

# Part 1

## Introduction and the Long Expedition ROBERT E. PEPPERL AND JOHN R. BOZELL

The 1819-1820 scientific expedition led by Major Stephen H. Long is widely regarded as an important episode in the early history of the American West. During the journey from Pittsburgh to the Rocky Mountains and then back to the Mississippi River, the scientists documented botanical, zoological, geological, and topographical resources and features and made associated collections across tall-grass, short-grass, and alpine environments.<sup>1</sup> Long subsequently labeled a large part of the area as a "Great Desert" and assessed the region unfit for subsistence agriculture. Less widely acknowledged is the nearly nine months (September 17, 1819 – June 6, 1820) the Scientific Party spent at Engineer Cantonment on the Missouri River in eastern Nebraska, prior to setting out for the Plains and Rockies. The over-winter stay at Engineer Cantonment is arguably the most scientifically important single episode of the expedition.<sup>2</sup>

This government-sponsored effort also had a much larger military contingent under the command of Col. Henry Atkinson that was expected to initiate a planned series of army fortifications in the newly acquired Louisiana Territory. This Military Branch established their

Route of the Stephen H. Long Expedition, 1819-1820. NSHS, State Archeology Office. Prepared by John Swigart and Courtney Ziska fortified winter encampment on the river bottom a few kilometers upriver from Engineer Cantonment. The exact location is unknown. Here, more than 1,000 troops spent a difficult winter plagued by disease, including a deadly scurvy epidemic, and also endured devastating spring flooding. This site, initially called Camp Missouri, was renamed Cantonment Missouri once construction was complete. The Military Branch was eventually forced by the flooding to move to higher ground atop the nearby Council Bluff where this more permanent base for western military operations was named Fort Atkinson and remained an important frontier post for seven years. There is no known archeological evidence of Cantonment Missouri, but extensive archeological studies and reconstruction at Fort Atkinson have been carried out over a number of years by the Nebraska State Historical Society (NSHS).

During the period 2002-2005, and in 2015, NSHS archeological research and cultural resource management projects resulted in the





The steamboat Western Engineer, by Titian Ramsay Peale. Courtesy of American Philosophical Society, Philadelphia (APSimg2021)



discovery, partial excavation of, and preservation of Engineer Cantonment. What began as a routine archeological surface survey and historic preservation compliance effort expanded into a significant and wide-ranging research project with local and national significance to several major disciplines including archeology, history, historic preservation, geography, zoology, and the history of science. This issue of *Nebraska History* is a summary of the Engineer Cantonment archeological research project.<sup>3</sup>

The Long Expedition played a significant role in pioneering natural science methods and knowledge, and the period of time spent at Engineer Cantonment became the primary opportunity for the scientists to meet their objectives.<sup>4</sup> The cantonment provided a site for meeting with and gathering information about local native groups, as well as a base of operations for trips into the surrounding area to visit Native American villages for ethnographic studies. Their efforts in and around Engineer Cantonment also included the collection of data and specimens needed to describe and classify the biological resources of the study area. These events remain important contributions to modern biological systematics, taxonomy, and various types of environmental and historical studies. The entire journey, including the stay at Engineer Cantonment, was chronicled by expedition member Edwin James and his account is referred to throughout this issue.<sup>5</sup>

Engineer Cantonment is likely the first, and perhaps only, example of nineteenth century American government-sponsored exploration where trained, field-experienced scientists gathered data within a single vicinity over an extended period of time. A renowned naturalist, Thomas Say, and two highly regarded artists, assistant naturalist and artist Titian Ramsay Peale and Samuel Seymour, the official expeditionary artist, spent their time at the cantonment carrying out biological and ethnographic studies consistent with their scientific mission.

This unique experience produced written and graphic documentation of faunal and botanical observations, including descriptions of a number of previously unknown species, which is believed to represent the first American biodiversity inventory. Additionally important, original documentation provided narrative, cartographic, and pictorial records of central Missouri River tribes, including meetings between tribal leaders and government officials. Geologic, geographic, and other information gathered by the scientists, while both at the cantonment and on their round trip to the Rocky Mountains, proved to be of vital interest to military and commercial concerns and to later American migration and settlement. This collusion of scientific and military means to advance the western frontier illustrates a blending of expansionist goals with uniquely American Enlightenment ideals which characterized many aspects of the newly

Left: Thomas Say, 1819, by Charles Willson Peale. Courtesy of Academy of Natural Sciences of Drexel University, Philadelphia, ANSP Archives Collection 2011-025

