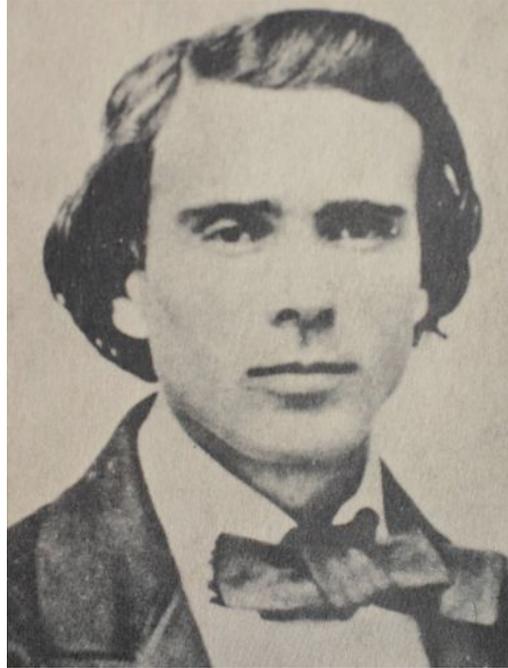


Mariner on a Dusty Sea: Josiah Gregg

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The wagon train contained nearly 100 wagons carrying more than 200 men accompanied by perhaps a dozen smaller vehicles, dearborns and the like, and a couple of cannons. It had been almost ten weeks since it had departed from Independence, Missouri, and now in the heat of late July the journey's end was not far distant. A group of ten or twelve horsemen rode out well ahead of the main party, impatient to arrive and to announce the proximity of the traders and their goods to those at their destination. One of the horsemen recorded the event:



Ascending a table-ridge, we spied in an extended valley to the northwest occasional groups of trees skirted with verdant corn and wheat fields, with here and there a square block-like protuberance reared in the midst. A little farther and just ahead of us to the north irregular clusters of the same opened to our view. "Oh, we are approaching the suburbs!" thought I, on perceiving the cornfields and what I supposed to be brick-kilns scattered in every direction. These and other observations of the same nature becoming audible, a friend at my elbow said, "It is true those are heaps of unburnt bricks, nevertheless they are houses – this is the city of Santa Fé."

Josiah Gregg, the narrator, was on his first journey from Independence to Santa Fé. The year was 1831. He would cross the untamed prairie seven more times in the next nine years.

The Gregg family moved from Ireland to Pennsylvania in 1682. Josiah's father, Harmon was born there in 1774. Near the end of the eighteenth century the family moved to North Carolina. By that time, Harmon had married. In the early 1800's Harmon and his family moved to Tennessee. Josiah was born there in Overton County, the fifth of eight children. The family moved to Illinois and then, by the beginning of the War of 1812, had relocated to Cooper's Fort in Missouri, in Howard County, near the Missouri River. It was here that Josiah was raised, at the edge of settled country, with a vast frontier to the west. Self-reliance was central and there were perils to test the

measure of determination. When Josiah was eight, marauding Indians killed his uncle and kidnapped his young cousin Patsy. She was soon recovered, but the precariousness of frontier existence and the courage to confront it were built into every soul.

Josiah was not a strapping and burly farm boy, but a somewhat delicate lad who did what he could in spite of not infrequent bouts of sickness. He did gain portions of his father's self-sufficiency and ingenuity, which would benefit him in his own times on the prairie. Josiah was of a more studious mien, reading everything he could find. He had a quick facility with numbers and their manipulation. He had a careful eye. There was a school of sorts at Cooper's Fort and Josiah absorbed all it had to offer. Students would seek help from him as often as from the "teacher". Before his teens he built a wooden quadrant that he could use to measure the heights of trees, much to the disbelief of other children. When he was sixteen he began the study of surveying with his brother John. When he was eighteen, he went to Liberty at the western edge of the territory where he founded a school and taught for a year.

