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John Muir In South America
(Part 2 of "John Muir, The Tree that Would Puzzle a Monkey")

by Deborah Ellen McMillin

[Editor's Note: Deborah's first article about John Muir, "The Tree that Would Puzzle a Monkey: John Muir and the Araucaria Araucana," was published in the November/December 2022 edition of the Cultivator, which is available to Champaign County Master Gardeners online via Box.]

He was committed. On August 12, 1911, John Muir, age 73, boarded a steamer from Brooklyn, New York to the coast of Brazil, as enthusiastic as he had been 44 years earlier when he traveled by train from Indianapolis to Jeffersonville, Indiana and crossed the Ohio River into Louisville, Kentucky to start his walk south to the Gulf of Mexico. Decades earlier, on September 1, 1867, the young John Muir's intention had been to travel on to the lush tropics of the Amazon, his imagination stirred by the German explorer and naturalist Alexander von Humboldt's writings about his Amazon and Brazil travels. Muir was as uncertain now as he had been at age 29: *Where would this travel take him—or, for that matter, would he return?*

Now, as an elder with international name recognition in the fields of geology, botany, and conservation, he was as fearless and resolute in his intentions as he had been as an uncredentialed young man who had labeled his identification on a pocket notebook, "John Muir, Earth-planet, Universe." Then, he had been a solitary wanderer with no possessions worth a robber's bother. He had knocked on strangers' doors—if not paying, then relying on the generosity of southern mountain folk for a dinner and a place to sleep for a night. He had written in his pocket notebook while crossing the Cumberland Mountains of Kentucky that he "was compelled to sleep with the trees in the one great bedroom of the open night." And when he awoke drenched with the early morning mist, he rejoiced in the beauty around him. Unbeknownst to the elder John Muir as he boarded that steamer, President Taft had already sent a memorandum to United States diplomatic and consular officers around the world, introducing "John Muir, Esquire, a distinguished naturalist and explorer," with a request that as part of their official duties they grant this traveler courtesies and assistance. Muir was to find that he did not need to knock during his 40,000-mile trek over two continents. For 33 weeks, the doors would open for him freely. He easily made friendships on his travels, his wit, intelligence and engaging personality drawing people in who offered him lodging and their help.

Amazon Travels in Brazil

Muir was 2 weeks at sea when he made landfall at the city now known as Belém, in the State of Para in Northern Brazil. Belém is located at Marajó Bay, near the estuary of the Amazon River, a starting point for traveling upriver. He was looking forward to observing vegetation of the Southern Hemisphere in its native habitat and familiarizing himself with species he had read about but never seen. He methodically read of the species of flora that interested him and located those species growing in local parks and botanical gardens before he set off to study the plants in their native habitat. On his first full day in Belém (August 30th), he was studying plants native to the Amazon in the Belém Botanic Garden when he took immediate interest in the giant Amazon water lily, *Victoria amazonica (*also named *Victoria regia* after British Queen Victoria), with floating pads up to 8 or 10 feet in diameter, native to the Amazon's shallow waters.

Muir's first full day of travel upriver by boat from Belém, on September 1st, found him within touching-distance of the Amazon palms and tropical vegetation along the riverbanks for hundreds of miles. He slept at night under a net, with an electric fan stirring the air and keeping mosquitoes at bay—a vast change from his nights 44 years

earlier, sleeping in the open, humid, Georgia air of the Bonaventure Cemetery, where he had contracted life-threatening malaria. His 6-day trip took him upriver as far as Manaus, near the mouth of the Rio Negro River, searching for the water lily without success.

