

organisms, mostly plants), often based on the flimsiest research and sometimes even on imaginary organisms—John James Audubon once wrote him about mythical fish and turtles which he promptly named as new species—that brought him censure and estrangement from the American scientific community. Among his harshest critics were the herpetologists Thomas Say and Richard Harlan.

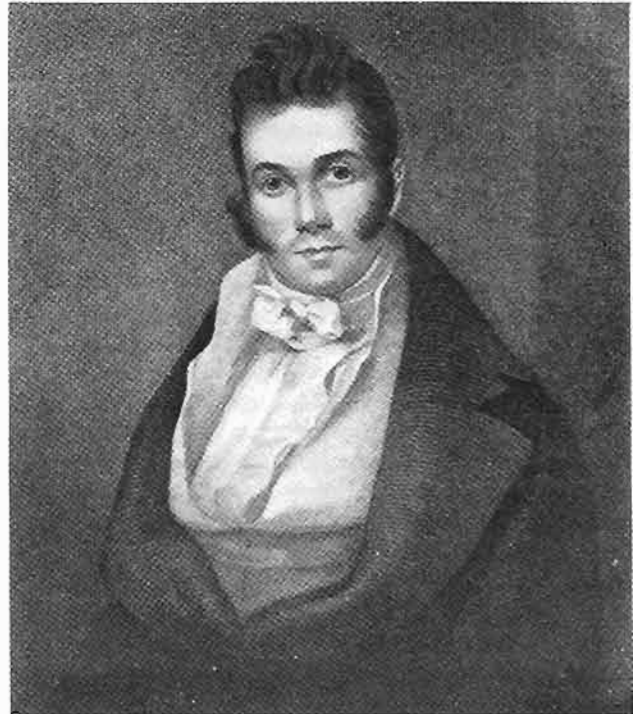
Some of Rafinesque's articles were mixtures of science and fiction, such as that on water snakes and sea serpents (1819), yet others were good natural history. He published about 15 articles of a herpetological nature (1814-1832), and these included descriptions of several well-known genera (*Necturus*, *Eurycea*, and *Gopherus*) and species (*Notophthalmus viridescens*, *Desmognathus fuscus*, *Sistrurus catenatus*, and *Crotalus viridis*). Since the standard American journals were closed to him, most of his herpetological titles were contained in the *Kentucky Gazette* (1822), a local newspaper, and in two journals published by Rafinesque himself: *Annals of Nature* (1820) and *Atlantic Journal and Friend of Knowledge* (1832). Rafinesque's herpetological titles from these three serials were reprinted in 1962-1963.

• *References*: "The Life and Work of Rafinesque," by F. W. Pennell, p. 10-70, and "Herpetology and Rafinesque," by W. M. Clay, p. 84-91. In L. A. Brown (ed.), *Rafinesque Memorial Papers*. *Transylvania Coll. Bull.* 15, 1942; "Constantine Samuel Rafinesque," by J. Ewan, *Dict. Sci. Biogr.*, 11: 262-264, 1975; Adler, 1979 (pp. 7, 9-12); "Fitzpatrick's Rafinesque," rev. ed. by C. Boewe, M & S Press, Weston (Massachusetts), xiii, 327 pages, 1982. • *Portrait* (1810): From Goode, 1901. • *Signature* (1819): Courtesy Library, Academy of Natural Sciences of Philadelphia, courtesy Marsha Gross. • *Note*: Rafinesque sometimes appended to his last name that of his mother's family, Schmaltz.

SAY, Thomas (1787-1834).

Thomas Say, born in Philadelphia on 27 June 1787, was one of America's leading naturalists of his day. His great uncle, the naturalist William Bartram, interested him in insects when he was a boy, but Say's father was opposed and arranged a commercial partnership with a pharmacist, John Speakman, and thus, unwittingly secured his son's future in natural history. The business shortly went bankrupt, but not before Speakman, Say, and others, meeting in a rear room of their shop in 1812, founded the Academy of Natural Sciences. The academy's tiny museum was contained in a rented room in which, after the bankruptcy, Say lived and he was totally devoted to the museum's development. It is said that he slept beneath the skeleton of a horse and fed himself on bread and milk, subsisting on 75 cents a week! Until his permanent departure from Philadelphia in 1825, Say was the mainstay of the academy: collector, curator of collections, and producer of the academy's *Journal* which he typeset and printed himself.

There were some interruptions, however. Say saw brief service during the War of 1812-1815, after which he



Thomas Say

travelled to the Sea Islands of Georgia and Spanish Florida (1817-1818). He joined the Yellowstone Expedition in 1819 as zoologist under Major Stephen H. Long, which established military posts along the Missouri River to protect the growing fur trade. The party travelled upriver to Council Bluffs in what is now Iowa, then across the Great Plains to the Rocky Mountains of present-day Colorado. Say's contributions to the early zoology of this area often are not fully recognized, since his discoveries of new species—including the well-known taxa *Bufo cognatus*, *Crotaphytus collaris*, *Scincella lateralis*, and *Elaphe obsoleta*—were published as scattered footnotes in Edwin James's account of Long's expedition (1823).

On returning to Philadelphia in 1820, Say took on additional duties as Curator of the American Philosophical Society (1821-1827) and Professor of Natural History at the University of Pennsylvania (1822-1828). In 1823, he accompanied Long on a second western trip, via Fort Dearborn (now Chicago), to explore the headwaters of the Mississippi River.

During the 1820s a communistic settlement began at New Harmony, along the Wabash River in southwestern Indiana. William Maclure, wealthy patron of the Academy of Natural Sciences, who saw the opportunity for New Harmony to become the center of education in America, persuaded Say and some other naturalists then living in Philadelphia, including Charles A. LeSueur and Gerard Troost, to join the experiment. Say became Superintendent of Literature, Science, and Education for the community and,