By the early 1820's trading expeditions to Santa Fé had begun. In 1822, Harmon Gregg was a member of the Becknell party, one of the earliest to reach Santa Fé. In 1824, Josiah's older brother Jacob was one of eighty men in twenty-five wagons bringing \$30,000 worth of goods across the prairie. The allure of the prairie had quietly woven itself into the Gregg fabric. In 1825, the Gregg family uprooted and resettled about a hundred miles west in Jackson County not far from where the town of Independence would be founded in 1827. Both in 1825 and 1826 Josiah's brother John made the trek to Santa Fé. Meanwhile, Josiah was trying to determine a suitable profession for the application of his mixture of talents. First he considered medicine, applying for an apprenticeship with a noted doctor in Saline County, about fifty miles east, but was declined. So he decided to study the law.

His study proceeded with some diligence but without passion. He informed his brother "law was the only study he had ever undertaken, in which he did not think he had been able to make reasonable progress." In 1830 he began to have significant problems with his health. By autumn he was bedridden where he remained through the winter. In the spring of 1831 his doctor suggested a strange remedy, but one making reasonable sense to the Gregg Family, a trip across the prairie. So Josiah and a few belongings were loaded onto a wagon headed for Santa Fé. For the first few days, all he could do was lie in the wagon, but he filled his time by studying Spanish. After a week he was able to ride his horse for part of the day. His strength grew and his health began to return. By July he was fully a member of the expedition and riding with the advance party into Santa Fé. On that horse he had found his calling.

Josiah did not return to Independence until the fall of 1833. He had gained an excellent command of the Spanish language and a feel for the customs and people of New Mexico. By the spring of 1834 he had arranged credit and filled his wagons with merchandise to make another trek to Santa Fé. In the spring of 1835 after selling his goods, he decided to journey to the Mexican city of Chihuahua, five hundred miles to the south to purchase Mexican textiles. Once there he decided to explore further and set out for Durango, then Zacatecas, and on to Aguascalientes, deep in Mexico. He returned to Santa Fé early in 1836 and to Independence that fall. The spring of 1837 saw him once again on the trail to Santa Fé. Again in 1837 there was another trip to Chihuahua

and in the Spring of 1838 the return to Independence. And in the April of 1839, once more he set out across the prairie, this time from Van Buren, Arkansas, with his brother John and a dozen others. They took a new route, paralleling the Canadian River just north of the Llano Estacado. From Santa Fé Josiah again made the trip to Chihuahua and back. The group headed east from Santa Fé in February 1840 and were back at Van Buren by late April. Josiah would not see Santa Fé again. His nine years on the prairie would never be forgotten. He had carefully kept a daily journal of the entire period.

Josiah returned to the family farm near Independence shortly thereafter where he remained until the summer of 1841. That summer he and his brother John decided to take a trip to Texas to sell mules and see the country. They returned to John's property on October 26. On the 29th Josiah purchased 640 acres in Sabine Parrish, Louisiana. He left the area again in early November, feeling that he had not seen enough of Texas. He rode to Houston and by the middle of the month to Galveston. In early December he went on to Austin where he attended the inauguration of Sam Houston as President of Texas on December 13th. He recorded in his journal: "Gen. Houston was elected by a heavy majority, and now seems the favorite of the people: but I fear this will be found to speak badly of the judgment and morals of his constituents. His morals and honest character, and general deportment through life will not, I fear, justify the favor he now seems to enjoy." He left soon afterward and was back in Arkansas by mid-January of 1842.

Josiah spent the year of 1842 staying with his brother in Van Buren. He was hired to survey the city. He worked off and on, completing the job late in the year. He also went into partnership with his brother and a man named George Pickett, establishing a store. As the year drew to a close he determined it was time to write a book about life on the prairie based on his journals. By June of 1843 he had started to work in earnest and decided to travel to Philadelphia in order to devote all of his time to the project and to the task of finding a publisher. He worked for months in the Philadelphia and Camden, New Jersey area. By late November he was nearly finished and went to New York to seek a publisher. The memoir, *The Commerce of the Prairies*, was published in June 1844. His book would see six editions and was even translated into German. Somehow the once sickly half-Irish lad had triumphed over it all.