Muir spent a week in Manaus with new friends who opened their homes and libraries to him. Since Muir did not speak Portuguese, his hosts were usually English speaking. For example, among his hosts were an American industrialist who was involved in the export of rubber from the *Heva* rubber trees for North American automakers, and Colonel May, the head of Madeira River Railroad, a company that was building extensive rail-lines to remote plantations and rivers for rubber export. Before his return to Para, Muir's acquaintances arranged to accommodate him in his search for the elusive *Victoria amazonica* in a remote lagoon where it had been seen recently. By skiff, guides took Muir into a channel with low water and overarching trees. When the channel became impassable because of fallen trees and vines, they attempted to travel by foot through the dense vegetation to reach the lagoon. Mud and jungle vines slowed their progress until it was determined that they would not be able to reach the lagoon, just a few miles away, and still have time to complete the return trip before dark. Muir exulted in the beauty of the trees, birds, butterflies, and even the jungle's dense vines and underbrush even though he was disappointed that he did not find the *Victoria amazonica* in its natural habitat.

Victoria amazonica at RBG Edinburgh. Natives grind water lily seeds to use as a flour for cakes.

Before leaving Para, Muir wrote to his close friend, Katharine Hooker (Sept. 19th, 1911), "Nevertheless I've had the most glorious time on this trip, dreamed of nearly a half a century—have seen more than a thousand miles of the noblest of Earth's streams and gained far more telling views of the wonderful forests than I ever hoped for." A trip upriver with tropical vegetation and palms crowding the Amazon riverbanks and a muddy hard slog through jungle underbrush found Muir reliving pages of the written words of Alexander von Humboldt's Amazon wilderness that had sparked his imagination as a young boy.

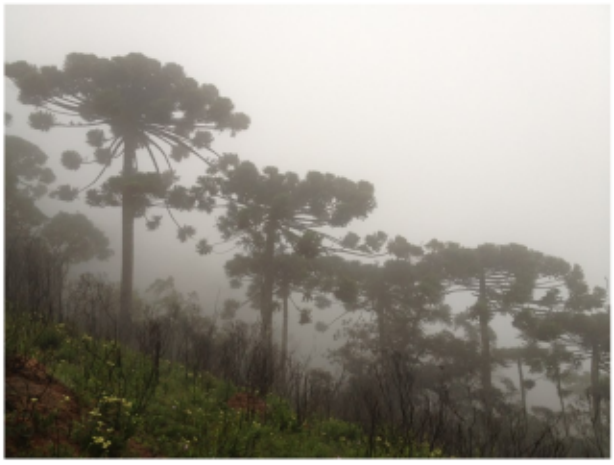
Brazil: Muir's Search for the Brazilian *Araucaria angustifolia*

Leaving Belém on a southbound steamer on September 26th, Muir's 10-day Atlantic sea journey to Rio de Janeiro, Brazil was his first step to locate the *Araucaria braziliensis (*due to a taxonomic revision, now known as *Araucaria angustifolia),* one of the two South American species of the *Araucaria.* It was his previous interest, when he had studied the ancient fossil remains of the species of *Araucaria* in the Petrified Forest in Arizona, that propelled him further south from the equator. As the ship approached the harbor of Rio de Janeiro in early morning mist and rain, he noted that geological features of the glacial-sculptured rocks were similar to Alaska, Yosemite, and the Alps and that the familiar hemlocks, spruces, and pines of the Northern Hemisphere were replaced with tropical vegetation. Strange to him, palms that he had envisioned walking to when he was a 29-year-old, he later observed growing on the glacial rocks high on the Corcovado Mountain.

On the steamer from Belém to Rio, Muir made an important contact that would facilitate his journey to locate the *Araucaria angustifolia* forests in Southeastern Brazil, not far from São Paulo. A Mr. Harrell, who was traveling to work at a lumber camp where forests of trees called Brazilian pine were being harvested and milled, described the tree to Muir. Muir was certain from the description that the Brazilian tree was the first of the *Araucaria species* that he was seeking. After 4 days in Rio, he left on a steamer southbound for Santos in the company of a Mr. Bouchet

(introduced to him by Mr. Harrell), Superintendent of the Parana Lumber Company, which owned nearly a million acres of *Araucaria* forest. Bouchet invited Muir to join his travels to a company-owned lumber camp in the interior forest in the State of Paraná. After traveling solo for about 9 weeks, it was a change when he left Rio on a small steamer to Santos with the lumbermen. Leaving Rio, he wrote that he had been in a "noble palmy ice land" and that every hour and every day he spent there was "well worth a hard lonely care-laden journey around the world."