**Right: Titian Peale II, 1819, by Charles Willson Peale.** Private collection

A scientist's 'uniform' is most evident in the portraits of Say and Peale, highlighted by a gold seven-pointed star fastened to the upright collar of their dark-colored coats. These stars were specifically designed for the Long Expedition.





established American government, economy, and society. The Philadelphia intellectual community, whose members included key political leaders and founding fathers, was called upon to help shape the expedition in a way that satisfied the needs for scientific inquiry, as well as serving the political and military agendas of the United States War Department, which sponsored the trip. The grand plans of the resulting large-scale venture captured the public imagination and served as a model for a succession of nineteenth-century, governmentsponsored western expeditions that followed.

The early nineteenth century was an era of pioneering efforts in American continental exploration, featuring large-scale plans generally carried out by mixed parties of military and civilian personnel. Military and political objectives were key among the various motivations for launching both information gathering and troop movement endeavors.<sup>6</sup> Following acquisition of the massive Louisiana Purchase, these objectives were focused on defining and protecting the boundaries and resources of this vast territory. These efforts not only set the stage for the expansionist agenda of the mid-to-late nineteenth century, but also contributed to the development of American science. In addition to producing major advancements in documenting New World natural history and indigenous cultures, governmentsponsored scientific exploration provided the first pictorial and cartographic records of the American West, significantly influencing the westward spread of commerce, infrastructure, and settlement.<sup>7</sup>

The Long Expedition was part of a much larger military mission initially planned as the Yellowstone Expedition and later renamed the Missouri Expedition when the enterprise's agenda and scope were reduced. Through the use of a large military force and impressive technology, the Yellowstone Expedition was envisioned by Secretary of War John C. Calhoun to be a show of strength and resolve that would convince both the natives and British traders in the area of the government's intent to extend and protect American interests in the upper Missouri region. Long proposed and organized the scientific component, which restarted the program of transcontinental exploration begun by Thomas Jefferson. The expedition set new standards for scientific exploration, helped to develop westernadapted transportation, and provided a model for government surveys of the western lands during the remainder of the nineteenth century. At the encouragement of Long and the American Philosophical Society (APS), the expedition was



to include scientific exploration-for the first time using experienced field personnel.8 Calhoun agreed with Long and the APS that the members of this exploring party were to be civilians with recognized expertise in the various fields of science. Long worked closely with the APS in selecting the scientific crew. Uniquely, this expedition was to be carried out by steamboat, a decision that followed years of incessant lobbying by Major Long who also designed the boat, which he named the Western Engineer. Even the military contingent used steamboat transportation, with a central goal being to make a grand impression of American power on the native inhabitants, the foreign trappers and traders they wished to expel, and also on American citizens whose support was needed for the success of the western campaign. The Western Engineer was the first steamboat to navigate the Missouri River as far as the Council Bluff.<sup>9</sup>

Major Long was instrumental in assembling the exploring party (Tables 1 and 2). The military members included two other topographical engineers (Lieutenants Graham and Swift) to assist Long with producing accurate maps of the interior region. A third military officer (Major Biddle) was engaged as the expedition journalist, historian, and ethnographer. The civilian scientific crew was selected through a careful process with the assistance of Calhoun and a committee of the Edwin James, date and artist unknown. Courtesy of History Colorado APS. Those civilians who ultimately joined the scientific party included: Thomas Say as zoologist; Dr. William Baldwin as botanist and surgeon; Augustus Edward Jessup as geologist; Titian Ramsay Peale as assistant naturalist and scientific illustrator; and Samuel Seymour as topographic artist. Baldwin died during the first leg of journey, never arriving at Engineer Cantonment. Jessup resigned for health reasons shortly after arriving at Engineer Cantonment. Also, Biddle was re-assigned to the military branch of the expedition. Following establishment of quarters at Engineer Cantonment in the fall of 1819, Long returned to Washington for revised orders. While back east he enlisted Captain John R. Bell to replace Biddle as journalist, and selected Dr. Edwin James to serve as physician and botanist in place of Baldwin, and also to replace Jessup as geologist. The expedition was also assisted in many ways by Indian Agent Benjamin O'Fallon,<sup>10</sup> by fur trader, interpreter and agent John Dougherty,<sup>11</sup> and by fur trader Manuel Lisa.<sup>12</sup>

Key members of the original exploring party that remained for the trip west from Engineer