John Gregg had moved to the vicinity of Shreveport, Louisiana. Josiah arrived there in late July with a hundred copies of the book. Shortly thereafter his father died. Over the next few months his immersion in civilization began to weigh on him. In October he wrote to John Bigelow, a friend in New York who had helped him with the publishing of the book: "My organ of 'inhabitiveness' is, I believe, entirely annihilated, and my desire to be on the 'wild roam' continues to increase." But rapid book sales demanded his return to New York where he prepared for a second edition and wrote a new preface. He was back at Shreveport by February 1845. After several months of tending to his mercantile interests in Arkansas and visiting in Missouri and Louisiana he settled on the idea of attending medical lectures at the Louisville Medical Institute in Kentucky (later part of the University of Louisville).

He arrived in Louisville in early November. His course of study required six hourlong lectures per day. Despite a few problems with his health, he pursued his medical education with dedication. He was impressed and pleased with the professors. He developed a particularly warm relationship with the "demonstrator of anatomy",

Charles Wilkins Short. Short was the successor of the infamous Constantine Samuel Rafinesque at Transylvania University in Lexington. In 1838 Short and several others founded the Louisville Medical Institute. It is likely that Short, who was very interested in botany, piqued Josiah's interest in plants. During 1845, probably prior to his time in Louisville, Josiah made the acquaintance of two other physicians in St. Louis, George Engelmann and Frederick Adolph Wislizenus who also stimulated his interest in natural science. Josiah became a Doctor of Medicine on March 9, 1846.

By this time Josiah had become restless and was strongly feeling a need to return to his prairie life. He had summarized the situation in the last few pages of *The Commerce of the Prairies*:

Since that time I have striven in vain to reconcile myself to the even tenor of civilized life in the United States; and have sought in its amusements and its society a substitute for those high excitements which have attached me so strongly to prairie life. Yet I am almost ashamed to confess that scarcely a day passes without my experiencing a pang of regret that I am not now roving at large upon those western plains. Nor do I find my taste peculiar; for I have hardly known a man who has ever become familiar with the kind of life which I have led for so many years, that has not relinquished it with regret... It will hardly be a matter of surprise then, when I add that this passion for prairie life, how paradoxical soever [sic] it may seem, will be very apt to lead me upon the plains again, to spread my bed with the mustang and the buffalo under the broad canopy of heaven – there to seek to maintain undisturbed my confidence in men by fraternizing with the little prairie dogs and wild colts and the still wilder Indians – the *unconquered Sabaeans* of the Great American Deserts.

Col. G. C. Owens was organizing a trip to Santa Fé out of Independence. Josiah needed to shake free from his societal disguise and signed on. His departure was delayed by an outbreak of scarlet fever in his brother-in-law's family, but he sent his belongings with the expedition. On June 10, 1846 in a letter to George Engelmann he wrote:

I received the articles which you were so kind to procure for me by Dr. Wislizenus – all complete and in good condition – and I know not how sufficiently to express my obligations to you for your attentions – and very especially for the most valuable memoranda with which you have furnished me. I can only hope to be able hereafter – not to repay you in equally valuable favors but to reciprocate in at least an insignificant degree, by forwarding to you such specimens – as well zoological as vegetable and fossile – as I may suppose interesting to you.

On the 13th he mounted his horse and rode out to overtake the wagons.