From the port of Santos, he traveled northwest to São Paulo by rail, where he intended to go inland 400 to 500 miles into the State of Paraná's wilderness in southern Brazil. On the plateau outside of São Paulo he had his first glimpse of the *Araucaria angustifolia* of Brazil, with bare stems rising as high as 100 feet until thick tufts of horizontal, spreading branches turned inside out, prompting the common name, candelabra tree. After a day in São Paulo, Muir resumed his travels with the lumbermen, southbound by rail for Porto Amazonas on the Iguaca River. From the train window he could see prairie grassland and the surrounding rocky hilltops where *Araucaria* in the thousands stood. From Porto Amazonas, he traveled on a small river steamer into the Paraná wilderness to the lumber camp, where a vast forest of *Araucaria angustifolia*, the dominant tree of Brazil, was being milled. Muir spent a week in the forest making precise observations of the unusual tree in its native habitat. He later wrote to Katherine Hooker, "Just think of my joy in these noble aboriginal forests—the face of every tree marked with the inherited experiences of millions of years."



Auracaria angustifolia in Brazil. Photo by Adrian Michael. (Wikimedia photo ID listed on photo credits.).

Chile: Muir's Search for the *Araucaria araucana*

Returning to the coast, Muir sailed south to the port city of Montevideo, Uruguay and then to coastal Buenos Aires, Argentina to begin his second tree quest. He traveled west across the South American continent by rail to Chile where he hoped to find the rare *Araucaria imbricata*. Due to a taxonomic revision, it is now known as *Araucaria araucana,* or the common name assigned by the English in 1834, Monkey Puzzle Tree—a tree whose spiky, prickly leaves arranged spirally around a branch would be a puzzle for a monkey to climb.

At a stop in the Chilean capital, Santiago, which sits in a valley surrounded by the Andes mountain range to the east and the Chilean Coastal Range mountains to the west, Muir was assisted by the U.S. diplomat, Mr. Fletcher (following President Taft's request), with overnight lodging at the diplomat's residence and an introduction the next day to the Santiago Botanical Gardens. The Director of the Botanical Garden, German born Federico Albert, a botanist, forester, and founder of Chilean nature conservation (Muir's counterpart in Chile), was not in Santiago at the time. Muir did have contact with a person at the Natural History Museum who showed him a photograph of old *Araucaria* trees but did not know where the native forests were located and had never seen the tree in its native habitat. Four words of neat cursive handwriting by Federico Albert were written on the back of the photo: "*Araucarias* of Vulk. Tolhuaca." In German, Vulkan (or abbreviation Vulk.) is volcano. "Volcan Tolhuaca" was the clue. Even this brief cryptic note was a hint to direct Muir's next steps.

Araucarias of Vulk. Tolhuaca. c.1910. Courtesy of National Park Service, John Muir National Historic Site, JOMU 3335.

The Ambassador had introduced Muir to an American educator, Dr. Rice, who had a friend, Mr. Philip Smith, who had immigrated to Chile from Ontario, Canada in 1883 to install sawmills for the Watrous Engine Works Company of Ontario. Phillip Smith lived west of the Tolhuaca volcano near Victoria, Chile, so it was suggested that he might be helpful in Muir's search for the *A. araucana.* Arrangements were immediately made for Muir to visit the Smiths. Late afternoon that same day, November 14th, 1911, Muir boarded a train, riding 500 miles south through the night to Victoria. From that point he intended to locate an area known as the Araucaria Region, where the forests extended along the Andes near the snow line, and for which his sought-after tree was named. From the knowledge he did have—soil conditions, elevation, and temperature range of where the tree would grow—he would follow his intuition to locate the trees that would puzzle a monkey.

