

In 1842-1846, Agassiz published "Nomenclator Zoologicus," a listing of all genera and supragenera, giving original citation and etymology (the reptile section, entitled "Nomina Systematica Generum Reptilium," was published 1844). In 1846 (octavo edition, 1848) he published the companion "Nomenclatoris Zoologici Index Universalis," an index of all generic names in zoology including fossil taxa, and in 1848-1852 his four-volume "Bibliographia Zoologiae et Geologiae." Agassiz was justly famous, but by 1845 he was also financially bankrupted by all the publishing ventures.

Accordingly, in September 1846 he began a lecture tour in the United States, originally intended to raise money, which resulted in a professorship at Harvard College where he stayed the rest of his career. Agassiz was an outstanding orator and teacher; audiences, professional and lay alike, were spellbound, and he enjoyed all the attention. In America he saw great possibilities for the advancement of science, even at the level of secondary schools, which he championed. At Harvard he was successful in raising money, from the college, from private donors, and from the State of Massachusetts, to build a great museum, the Museum of Comparative Zoology (still called the "Agassiz Museum" by local people), which was founded in 1859. This embodied Agassiz's concept of the combination of research, field work, publication, and graduate education at an institution of higher learning which became the model for many other American universities. His own legion of students went out to leading universities of the day. On the national scene, Agassiz was similarly influential—for example, in co-founding the U.S. National Academy of Sciences in 1863—but his influence met with increasing hostility from many who opposed his efforts to dominate the academy and to control American science.

Agassiz, like Cuvier, believed in special creation and the fixity of species and, thus, inevitably became America's chief opponent of Darwin. From that time onward, Agassiz suffered a loss of respect in intellectual circles, and even at Harvard he became isolated. He sought new challenges in two expeditions to South America (1865-1866 and 1871-1872) and in assisting with the foundation of Cornell University, where he briefly served as a professor (1868-1869). He died on 14 December 1873, in Cambridge, Massachusetts, at the age of 66. He was succeeded as Director of the Museum of Comparative Zoology by his son, Alexander Agassiz, also an accomplished biologist, who had generated substantial money from investments in copper mines and spent generously of his personal fortune to support the museum's activities.

Agassiz's primary herpetological work was contained in his magnificent series, in quarto, entitled "Contributions to the Natural History of the United States of America." Ten volumes were planned, but only five were published (volumes 1-4, 1857-1862; reprinted 1978); the fifth volume was published posthumously, in 1877, as a *Memoir* of the museum at Harvard. Volume one contained Agassiz's well-known "Essay on Classification," based on Cuvier's old plan, and gave Agassiz's account of the special and

independent creation of species, which was in stark contrast to Darwin's views in "Origin of Species" published only two years later.

The last half of volume one and all of volume two (1857), together comprising Agassiz's monograph of North American turtles, covered chelonian classification, anatomy, embryonic development, physiology, distribution, and habits. Volume two contains 34 exquisitely detailed plates depicting juvenile turtles, eggs, and embryological series. In these volumes, Agassiz described new genera (*Graptemys* and *Deirochelys*) and many new species (*Kinosternon flavescens*, *Terrapene ornata*, and *Gopherus berlandieri*, among many others) of American turtles.

Agassiz had amassed an enormous collection of turtles for this work, many loaned by his friend Spencer F. Baird at the new Smithsonian Institution, but others were sent by laymen throughout the country who had heard his appeals. Such was the fame of Agassiz that one Massachusetts school teacher, learning that the professor wanted embryos not more than three hours old, camped out at a local pond for three weeks until he got fresh eggs, which he then rushed to Cambridge by a combination of a horse-and-buggy, a freight train, and finally a delivery wagon, just to play his small part in Agassiz's grand scheme.

Unfortunately, this book also illustrated a side of Agassiz's personality that was displayed long before at Neuchâtel: his inability to work with others as equals and his failure to credit collaborative work. After publication of volume four, his main assistant, H. James Clark, who was acknowledged but whose name does not appear on the titlepages, claimed to have written most of volumes two, three, and four. As far as the volume on turtles is concerned, the published correspondence between Baird and Agassiz make it clear that Agassiz was deeply involved in the actual research, if not the writing.

• *References*: "Louis Agassiz," by E. C. Agassiz, Houghton, Mifflin, Boston, 2 volumes, (xiii), 1-400 pages, and (ix), 401-794 pages, 1885; "Memoir of Louis Agassiz, 1807-1873," by A. Guyot, Biogr. Mem. U.S. Natl. Acad. Sci., 2: 39-73, 1886; "Louis Agassiz as a Teacher," by L. Cooper, Comstock Publ. Co., div. Cornell Univ. Press, Ithaca (New York), (xiii), 90 pages, 1917 (rev. ed. 1945); "Agassiz, Darwin and Evolution," by E. Mayr, Harvard Univ. Bull., 13: 165-194, 1959; "Louis Agassiz: A Life in Science," by E. Lurie, Univ. Chicago Press, Chicago, xiv, 449 pages, 1960 (abridged edition, Chicago, 1966); "Jean Louis Rodolphe Agassiz," by E. Lurie, Dict. Sci. Biogr., 1: 72-74, 1970; Adler, 1979 (pp. 17-18). • *Portrait* (1859?): Museum of Comparative Zoology, Harvard University, courtesy Roxane Coombs. • *Signature* (1873): From "Correspondence Between Spencer Fullerton Baird and Louis Agassiz," edited by E. C. Herber, Publ. Smithsonian Inst., Washington, 237 pages, 1963.

### BAIRD, Spencer F. (1823-1887).

Spencer Fullerton Baird, American vertebrate zoologist, administrator, and public servant, was born in Reading, Pennsylvania, on 3 February 1823. After his father's death