That same month war had broken out between the United States and Mexico. Before Josiah left Independence he had been asked to accompany the Arkansas Regiment of the U.S. Army to Mexico, but he felt that his role was not clearly defined and chose to head to Santa Fé. After a few days on the trail, he received correspondence from the U.S. Senator from Arkansas imploring him to accept the mission. He rode back to Independence with only as much as he could carry on his horse. On the 22nd he rode to Shreveport to join the Arkansas Volunteers. On the 24th they were on their way to San

Antonio, Texas, where they arrived on August 28. The army of about 3000 men under Gen. John W. Wool left San Antonio on September 26 and crossed the Rio Grande into Mexico at Presidio on October 9. The march into Mexico was mostly unopposed. In fact the army was treated with decency and a spirit of cooperation by the Mexican citizenry. "The Chihuahuan Army", however, was often less cordial, stealing animals and food supplies, even destroying houses for firewood. Josiah was outraged at such behavior, and ever more so at the tacit acceptance displayed by commanding officers. At the same time, he was still quite uncertain of what his role was in the campaign. By mid-December the army had arrived at Parras, 90 miles east of Saltillo, where they settled in awaiting further orders.

During the month of January 1847, and early February Josiah spent his time traveling about the area between Saltillo and Monterey collecting plants. In a February 10th letter to Engelmann he wrote:

In Botany, I had done nothing until lately – until the last two months or less. Having sent my "portfolio" and drying paper across the Prairies to Santa Fé, I have been unable to procure any suitable paper until I chanced to find at Saltillo an abundance of pretty fair quality. Since that, I have collected from Saltillo here (rather to my surprise, at this very unfavorable season) nearly two hundred varieties of plants – half or three-fourths of which were in flower. I flatter myself with the hope that at least a few dozen of these may prove new, and a chance one interesting to you; if so, I shall feel amply rewarded for the little pains I have been at: for I have ventured to put you up a small "book" with nearly a hundred species, I think – though I in my very great hurry I did not count them. These I send in care of Professor Short, of Louisville, as I have met with a friend of confidence going directly to that place... I doubt not you will frequently find the same plants twice or thrice inserted, as I had not the leisure to pack them with sufficient care. I doubt not also, that you will consider them very badly "handled"; yet I hope the fact of this being my first attempt at practical botany will serve as an apology. I think I shall be able to do something better in the future. And now that I have embarked in it, and contracted a decided interest in the collection of plants, I trust I shall be able in the course of the ensuing spring and summer, to send you several hundred specimens – many new and some interesting.

Josiah's botanical activities were interrupted by the appearance of the Mexican army under Santa Anna a few miles south of Saltillo in the third week of February. On February 22nd the Battle of Buenavista began. By the morning of the 24th the Mexican forces were in retreat. The Mexicans lost more than a thousand men, the Americans several hundred, but hostilities in the area were over. Josiah gathered more plants during March and wrote Engelmann on the 25th that more specimens were on the way along with some for Professor Short.

On April 2nd a small contingent of soldiers arrived from Chihuahua and announced Col. Doniphan's triumph over Mexican forces there. Josiah learned that Col. Owens and the group that was on its way to Santa Fé had joined Doniphan's army and were in Chihuahua. Josiah had certainly had enough of his immersion in army life and returned with the small group of soldiers to Chihuahua, collecting plants along the way.

They arrived in Chihuahua April 23. There he met up with Dr. Wislizenus who had journeyed to Santa Fé and Chihuahua with traders in May and June of 1846. Wislizenus was taken prisoner at Chihuahua when the war began. He was not incarcerated, but was not allowed to leave the area. Wislizenus used his time to collect plant specimens for Engelmann. The two doctors were glad to see each other again. Josiah was able to reclaim his wagon and belongings which had arrived with the Owens group. Doniphan's regiment was returning to the U.S. They left Chihuahua on April 28 for Saltillo accompanied by the two doctors. When they arrived, Josiah received correspondence from a trader who offered to finance a buying trip to New York. Josiah decided to seize the opportunity. The group proceeded through Monterey and on to Matamoros. All the while the two doctors gathered plant specimens.