When he arrived in Victoria early the next morning, the Smiths were there to greet him and invited him into their home. A heavy rainstorm then necessitated a 2-day stay at their Victoria residence while waiting for the back-country roads to dry sufficiently for travel into the upper-elevation Andes forests. With weather clearing but streams overflowing and bridges and roads in rough condition, it was a treacherous 3-hour buggy ride to the Smith's logging ranch 15 miles from Victoria. The next morning, Muir wandered through wheat fields not far from the ranch house, sketching the high ranges of the volcanic peaks of Volcán Tolhuaca and Volcán Lonquimay visible in the western Andes. He studied the trees and shrubs of the nearby forest: Roble, which he identified as making the best lumber for use in construction and furniture making, and the shrub *Embothrium (*Chilean fire tree or bush) growing in masses in the open spaces and meadows with showy crimson spring flowers. He noted in his journal that he "had never passed through a finer forest of round-headed hardwood trees," with heights he estimated at 100 to 140 feet tall. He expressed outrage in his journal notes that this forest was rapidly being destroyed by the lumbermen who "rent to buy large tracts; cut the most valuable, Roble, etc., then ruthlessly burn all that's left; nine tenths or so. Dry limbs and brush are piled around every tree and the burning goes on until nothing but black monuments are left of all the flowery leafy woods. Then wheat is sown around the stumps and rubbish and scratched and reaped with sickles." He compared it to the deforestation he had witnessed in New Zealand.

The early morning of November 20th was shrouded in fog as Muir packed his gear to travel on horseback with the lumbermen who knew where the *Araucaria araucana* grew on towering ridges. John Hunter, a sawmill owner Muir had met the night before, would guide Muir and the accompanying party (Philip Smith, a Mr. Williams, and two Chilean packers) to the forests that Muir had traveled thousands of miles from his home in the Alhambra Valley of California to study. From Smith's ranch they rode on horseback across ridges, streams, and meadows until they came in sight of a ridge 1,000 feet high that bordered the south side of a glacier meadow. Scattered along the perimeter of the ridge top were the *Araucaria araucana* that Muir had traveled by rail across the Argentina pampas to Chile to see.

To reach the native groves of *A. araucana,* the group moved upwards on the precarious grassy slope. One of the horses fell and rolled. Muir was not deterred. He dismounted from his horse and, in his excitement, scrambled to the top of the high ridge to walk among the trees. Tracing the ridge a mile or two and descending to the bottom of another glacier meadow, they found a place to camp for the night near a glacier stream and underneath a grove of *Araucaria* on the *s*lopes of Volcán Tolhuaca. Muir eloquently wrote of his nighttime experience, "*Araucaria* in scattered groups or singly all the way down and up S. slope and fringing the horizon all around. A glorious and novel sight, beyond all I had hoped for. Yet I had so long dreamed of it, it seemed familiar. My three companions slept under tarpaulin tents, strangely fearing the blessed mountain air and dew." Once again as he had many times, John Muir comfortably slept under the trees "in the one great bedroom of the open night."

The following morning, Muir sketched and photographed six views of the ancient forests. Ancient trees with spine-like needles on thick straight trunks reached upward 160 feet, ending with a top-heavy umbrella-shaped crown of sharp, ragged needles. The landscape sketches also included seedlings with spreading branches and the juvenile conifers that have an attractive pyramidal shape until they lose their lower branches with age. Muir did obtain a male and female flower and cones before starting a return trip to Smith's ranch.

The group traveled a different track on their return, which gave new views of the *Araucaria* trees over 100 feet in height and extending for miles. He wrote that the "magnificent round-headed forest trees" extended over the whole plateau as far as the eye could reach, and interrupted only by small grassy prairies, and meadows with beautiful tall scarlet-flowered shrubs bordering the forests. By that evening, November 21st, he had returned to his hosts' ranch.

Tolhuaca volcano in background, where Muir camped. 1901-1902 photo..

