baird" p. 5

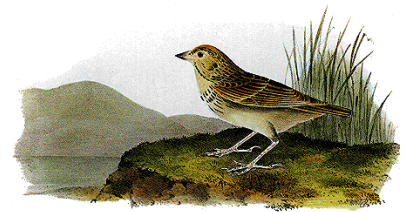
Baird returned to Washington after the end of the war where he resumed his responsibilities as the Smithsonian’s assistant secretary. The 1876 Centennial Exposition in Philadelphia presented Baird with the opportunity to display his lifelong collecting efforts through special exhibits devoted to the Smithsonian, National Museum, and National Fish Commission. Following the Exposition, Baird left Philadelphia with an additional sixty train cars full of donated specimens. The combination of the popularity of Baird’s exhibits at the Centennial Exposition and the sheer volume of the items he brought back to Washington, finally convinced the federal government to fund a new building for the museum, now the Smithsonian Arts and Industries Building on Jefferson Drive, Washington, DC.



Centennial Exposition
Philadelphia, PA 1876

"Spencer Fullerton Baird" p. 6

Spencer Baird became the secretary of the Smithsonian in 1878, and he spent his last nine years helping create the foundation of the modern Smithsonian museum system. Baird’s contributions to the Smithsonian Institution can be seen through its growth from the original Smithsonian Castle to the sprawling network of Smithsonian buildings that currently frame the National Mall. Beyond the Smithsonian, Baird left a scientific legacy that transcended the thousands of specimens he collected, inspiring a new, evidence-driven way to study natural science. Baird’s old friend and mentor, John Audubon had recognized Baird’s potential in 1844 when he named a newly discovered species of bird, Baird’s Bunting. To date there are more than twelve species of fish, over twenty-five species of mammals, birds, and mollusks, and one entire genus named for Spencer Fullerton Baird. Baird’s collecting helped transform nineteenth-century American science by documenting America’s own natural history. It was a career he seemed quite literally born to pursue.



Baird's Bunting

Baird's Bunting, 1844



Further Reading

Conway, Moncure Daniel. *Autobiography, Memories and Experiences of Moncure Daniel Conway*. 2 Vols. New York: Houghton, Mifflin and Co., 1904.

Dall, William Healey. *Spencer Fullerton Baird: A Biography, Including Selections From His Correspondence With Audubon, Agassiz, Dana, And Others*. Philadelphia: J. B. Lippincott Co., 1915.

Jackson, Jerome A. "Baird, Spencer Fullerton." *American National Biography Online*. February 2000, <http://www.anb.org/articles/13/13-00070.html>.

Rivinus, Edward F. and E. M. Youssef. *Spencer Baird of the Smithsonian*. Washington, DC: Smithsonian Institution Press, 1992.



Document 1— Spencer Fullerton Baird to John James Audubon, June 4, 1840

<http://hd.housedivided.dickinson.edu/node/33006>

Source Citation –

Spencer Fullerton Baird to John James Audubon, June 4, 1840, New York, NY, in Ruthven Deane, "The Unpublished Letters of John James Audubon and Spencer F. Baird," *The Auk* 23, no. 2 (April 1906), 198-200.

Overview –

Seventeen-year-old Spencer Baird wrote John Audubon, a leading ornithologist, to ask for Audubon's advice on two specimens of fly catchers that Baird had collected in Carlisle, Pennsylvania. Baird meticulously described the birds' features, so Audubon could compare Baird's measurements to the known species of fly catchers. Baird wrote of his hesitancy to approach Audubon, claiming "I am but a boy, and very inexperienced" though he would grow into a leading authority in the field of ornithology himself. (By Rebecca Solnit)

Transcribed Text –

Carlisle, Cumberland Co., Pa., June 4, 1840.
Dear Sir

I herewith send you the description of a species of *Tyrannula*, an account of which I have been able to find, neither in your *Ornithological Biography and Synopsis*, nor in Nuttall's *Ornithology*. I have obtained three specimens, all in low swampy thickets. Two of them I stuffed, the third (obtained last Saturday) [May 30, 1840] I have in spirits and would gladly send it to you, had I the opportunity. Their habits were very similar to those of the Little Tyrant Flycatcher. (*Muscicapa Pusilla*.) Male. Bill large, depressed, decidedly convex in its lateral outlines, and very broad. Third quill longest. Bill dusky above, yellow beneath. Feet dark brown. Upper parts clear greenish olive. Cheeks and sides of neck of a slightly lighter tint. General color of lower parts gamboge yellow, throat slightly darker, across the breast tinged with yellowish green. Quills and tail brown. First row of smaller wing coverts tipped with yellowish white, as also are the secondary coverts. Secondary quills narrowly tipped and margined with the same. Loral space and eyelids yellowish. Outer edge of tail feathers, like the Back. Length to end of tail $5\frac{1}{2}$, to end of wings 3, $11.5/12$, of claws $4.4.5/12$, wing from flexure $2\frac{6}{12}$; tail 2; distance between end of closed wing and end of tail $1\frac{3}{12}$: Bill along ridge $5/12$, lower mandible $7/12$: Tarsus $7.5/12$: Hind toe and claw $4.67/12$, middle toe and claw $5.5/12$: First quill $4/12$ less than third; $3.25/12$ less than second. Middle tail feathers $1.5/12$ less than the outer. It differs very decidedly from the Little Tyrant Flycatcher. The color of the upper parts is of a much brighter and purer color. The white and ash of the throat, neck, and sides, is replaced by the yellow and greenish yellow. The color of the rest of the lower parts is much brighter, being a decided gamboge. The bill is much larger, and broader, being very decidedly convex in its lateral outlines. The tail also is of a darker brown.....