Josiah arrived at New Orleans on June 13 and, after traveling through Philadelphia and Washington D.C., at New York on July 12. There he received "a telegraphic dispatch" from the trader informing him that the expedition was canceled. He decided that he wanted to return to Mexico, possibly in some capacity with the U.S. government. He returned to Washington to see what he could arrange. On July 30 he visited President Polk. Josiah was quite disappointed: "It is remarkable that a man so short of intellect should have been placed in the executive chair!" He decided to have no more involvement with the government and to return to Saltillo to practice medicine. From Louisville on August 13th he mailed a package of Mexican specimens and wrote a long letter to Engelmann. It began: "You must allow me to apologize again for my delay in sending the collections, etc. which I have so long promised you." In the letter he explains the curious symbol code he used to describe "size and abundance of the plants." Engelmann later summarized the value of the collections of the two doctors in his *Memoir of a Tour to Northern Mexico*:

In examining the collections of Dr. Wislizenus, I have been materially aided by having it in my power to compare the plants which Dr. Josiah Gregg, the author of that interesting work, "The Commerce of the Prairies," has gathered between Chihuahua and the mouth of the Rio Grande, but particularly about Monterey and Saltillo. And a share of which, with great liberality, he has communicated to me. His and Dr. W's collections together, form a very fine herbarium for those regions.

Josiah was unable to extricate himself from the country until November 28 when he boarded a steamer at New Orleans.

He arrived in Saltillo on January 4, 1848. On the 24th he wrote Engelmann describing his traveling difficulties and commenting: "As to botany, I have done virtually nothing yet: the month of December was unusually cold, so that, from Matamoros here, vegetation was pretty much frost-bitten... I shall therefore leave this subject – as well as other branches of natural history – to some future communication, for I have done little else as yet but endeavor to get myself to rights in my new domicile – barring a little attention to medical practice, into which I have been drawn by the Mexicans." By May his medical practice was well established and he was tending to the sick day and night. On May 15th he wrote his brother John: "I made a rough estimate of my practice for the month of April. It amounted to between four and five hundred dollars. This month will doubtless be more." He had become a respected and revered citizen of

Saltillo. During the summer he began to take small trips around the area hunting plants, and by autumn he was making more frequent and more extensive forays, but as the year drew to a close he found himself again with a yearning to roam.

On the 14th of December he joined "a distinguished party of Saltillenses" leaving on a trip to Mexico City. The group consisted of 8 men and 3 women, but with servants the number reached about 30. They arrived in Mexico City on January 8, 1849. Josiah spent the rest of the month "looking at the city and surrounding country." On the 1st of February he wrote Engelmann:

When I left Saltillo, I had not my future route fully planned out; I have, ever since entering Mexico last time, contemplated a tour upon the Pacific Coast, as far north as California, and perhaps Oregon: and now that so much is said about the mines of California, I have added inducement to go that way. I have therefore *about determined* – if not positively determined – to leave here toward first of March for the Pacific Coast, via Morelia, Guadalajara, etc. to Mazatlan... I shall send you (via Vera Cruz) before leaving this place, my entire botanical collections, etc. not very extensive, to be sure, as I was most of the time at Saltillo, whose vicinity I had examined pretty well before. Still – all in all – including duplicates of many sent you before – I suppose I must have nearly as many species as I sent you before. These all will go numbered, keeping a memorandum of them myself.

Josiah did not meet his March deadline, unable to pull himself away from the culture, architecture, and endless unseen landscapes of the area. On the 14th of April he again wrote Engelmann:

I have now put up to send you from here some 700 specimens, including all my collections since I last entered Mexico. Among these I purposely [sic] embraced a great number of those I had already sent – many others have doubtless been introduced without my knowing it; nevertheless I think more than half are distinct; and a few I hope new and interesting. I have followed the system of numbering as you directed; but I find it impossible at present to copy my notes; yet I will do it as soon as possible and send you.