A. aracara in Tolhuaca, Chile. 1907 landscape that Muir may have seen while camping nearby.

Muir later wrote to his daughter, Helen, about camping among the forests. "Guess how happy I was and how I stared at and admired these ancient trees I've so long dreamed of and what long stories I'll have to tell you. All I came to seek I've found and far, far more." He told Helen that he was often tired and could be bewildered in towns with strange languages spoken but that always a friendly soul, as if sent from heaven, would come to help him. He said that his health was better than when he had started his trip. He was near the conclusion of 4 months abroad, but his South American travels had been in his thoughts for 44 years.

Muir's visit to the *Araucaria araucana* forest was short. He had on his itinerary to visit the other "hot continent" of the world, Africa. As a teenager he had read a book by the Scottish explorer, Mungo Park, entitled *Travels in the Interior of Africa*. Were Mungo Park's words stirring new adventures in the elder Muir, who was now rejuvenated in body and spirit? His mother had predicted that he would "travel like Park and Humboldt some day." Now, he needed to move along quickly to obtain steamer passage to the African continent so that the trees and plants he wanted to see would be in the proper season to observe and study.

A. aracara forest, similar to what Muir would have seen. Upper Valley Villacara Chile, 1901.

Leaving Smith's home in Victoria on November 23rd, he returned to Santiago, Chile. By November 25th, he was eastbound, traversing the Andes by rail through tunnels and tracks curving around the steep mountainside. From the eastern foot of the Andes, it was 2 days of travel across the continent to coastal Buenos Aires, Argentina. There he set sail to Montevideo, Uruguay late in the evening on November 30th. He was in a race with the calendar to find a steamer to Cape Town before the "hot continent's" vegetation would fade with

seasonal changes. Montevideo was where his quest for the second *Araucaria* of the continent had begun a month earlier and where it would end on December 9th, when the steamer he had boarded headed out late into the darkness of the Atlantic Ocean. It was another tree, ancient and massive, now forefront in John Muir's mind: the *Adansonia digitata* or African baobab that Alexander von Humboldt had referred to as "one of the oldest inhabitants of our globe." It would be the start of another "John Muir, Earth-planet, Universe" daily pocket journal.

John Muir's Return Home

To friends and family, he wrote that "I've had the most fruitful time of my life on this pair of hot continents….Fain I would write about it, but it's utterly unletterable." While waiting for his ship to leave for South Africa, he wrote to his friend, Harry Osborn, that he had "a glorious time in this fine wild America. All I came to seek I've found and far, far more….I'll tell the story when I get back."

Close to his 74th birthday, Muir returned to New York by steamer on March 27th, 1912. He had traveled halfway around the world in 8 months. He was returning not only to his home in Martinez but to an ongoing political fight he had temporarily left behind in California and the nation's capital. It was not just his fight, but our nation's first major environmental battle—a decade of controversy and struggle to stave off San Francisco damming the Tuolumne River and creating a reservoir in the Hetch Hetchy Valley and Lake Eleanor in Yosemite National Park. It would be a water source for San Francisco's growing population. Years of energy were devoted by Muir and others to push against the power of the political elite of San Francisco and their land grab to benefit a small segment of society. Robert Underwood Johnson, on behalf of John Muir, lobbied Washington politicians relentlessly, untiring in his efforts, making personal contacts with government officials and writing editorials to leave Hetch Hetchy Valley as part of the Yosemite National Park landscape. Fueled by money and politics of that time, the fight came to a bruising conclusion in December 1913 when Congress passed the Racker Act (which Congress had debated since 1908), giving San Francisco the water rights they had been pushing for since 1901 with the Interior Department. It would be 1934 before the dam and aqueduct system would be complete and the spigots in San Francisco would flow with the pure water that flooded 300-feet deep the "Yosemite twin," the valley that Muir called the "people's cathedrals and churches" and the falls "its holy music."