Cantonment included: Major Long, Lieutenant Swift, Thomas Say, Titian Peale, and Samuel Seymour. Lieutenant Graham was assigned to return the Western Engineer downstream and then to bring it to Cape Girardeau to meet the overland exploring party in the fall. Given the change from steamboat transportation to travel by horseback, the support crew also changed and included hunters, baggage handlers, and interpreters, instead of the boat crew that brought the expedition to Engineer Cantonment. The military escort and other expected supplies were severely reduced, due in part to a revised austere budget. Major Long had requested 100 men from Cantonment Missouri to serve as a military escort, but received only six men from the Rifle Regiment along with a seventh added from the Corps of Artillery.<sup>13</sup> A small military and civilian escort accompanied the scientific party throughout their journey from Pittsburgh to Engineer Cantonment. These individuals are identified by Major Long's letter to the Secretary of War.14 🔯

#### Table 1. Personel comprising the Long Expedition

Name and Assignment	Personal Information					
I. Personnel for Initial Stage of the Journey: Pittsburg to Engineer Cantonment						
A. MILITARY SCIENTISTS:						
Major Stephen H. Long, Commander and chief topographer; age 35	(1784-1864) From New Hampshire farm family; graduated from Dartmouth College; commissioned second lieutenant in Army's Corps of Topographical Engineers in 1814; briefly taught mathematics at West Point; was assigned to a number of military surveys between 1816 and 1819 to establish forts in the frontier, primarily east of the Mississippi River; lifelong career as topographical engineer included significant work with railroad development and navigation improvements on the western rivers	Lobbied successfully to get the expedition sponsored by the War Department and supported by the intellectual community in Philadelphia; also sought funding for post-field work-up and reporting				
Major Thomas Biddle, Jr., Journalist, historian, and	(1790-1831) From prominent Philadelphia family; viewed the expedition as "interesting and enterprising," applied for the journalist position and was bired; does not seem to have provided records	Quarreled often with Long; left the scientific party after 3 months; transferred to Colonel				

was hired; does not seem to have provided records

or notes on the trip of any kind

transferred to Colonel Atkinson's staff

ethnographer; age 29

Lieutenant James D. Graham, First Assistant Topographer; age 20	(1799-1865) From Virginia; graduated West Point in 1817; in 1819 was 20 years old, second lieutenant in artillery	Successful career as topographical engineer; responsible for several important boundary surveys	
Cadet William H. Swift, Second Assistant Topographer and commander of the guard; age 19	(1800-1879) From Massachusetts; graduated West Point in July, 1819, and commissioned second lieutenant in the Corps of Topographical Engineers while on the expedition	Promoted to Captain while serving on the U.S. Coast Survey until resigning from the Army in 1849 to head up several railroads	
<b>B. BOAT CREW:</b>			
Nine military and four civilian crew (plus 2 boys)	Military personnel: Sergeant Samuel Roan and eight privates; civilian crew: steam engineer, pilot, carpenter, and clerk; also two cabin boys	The carpenter and military escort were the likely builders of Engineer Cantonment	
C. CIVILIAN SCIENT	ISTS:		
Dr. William Baldwin, botanist and surgeon; also to report on Indian diseases and health; age 41	(1779-1819) Physician and highly respected scientist with interest in botany; medical degree from University of Pennsylvania in 1807; practiced medicine and also conducted botanical research; had hereditary pulmonary disease; selection of Baldwin caused John Torrey to decline position as geologist (applied as botanist)	Was too ill to continue and resigned from the Expedition at Franklin, Missouri during trip up Missouri River; died two months later of tuberculosis	
Thomas Say, zoologist; served as ethnographer, and journalist; age 32	(1787-1834) Philadelphia apothecary; active field work; broadly interested in documenting animal and insect life; became co-founder of the Academy of Natural Sciences of Philadelphia in 1812; prone to illness throughout his short life	Known as father of American conchology and father of American entomology	
Titian R. Peale, Assistant Naturalist (and artist); age 20	(1799-1885) Son of renowned artist and natural history museum owner; trained artist and experienced naturalist; accompanied Say on 1818 Florida Expedition	Also skilled in specimen mounting and collecting	
Augustus Edward Jessup, Geologist; age 30	(1789-1859) Massachusetts native; Philadelphia manufacturer with active interest in geology and mineralogy; his research was sufficient to get him elected to the Academy of Natural Sciences of Philadelphia at an early age	Jessup's interest in chemistry allowed him to improve paper production and succeed as a paper manufacturer and paper mill owner	
Samuel Seymour, landscape artist; age 40 (?)	(1779?-1823?) British-born painter; apparently working in Philadelphia along with his uncle as an engraver; appointed official artist/illustrator	Seymour seemingly disappears after return from 1823 expedition	