By this time Josiah had assembled a group of six men and "a Mexican servant" to accompany him on his trip northward. They left Mexico City on April 26. Traveling slowly, they reached Guadalajara on May 17 and Mazatlán on June 7. There he paused for more sightseeing and a bit of casual collecting. On June 30 he wrote Engelmann and described how he had separated his botanical collections into two sets, one complete and another with duplicates, which he would send separately in case of loss and requested that if Engelmann received both that he forward the duplicate collection to Professor Short in Louisville. This would be his last known communication with Engelmann.

Due to the parched climate and his growing desire to reach California, he abandoned the idea of making the trip on horseback and on July 16 boarded a ship bound for San Francisco. On the 30th of August he described his arrival at the harbor of San Francisco which "resembled those of the large cities of the world, on account of the immense forest of masts which loomed up before us." After reaching San Francisco any

records Josiah certainly would have kept were lost, but a general picture of the next six months has emerged.

Always one who enjoyed being in the middle of nowhere, Josiah made his way by October to a tiny community called Rich Bar on the Trinity River in northern California. It was a rugged area almost 300 miles from San Francisco but only about 80 miles from the Pacific Ocean. A group of men decided to journey westward to the ocean to see if they could locate a suitable bay where ships could bring supplies. On November 5 twenty-four men departed. Josiah was elected leader. The weather was miserable and after a couple of days sixteen men returned to Rich Bar. Josiah and seven other persevered. Food quickly ran out and they were forced to survive on whatever they could find, often going a day or two without food. As they neared the coast they met a redwood forest, a jumble of standing and fallen giants. They could scarcely make two miles a day. Ever the man of science, Josiah wanted to measure heights and girths of trees. The others scoffed and hurled vocal abuse. They reached the sea in the first week of December near the mouth of what is now the Little River. About ten miles north they found a suitable bay (Trinidad Bay). On the 7th of December Josiah carved the latitude, barometric pressure, temperature, the date, and his name into a large tree beside the bay. This tree was observed in the spring of 1850 by a group of explorers who reached the area by ship. The tired, bedraggled men decided to head south to try to reach civilization. After friction as to routes, they broke into two groups. Josiah's group headed inland and turned south. The winter forest was cruel. They had little ammunition and began to starve. Josiah grew weaker and weaker. On February 25, 1850, near Clear Lake, he fell from his horse and died a few hours later. He was buried there and his belongings abandoned.

Josiah Gregg was a classic character of the American western frontier. He represented an important blend of vital forces in the country at the time, the unpolished individualism and indomitable courage of a Daniel Boone explorer and the innocent inquisitiveness and quest for orderliness growing in men of science like Engelmann, John Torrey, and Asa Gray. He went to places no one else would go and found a way to not only survive but to succeed, a champion of both frontiersmanship and careful science. In his description of *Greggia* (now *Nerisyrenia camporum*) in *Plantae Wrightianae Texano-Neomexicanae* in 1850, Asa Gray wrote:

Also gathered, some years since, "west of Parras" in Cohahila [sic] and later at Cerros Bravos, by Dr. Josiah Gregg, the author of the "Commerce of the Prairies", and other writings on the physical character, productions, and resources of New Mexico, and who has for several years past been a most diligent explorer and collector of botanical treasures of New and Northern Mexico. Intelligence of his lamented decease, in California (from over-exertion in scientific investigation in the interior) having reached me which engaged in the study of this interesting plant – one of his own discoveries, -- I dedicate the genus to his memory, and give to the species a name that associates it with the plains of the Southwest, which this enterprising discoverer has so largely explored and so ably illustrated.