Robert Underwood Johnson, the majority of the members of the Sierra Club, other organizations, and the public whose souls resonated to Muir's mystic glimmers of nature when reading his writings, had protested nationwide. The grassroots conservation movement may have lost the battle in 1913, but it did act as a wake-up call. They did win the war for environmental protection of the national parks and wilderness when Congress passed the National Park Service Act of 1916, setting new standards for the national parks that, to this day (due diligence still needed), prevent the parks from being seized or changed by local interests.

Johnson, Muir's longtime friend and influential force in the Washington capital who successfully played a major role in lobbying for Yosemite to obtain National Park status and protection, was editor of the prestigious Century Magazine in New York. Throughout their years of friendship, he had encouraged Muir to use his pen in the fight against the destruction of forests and desecration of lands. Johnson had asked Muir before he left on his travels in 1911 to write stories of his travels on the "two hot continents." Muir had mentioned in his journal entry that he sketched and photographed six views of the ancient A. araucana forests. He must have lost the photos as they were never found. He did have correspondence with Phillip Smith and John Hunter, requesting any photographs of the Araucaria araucana they might have. Muir was also unsuccessful in an attempt to obtain photographs from his contacts in Brazil and Africa. Photographs were now expected with magazine articles and Muir conceded that they

were worth a thousand words. He did have his journal notes typed up by a secretary shortly after his return, but he wanted better than what he had. His task of writing thousands of descriptive words was never completed, his stories not published. They would have been stories of his solo journey through the Amazon, the jungles of Brazil to the snowline in the Andes of Chile, across the ocean to Southern and Central Africa, the headwaters of the Nile, and homeward through southern Europe. The physical journey remained in his tiny, scrawled handwriting and penciled sketches in three small, approximately 3½" x 5", pocket notebooks for nearly 90 years until author Michael Branch meticulously researched Muir's notebooks, journals, and correspondence between relatives and friends and, in 2001, published "John Muir's Last Journey."

John Muir's Final Journey

The new year of 1914 found John Muir exhausted from the political battle to preserve Hetch Hetchy. He turned his attention to his notebooks and journals. He was returning to the climate of ice, snow, and glaciers of Alaska, a northern landscape so wild and grand he had visited seven times to scientifically study earth's glacial history. He may have found a touch of youthful vigor in revisiting manuscripts, notes, and articles that he haphazardly scattered in his den while writing. He worked from dawn to late at night to compose his Alaska journals into a cohesive narrative. He wrote to his friend, Katharine Hooker, that "when he had sacrificed most of his flesh by a lack of food and exercise, he would rattle up a mountain for reincarnation," perhaps the high Sierra mountains that he once said he could hear speak to him from his home in the Alhambra Valley.

He kept close to home, his lungs easily affected by the cool and rainy winter of the Alhambra Valley. By November, now in his 76th year, Muir's health was deteriorating, causing his work to slow. A week before Christmas, Muir left for Daggett, California, a small town in the Mojave Desert, to visit his daughter, Helen, and her husband, Buel Funk. Muir hoped that the drier air would improve his health. Helen, concerned that his cold was worsening, called a doctor who diagnosed Muir with double pneumonia and insisted that he should be moved by train to the California Hospital in Los Angeles. Helen requested Buel to travel with him to the hospital where he was admitted just before midnight on December 23rd. Feeling better the next morning, he requested his Alaskan manuscripts to work on. Shortly after, John Muir passed away alone in his hospital room. The unfinished Alaska manuscript lay scattered within reach on his blankets.