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#### D. REPLACEMENTS (May 1820):

Captain John R. Bell, Light Artillery; Journalist; age 35 (ca. 1785-1825) West Point instructor in tactics; replaced Biddle as journalist when he returned with Long to join the expedition at the cantonment in May, 1820		Bell submitted a separate report; James did not have his notes
Dr. Edwin James, physician, botanist, and geologist; age 23	(1797-1861) Vermont native; graduated from Middlebury College in 1816 then studied medicine under his physician brothers and also botany under famous botanists Amos Eaton and John Torrey; also interested in geology and published on both botany and geology; Army surgeon and advocate for various social issues	Replaced William Baldwin and Augustus Jessup when he returned with Long in May, 1820

#### E. ASSISTING AGENTS (Joined the exploring party at St. Charles, Missouri, June 25, 1819):

Major Benjamin	(1793-1842) Accompanied expedition up Missouri	Assured the local tribes	
O'Fallon, Indian	River to meet with local natives for punishment and	the scientists were	
Agent; age 26	peace treaties	friendly and peaceful	
John Dougherty, assistant Indian agent and interpreter; age 28	(1791-1860) Born in Kentucky; worked for Manuel Lisa's fur trade company 1809-1819; traveled with Say and others on overland trip to visit the Konza (or Kansa) village, and continued this assistance at Engineer Cantonment; also served as hunter	Wide experience with native groups; assisted ethnographic study and relationships with local groups	

### II. Personnel for the Revised Mission: Journey from Engineer Cantonment to the Rocky Mountains (James 1966, I:425 [1822])

Scientific party assembled for Rocky Mountain trip	Major Long, Captain Bell, James, Say, Peale, Seymour; and Lieutenant Swift who also commanded the military guard	
Military Escort (Corporal Parish and 6 privates; also served as hunters)	Rifle Regiment: Corporal W. Parish and privates, J. Verplank, R. Foster, M. Nowland, P. Bernard, and C. Myers; Artillery private: J. Sweney	Nowland, Myers, and Bernard deserted while on the Arkansas River and destroyed valuable notes
Other civilian help	Han? Dougherty, hunter; A. Ledoux, farrier and hunter; Z. Wilson, baggage handler; D. Adams, Spanish interpreter; and 2 engagés: Duncan and Oakley	Ledoux engaged at Pawnee Village, stayed until Aug. 7
Added Guides/ Interpreters	S. Julien (hired at Engineer Cantonment) and J. Bijeau (engaged at Pawnee village)	Bijeau stayed until Aug. 7

Name	Enlistment Record	Rank	Branch	Birthplace	Age	Occupation	Comments
John Fitzpatrick	408, p. 184 (under F)	Private	Artillery	Ireland	44	None given	Discharged 9/30/1819 (time expired; would not have spent the winter at Engineer Cantonment)
Lewis Henserling	1059, p. 187 (under H)	Private	Artillery, Company F	Germany	21	Farmer	Transferred to 6 <sup>th</sup> Infantry 8/1/1820
Jacob Halinger	859, p. 168 (under H)	Private	Artillery, Company F	Bucks Co., Pa.	32	Farmer	Transferred to 6 <sup>th</sup> Infantry 8/1/1820
John McGaliger	(unknown)						
Joseph Norman	187, p. 18 (under N)	Private	Artillery, Company F	Middlesex Co., N.J.	27	Laborer	Transferred to 6 <sup>th</sup> Infantry 8/31/1820
Samuel Roan	(unknown)	Sergeant					(Roan is identified as a sergeant in Long's letter to Calhoun)
John Sweeny	1272, p. 108 (under S)	Private	Artillery, Company F	Philadelphia, Pa.	22	Painter	Transferred to 6 <sup>th</sup> Infantry 8/31/1820
James Trimble	331, p. 193 (under T)	Private	Artillery, Company F	Ireland	32	None given	Transferred to 6 <sup>th</sup> Infantry 8/31/1820
Almon Willcot	3, p. 26 (under W)	Private	Artillery, Company F	N.Y., N.Y.	30	Laborer	Transferred to 6 <sup>th</sup> Infantry 7/29/1820 ( <i>identified as Almon</i> <i>Willcot by Wood</i> 1966:76, note 52)

#### Table 2. Enlisted men serving as escorts for the Long Expedition.

#### NOTES

<sup>1</sup> For background on the scientific aspects of the Long Expedition see Howard E. Evans, *The Natural History of the Long Expedition to the Rocky Mountains, 1819-1820* (New York: Oxford University Press, 1991), and George J. Goodman and Cheryl A. Lawson, *Retracing Major Stephen H. Long's 1820 Expedition: The Itinerary and Botany* (Norman: University of Oklahoma Press, 1995).