Josiah's Plants

One hundred sixty years have passed since Josiah Gregg's last plant specimen was gathered. His early botanical efforts were sincere but not scientific. It was George Engelmann who convinced Gregg to number his specimens and to record data, but, even so, Gregg reused numbers and did not assign numbers in the order of collection. The majority of his specimens were sent to Engelmann in St. Louis, but a significant number went to Charles Wilkens Short in Louisville. The Engelmann material is housed at the Missouri Botanical Garden and is databased. The C.W. Short Herbarium was sent to the Smithsonian Institution upon his death and was ultimately placed at the Academy of Natural Sciences in Philadelphia and is not databased.

The Gregg material at Missouri amounts to almost 1900 sheets representing 123 families, 530 genera, and 1020 different species. It provides an excellent view of Gregg's botanical activity. More than one-fourth of the families are represented by a single species. More than one third of the families are represented by a single genus. Almost one half of the different species come from the ten largest families in his collections (see table below).

Family	Genera	Species	# of specimens
ASTERACEAE	78	143	251
FABACEAE	39	116	215
EUPHORBIACEAE	13	44	74
SOLANACEAE	8	38	65
POACEAE	27	30	43
CACTACEAE	12	27	47
BORAGINACEAE	9	27	41
VERBENACEAE	7	24	62
CONVOLVULACEAE	7	22	44
NYCTAGINACEAE	10	20	35

The genera with the largest number of species are *Solanum* (17), *Chamaesyce* (15) *Tillandsia* (10), *Opuntia* (10), *Acacia* (10), *Euphorbia* (10), *Heliotropium* (9), *Physalis* (9), *Verbena* (9), *Asclepias* (9), *Nama* (8), and *Salvia* (8).

Since Gregg was one of the first to collect deep in Mexico, a number of his specimens are vitally important. The Missouri Botanical Garden credits him with 89 type specimens in 24 families. The New York Botanical Garden shows 70 Gregg specimens specifically designated as some form of type (type, holo-, syn-, lecto-, isosyn-, etc.) in 28 families. Since the NYBG was founded in 1891, the presence of these types suggests a wider dispersal of Gregg's collections. Certainly other herbaria are involved. 42 of the New York specimens are *sine numero* (none among types at Missouri). 17 of the sheets carry the same date and specimen number as a sheet at Missouri. The Academy of Natural Sciences lists but one type from Gregg, a lectotype of *Drejera* (*Anisacanthus*) *greggii* numbered 587 which matches the number and date of a lectotype at NYBG. It is interesting to note that among all specimens mentioned above (general collection and types at MO, types at NY and PH), the earliest collection date mentioned was 26

December 1846, by which time he was in the vicinity of Saltillo, far into Mexico. There is no record of plant specimens ever being collected in New Mexico.

Attempts to name a genus for Gregg have been made (*Greggia* Engelmann = *Cowania*, *Greggia* A. Gray = *Nerisyrenia*), but none has survived. Roughly 80 species epithets have been generated to honor Gregg, but taxonomic revisions have eliminated more than half (see <http://www.csupomona.edu/~larryblakely/whoname/greggiis.htm> for a 2004 summary). In 2009, eleven taxa in New Mexico still carry Gregg's legacy:

Acacia greggii Gray var. *arizonica* Isely (FABACEAE)

Acacia greggii Gray var. *greggii* (FABACEAE)

Ceanothus greggii Gray var. *greggii* (RHAMNACEAE)

Dalea greggii Gray (FABACEAE)

Fraxinus greggii Gray (OLEACEAE)

Haploesthes greggii Ray var. *texana* (Coulter) I.M. Johnson (ASTERACEAE)

Heliotropium greggii Torrey (HELIOTROPACEAE)

Peniocereus greggii (Engelmann) Britton & Rose var. *greggii* (CACTACEAE)

Silene laciniata Cavanilles var. *greggii* (Gray) C.L. Hitchcock & Maguire
(CARYOPHYLLACEAE)

Thymophylla setifolia Lagasca var. *greggii* (Gray) Strother (ASTERACEAE)

Tiquilia greggii (Torrey) A. Richardson (BORAGINACEAE)

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