Perhaps John Muir was not alone. When he took his last breath, were the mountains of "ice & forests & flowers" calling him home? As his consciousness was leaving his body, was Muir with his grandfather in Dunbar on a childhood walk, where he had learned compassion towards all creatures of Earth? Was he wandering in the flat fields of Dunbar with his ear turned to hear the bird songs? Was he once again walking along the wild, stormy North Sea coast of Dunbar, the wildness that resonated in his being, allowing him to push past physical boundaries in the pursuit of understanding the beauty of Earth and its creation? "Let children walk with nature," he wrote during his walk towards the gulf as a young man with the intent to reach the Amazon. "Let them see the beautiful blendings and communions of death and life, their joyous inseparable unity as taught in woods and meadows, plains and mountains and streams of our blessed star." It was the inherent goodness of people and nature, the oneness of life and death of all on this planet that Muir had optimistically embraced. On his walk, he had spent 5 days and nights camping in the Bonaventure cemetery in Savannah, Georgia. On the first night, he inadvertently lay on a burial mound to find sleep. He awoke to early morning sunlight filtering through the live oak trees overhead, with an understanding that "death is stingless indeed and as beautiful as life and that grave has no victory, for it never fights. All is divine harmony." The divine harmony he found in the mountains and valleys of Yosemite he recognized immediately as his spiritual home. As Muir's soul took flight, were the mountains and waterfalls singing their hymns in unison in the universe's cathedral?

John Muir's passing on Christmas Eve was a shock to his family and friends as they were not aware how ill he was. Over 100 members from the Sierra Club traveled in a special train from San Francisco and the Bay cities to Muir's home in the Alhambra Valley for the Sunday, December 27th funeral in his home. The San Francisco Chronicle wrote for their readers that John Muir had a simple wooden casket that rested in the bay window just below the study where he wrote the majority of his books. Ferns and violets draped the coffin and branches of fir and pine were placed alongside the casket by mourners. Two large floral tributes, laurel and roses, had been sent from the Academy of Arts and Letters (by Robert Underwood Johnson) and the National Institute of Arts and Letters in New York. The family gravesite was a mile from the house along the Alhambra Creek, where a brief ceremony was held. A member of the Sierra Club placed on the coffin a bough cut from the *Sequoiadendron giganteum* that Muir had planted nearby forty years previously. As his coffin was being lowered into the grave, it was noted that there was quail and birdsong. "God's feathered creatures, that had come to know, and not fear, the man sang his requiem."

A. Araucana.
Monkey Puzzle Tree
at Kew Gardens.

Bird songs in the trees were an appropriate tribute to the man who loved all trees—all trees in his travel through what he called the Milky Way. Big trees, including the ancient Araucariaceae of the Southern Hemisphere and the massive baobab tree of South Africa. But closer to home, we remember him for his legitimate concern and tireless work to protect the big trees—the two California sequoias that are currently on the Endangered Species List: the massive *Sequoiadendron giganteum* of the Sierra Nevada, the largest living tree on Earth by volume, and the coastal redwood *Sequoia sempervirens,* the tallest tree in the world. Due to several reasons, the sequoias currently face the threat of extinction in the California forests.

As a botanist, John Muir's footsteps walked on Earth's ground where he closely observed Earth's creations and understood the power of nature in the universal landscape. The natural world has healing powers if given the opportunity.

As a conservationist and environmentalist, Muir understood that, in his time and in the future, nature requires protection to rejuvenate and thrive.

As the "Father of the National Parks," he believed that access for all people to share in "nature's divine harmony" could restore emotional and physical health, and heal fractures caused by the social economic divisions.

As a mystic, he used his pen and paper to persuade his readers, then and now, to rejoice in the wonders of nature.

Should not our thankful response be to respect the flora and fauna of our planet?

A Giant Redwood
at Kew Gardens.
Sequoiadendron giganteum,
first introduced into
the UK in 1853.

Coastal Redwood
at Kew Gardens.
Sequoia sempervirens can
reach heights of 300-350 feet.

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- Photo of A. araucana with Tolhuaca volcano in background where Muir camped. Trees of Great Britain and Ireland, Vol. #1 plate 17 Elwes, Henry 1901-1902 photo. (Public domain)
- Photo of Araucaria (imbricata) araucana in Tolhuaca, Chile. Reiche, Karle 1907, "The Vegetation of Chile," p. 123 Figure 6. Biodiversity Heritage Library. (public domain)
- A. araucana forest in Upper Valley Villacara, Chile. Trees of Great Britain and Ireland, Vol.#1, plate 18, Elwes, Henry 1901-1902 photo. Trees of Great Britain and Ireland. (Public domain)
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