<sup>2</sup> In the U.S., "cantonment" generally refers to a temporary military encampment of some extended but limited duration, such as over-winter or longer. Quarters and other construction are appropriate to the expected length of stay and conditions. Camp Missouri became Cantonment Missouri once the barracks could be occupied.

<sup>3</sup> John R. Bozell, Gayle F. Carlson, and Robert E. Pepperl, eds., "Archeological Investigations at Engineer Cantonment: Winter Quarters of the 1819-1820 Long Expedition, Eastern Nebraska," *Publications in Anthropology* No. 12 (Lincoln: Nebraska State Historical Society, 2018). The full list of contributors to this publication include: William T. Billeck, John R. Bozell, Gayle F. Carlson, Jeremy S. Dillon, Carl R. Falk, Hugh H. Genoways, Amy Koch, Thomas E. Labedz, Mary E. Malainey, Curtis Nepstad-Thornberry, Catherine A. Nickel, Robert K. Nickel, Robert E. Pepperl, Michael A. Pfeiffer, Paul R. Picha, Brett C. Ratcliffe, and Karen A. Steinauer.

<sup>4</sup> Hugh H. Genoways and Brett C. Ratcliffe, "Engineer Cantonment, Missouri Territory, 1819-1820: America's First Biodiversity Inventory," *Great Plains Research* 18 no. 1 (Spring 2008): 3-31.

<sup>5</sup> The Official record of the Long Expedition was compiled by Edwin James within two years following the journey and is used extensively throughout this issue and in Bozell, Carlson, and Pepperl, eds., Publications in Anthropology. The report was based on James's notes and also on those of other expedition members and was titled Account of an Expedition from Pittsburgh to the Rocky Mountains Performed in the Years 1819 and 1820. By Order of the Hon. J. C. Calhoun, Secretary of War, Under the Command of Major Stephen H. Long, of the U.S. Topographical Engineers and often referred to simply as 'the Account.' Five versions of the account have been published. The original intention was to publish simultaneously original versions in Philadelphia and London. See Neal Woodman, "History and Dating of the Publication of the Philadelphia (1822) and London (1823) Editions of Edwin James's Account of an Expedition from Pittsburgh to the Rocky Mountains," Archives of Natural History 37(1) (2010): 28-38. Based on examination of contemporary correspondence and advertisements (Woodman, "History and Dating," 31-33), the Philadelphia edition was available to the public. in a two-volume set in December of 1822 (cited as "James 1822" based on Woodman's research), but the London, three-volume version was not issued until February of 1823 (cited as "James 1823"). Both bear the date 1823 in the frontispiece. Woodman ("History and Dating," 29) noted that the two versions vary markedly in format, titles, content, and illustrations. In 1905, Reuben Gold Thwaites (ed.) published the Account in his Early Western Travels series (Vols. XIV-XVII), Cleveland, Ohio: Arthur H. Clark, 1905). While the 1823 London text forms the basis for the Thwaites work (cited as "James 1905" or in some cases "James in Thwaites 1905"), it contains additions and annotations from the 1822

Philadelphia version. In 1966, the Readex Microprint Co. produced a complete facsimile edition of the two-volume 1822 Philadelphia edition and herein appears as "James 1966 [1822]." A final version was released in 1972 by the Imprint Society; it is a significantly abridged edition of the of the 1822 Philadelphia version. It is not often used and cited as "James 1972." Various authors in this issue, and in Bozell, Carlson, and Pepperl, eds., *Publications in Anthropology*, used whatever editions were available to them, although every effort has been made to accurately cite the correct edition, volume, and page number. Due to the variation in the 1822 and the 1823 versions, readers are encouraged to consult both for a more complete understanding of the Long Expedition chronicle.

<sup>6</sup> Willima H. Goetzmann, *Army Exploration in the American West, 1803-1863* (Austin: Texas State Historical Association, 1991) and *Exploration and Empire: The Explorer and the Scientist in the Winning of the American West* (Austin: Texas State Historical Association, 2000).