I have already trespassed to much on your patience, and will conclude by saying, that if I can be of the slightest assistance to you in any way, be assured that although others may tend it more ably, yet none can more cheerfully.

I am Sir, very Respectfully
Your Obedient Servant
Spencer F. Baird



Document 2– Spencer Fullerton Baird to William Baird, April 2, 1842

<http://hd.housedivided.dickinson.edu/node/32940>

Source Citation –

Spencer Fullerton Baird to William Baird, April 2, 1842, in William Healey Dall, *Spencer Fullerton Baird* (Philadelphia: J.B. Lippincott Company, 1915), 64-65.

Overview –

Spencer Baird wrote his older brother William to ask for his brother's continued support of their joint specimen collection. The Baird brothers began collecting local animal specimens in Carlisle, Pennsylvania in 1833 and maintained a close relationship based on their shared interest in the natural world. (By Rebecca Solnit)

Transcribed Text –

Carlisle, April 2 1842

Dear Will,

I received the birds and other things safely by Mother and find some very interesting articles among them for instance the piece of Gen. Washington's carriage. The birds were in excellent condition and the Canvas back & Ring necks were done up so as to make exceedingly good skins—and could be mounted from, almost as well as if fresh. The whole will be valuable additions to the collection. We bid fair to have as good a collection in a few years as any about. You do not say what you think of the birds I sent on, the hawks, &c. I will send the *Muscicapa Acadia* by Uncle Penrose who talks of leaving here on Tuesday, next—I think that it is distinct from our *M. Trailli*. In respect to the Black head ducks, the bird that Giraud named was the smaller; as *F. Minor*. so that we could not name one of them.

I have shot five or six ducks this week, three yesterday—They are getting very scarce and probably in a week will be all gone except a few Summer ducks & Butterballs. Those show yesterday were Summer duck, Black duck and Hooded Merganser. The spring birds are coming back rapidly. Will Penrose insists that he saw a warbler, and I shot a Yellow Belly Woodpecker and purple Finch yesterday, which I stuffed. We saw several Cranes &c. The spring flowers are out, the Dogtooth Violets will Bloom in a few days or so. The small bird time is near at hand & I will have to look very sharp lest I miss them—By the by if you are not exhausted or wearied out by my continual & certainly unreasonable demands for powder & shot, send me a stock or its equivalent for the spring campaign. Mother makes such a fuss about my shooting away powder and shot that I hate to ask her for money....

Try and get me heads of all the birds which cannot be procured here; by pulling off the skin, taking out the eyes, and extracting the brain or some of it, and putting them in the sun, they would dry and I would clean them when I get them. I will write more full hereafter; as I want to stuff a cowbird before going to bed, and it is late now. Give my love to Aunt Blaine & Penrose and Believe me

Your aff. Brother

S.F. Baird.



Doc. 3– Spencer Baird, Report of the Curator of the Museum, July 11, 1848

<http://hd.housedivided.dickinson.edu/node/27321>

Source Citation –

Baird, Spencer Fullerton, Report of the Curator of the Museum, July 11, 1848. Record Group 1/2, Board of Trustees (1833-1879), Dickinson College Archives and Special Collections.

Overview –

In an annual report to Dickinson College's Board of Trustees, Spencer Baird noted the quickening pace of the school museum's acquisition of new specimens. This was a credit to Baird's role as a professor as he sparked scientific interest among his students. Baird continued his own collecting and many of the items on the Museum's inventory were "deposited by the Curator." (By Rebecca Solnit)

Transcribed Text –

During the past year, numerous additions have been made to the Museum, in all the departments of Natural History, and particularly in those of Reptiles, Fishes and comparative Anatomy. It is hoped that a few more years of such progress will place the cabinet of Dickinson College on a par with that of any institution in the country. The increasing interest which is taken in it, by the students, has resulted in many valued accessions.

Among the various donations and deposits, made since that last report may be mentioned them following:

- A collection of antiquities from Egypt & India present by Mr. Comfort Tiffany .
 - One box of minerals from Centre County, Penna., presented by Mr. John L. Phillips.
 - One box of fossil shells from the Tertiary of Maryland & Virginia, presented by Mr. John L. Phillips.
 - One box of Iron ore fossils from Centre Co., Penna., presented by Mr. Sam Reynolds .
 - One box of fossils, mineral & shells, from the shores of Lake Champlain, presented by the Curator.
 - One box of stalactites etc, from the Mammoth Cave, Ken., presented by Mr. Bibb.
 - Two boxes fresh water shells, and one box of minerals from Georgia presented by the Curator.
 - Massive specimens of copper ores from Lakes Superior & Huron presented by Mr. E. Helfenstein.
 - One keg fish, from Chesapeake bay, presented by the Curator. Forty mounted European birds presented by the Curator.
 - One box of birds from Japan, Asia & Europe deposited by the Curator.
 - One box of birds from Europe & Guatemala deposited by the Curator.
 - One keg of fish from Chesapeake bay presented by Mr. T. R. Smith.
 - One keg of fish from Portland, Maine, presented by Prof. Caldwell
 - Large collection of reptiles & fish of Cumberland Co., Penn., containing many nondescript species, deposited by the Curator.
 - Skeleton of an Alligator, from Georgia deposited by the Curator.
 - Various crania & complete skeletons of mamalia, reptiles, birds and fish, deposited by the Curator.
 - Pair of Moose horns, from Maine, deposited by the Curator.
- Besides numerous individual objects of greater or less value-
Another year will, it is hoped, see a still greater increase in the Museum, as several packages of valuable objects are now on their way, a statement of which will be presented in the next report.
Carlisle July 11. 1848 S.F. Baird Curator