

Lucia Summers (1835-1898): First Resident Botanist in the Pacific Northwest

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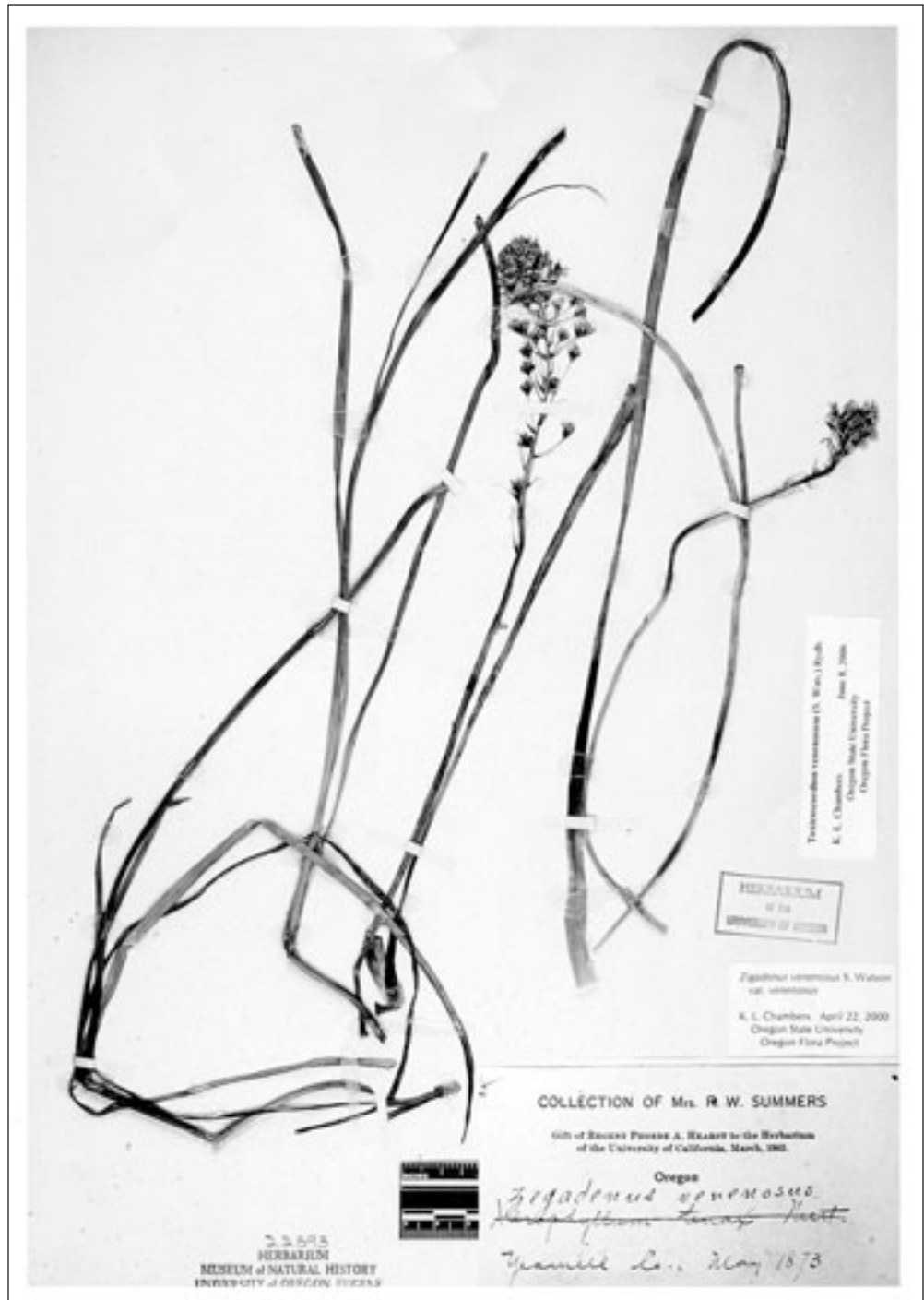
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Lucia Summers was a pioneer botanist in the Pacific Coast states between 1871 and 1898. She experienced the Northwest landscape as it was just beginning to be altered by the first generation of European settlers. When she arrived in Seattle with her husband, the Rev. Robert W. Summers (the first Episcopal priest in Seattle), it had been a mere 17 years since the arrival of the first permanent European settlers. Seattle of 1871 was little more than a village of about 1500 inhabitants. Lucia was well educated, and an accomplished linguist and musician, when she arrived in Seattle at the age of 34. After three years in Seattle, the Summers moved to McMinnville, Oregon, where they lived until 1881. In Oregon, she traveled extensively with her husband, collecting both bryophytes and vascular plants. In that era there were no herbaria in the region, so she sent her specimens to botanists at Eastern herbaria. Consequently, her role as a pioneer resident botanist is not well known to present-day Northwest botanists. However, her experiences were remarkable. Once, she traded the dress off her back to a Native American woman in exchange for a shell necklace and beaver charm.