<sup>7</sup> Robert E. Pepperl Engineer Cantonment Project Research Papers [Historic Context, Overview of the Long Expedition, and the Scientific Party] (mss on file, Lincoln: Nebraska State Historical Society, State Archeology Office, 2010); Robert E. Pepperl and John R. Bozell, "Chapter 2: The Long Expedition and Engineer Cantonment" in Bozell, Carlson, and Pepperl, eds., *Publications in Anthropology* and Jesse Poesch, *Titian Ramsay Peale, 1799-1885, and His Journals of the Wilkes Expedition* (Philadelphia: Memoirs of the American Philosophical Society No. 52, 1961).

<sup>8</sup> The American Philosophical Society (APS) was instrumental in assisting the development of the scientific component of the expedition, its agenda, and to some extent, its members. It now also plays an important role in preserving and making accessible materials related to the expedition, such as images of Titian Peale's drawings and paintings from that trip. This scientific society was founded in 1743 by Benjamin Franklin for the purpose of "promoting useful knowledge," making it the oldest of the various intellectual organizations in America that were centered in Philadelphia in the late eighteenth century. From the beginning, its members included key political figures such as Thomas Jefferson and Benjamin Franklin, as well as leading scientific minds and other scholars and civic leaders. It was a very influential factor in developing the Lewis and Clark and Long expeditions. Major Long met frequently with the intellectual community in Philadelphia for planning the scientific effort. Thomas Say became an elected member and curator of the APS in 1821 and contributed often to the Society's scholarly publication, Transactions. During 1833, Titian Peale also became a member of the APS and was made curator of the Academy of Natural Sciences in Philadelphia that Say helped found in 1812

<sup>9</sup> Unlike the *Western Engineer* that was specifically designed by Major Long for travel on the western rivers, the contracted steamboats provided to the Military Branch were poorly suited to the unique challenges of this trip and failed in their attempt to ascend the Missouri River. Instead, it became necessary for the military contingent to continue the journey in keelboats that were powered by hand, either by pushing with poles on the boat or hauled upstream by men on the riverbank pulling on heavy lines (*cordelles*) attached to the boat. This took a toll on the men from the exertion, as well as the exposure to the elements and long periods of time in the water, leaving them greatly fatigued.

By the time they reached their destination, this condition left the troops poorly prepared for the rigors of constructing their over-winter encampment, and more vulnerable to disease.

<sup>10</sup> Hiram M. Chittenden, *The American Fur Trade of the Far West* (New York: Barnes and Noble, Inc., 1935), 105, 157.

<sup>11</sup> Mark W. Kelly, *Lost Voices on the Missouri: John Dougherty and the Indian Frontier* (Leavenworth, Kansas: Sam Clark Publishing Company, 2013).

<sup>12</sup> Richard E. Oglesby, *Manuel Lisa and the Opening of the Missouri Fur Trade* (Norman: University of Oklahoma Press, 1963).

<sup>13</sup> John R. Bell, "The Journal of Captain John R. Bell, Official Journalist for the Stephen H. Long Expedition to the Rocky Mountains, 1820." In *The Far West and the Rockies Historical Series 1820-1875*, Vol. 6, Harlin M. Fuller and LeRoy R Hafen eds. (Glendale, California: Arthur H. Clark, 1957), 97, 103-104; John C. Fredricksen, *Green Coats and Glory: The United States Regiment of Riflemen, 1808-1821* (Youngstown, New York: Publication of the Old Fort Niagara Association, 2000); and Richard G. Wood, *Stephen Harriman Long, 1784-1864: Army Engineer, Explorer, Inventor* (Glendale, California: Arthur H. Clark, 1966), 93.

<sup>14</sup> Wood, *Stephan Harriman Long*, 76n2. Various versions of the expedition accounts use different spellings for some individuals—particularly for civilians and enlisted men. It is not possible with any degree of confidence to determine what the correct spellings of these individuals are, so the spellings are used as they appear in archival accounts. These include: 1) John Sweeney, Swaney, Sweney, Sweeny; 2) Stephen Julien, Julian; 3) Joseph Bijou, Bijeau; 4) Abraham Ledoux, Ladoux; 5) Mord Nowland, Nolan, Noland; 5) Peter Banard, Bernard, Bernard, Barnard; 6) Charles Meyers, Myers; 7) Lewis Henserling, Hoinserling; 8) Jacob Hollinger, Hallinger; 9) John McGaliger, McGabiger; 10) Samual Roan, Rowen, Rouse; and 11) Alden/Almon Walcott, Willcot.