Born in Vermont, Married in Missouri

Lucia's given name was Susan Ann Noyes, and she was born in Hartland, Vermont, on November 22, 1835, the older daughter of Benjamin Noyes and Julia Ann Bartlett. Her nickname Lucia was probably in honor of her father's first wife, who died in 1831. Lucia had one sibling, a sister, Lavinia, who was born in 1839 (Noyes 1904). Lucia's father Benjamin was listed in the 1860 census as

a "master carpenter," with a combined value of real estate and personal property of \$2900, a considerable amount at that time. The Noyes were a long established New England family, and



Herbarium specimen of death camas (*Toxicoscordion venenosum*) collected by Lucia Summers in Yamhill County, Oregon, in 1873. This is one of the oldest collections from Oregon in the Oregon State University Herbarium. Image courtesy of OSU Herbarium.

sufficiently affluent for Lucia to receive an advanced education, unusual for women at that time.

Some time during the 1850s, Lucia's family moved from Vermont to Hannibal, Missouri, where she met her future husband, Robert William Summers. They were married there on July 17, 1859. Hannibal, of course, is the river town along the Mississippi that was the childhood home of Samuel Clemens (Mark Twain).

Robert's Origins

Robert Summers was born in 1827 in Madison County, Kentucky, the son of John Summers, an officer in the U.S. Army who had distinguished himself in the "Indian wars" of the west. Perhaps it was hearing stories of his father's experiences on the frontier that was the source of Robert's life-long interest in Indian culture and artifacts. Robert's family had been long established in the New World; his obituary stated that he was descended from Sir George Somers, part of a group of Virginia colonists who were shipwrecked on Bermuda in 1609. Sir George's published account of their experience was the source of the plot of William Shakespeare's play, "The Tempest."

As a young adult, Robert Summers undertook a brief tenure as a homesteader in Oregon's Willamette Valley. He established a

claim in 1853 in the Eola Hills, in northern Polk County between Salem and McMinnville (Cawley 1995). Cawley's biography speculated that Summers emigrated to Oregon because he was a distant relative of the Applegate family. Barely two years later, in early 1855, he sold his claim and moved back east, indicating that perhaps he was not cut out to be a farmer.

Early Married Years

We know only a little about Lucia and Robert's activities and whereabouts between 1859 (when they married) and 1870. Apparently, the couple spent at least part of that decade touring Europe, and in 1867 Robert was ordained as a minister in Frankfort, Kentucky. In the 1870 census the couple was recorded as living in Frankfort, Kentucky. Three children were listed as members of their household: Nettie Watson, William Clark, and a three-year-old girl who also bore the name of Lucia Summers. The first two were possibly a niece and a nephew, the third was likely their own child. The fates of these three children are not known, but only one year later, when the Summers arrived in Seattle, they were childless. Probably all three were lost to an illness or some other type of tragedy that commonly befell children in the 19th Century.



Snoqualmie Falls is still a popular tourist attraction, and is an impressive spectacle when the river is running high. Photo by Ed Alverson.

West to Frontier Seattle!

Robert assumed the duties of minister in the Seattle Episcopal Church in 1871 and the Summers lived in the Pacific Northwest for the next ten years. They remained on the west coast for the remainder of their lives. Robert and Lucia made a striking, and in some ways, peculiar couple. One of his parishioners in Seattle described the couple: "He was not a young man and his hair, which was gray, hung in long curls to his shoulders. He wore a beard and was very patriarchal and dignified looking...Mrs. Summers was also very peculiar in her dress and manner. She had lived for some time abroad, and was a fine musician and linguist. She taught music and drawing. Both she and Mr. Summers were very fond of nature, and loved to collect insects, lizards, etc., from the woods, where they spent a good deal of time." Furthermore, while the Summers were "very charming and cultivated people, they were a little antiquated and they lacked the force necessary for so thriving a place [as Seattle]" (Jessett 1948). One gets the impression that both Robert and Lucia viewed the world through the eyes of the artists and philosophers of the Romantic Period of the early 1800s, and as such were out of place in the era of the Industrial Revolution.

Our knowledge of the Summers' explorations in Washington and Oregon primarily comes from a set of copybooks that Robert Summers compiled just prior to his death. The copy books contain a mixture of daily journal entries and undated reminiscences, touching on places visited, encounters with Indians, anthropological notes, and natural history observations. These copybooks have been organized and edited by Robert Cawley and published as "The Indian Journals of R.W. Summers." In the journals, Robert refers to Lucia in the third person, as "The Artist," or "The Botanist," as in this description of a visit to Snoqualmie Falls, east of Seattle, in July 1873. The words are Robert's, but they

certainly would describe Lucia's experience as well:

"As the road hither from Seattle is not practicable for wheels, we have made the trip with horses only, up and down steep hills, through unbroken cone forests and then across the small plain known as Snowqualmie Prairie, until we find ourselves camped where road and water meet, two miles above the falls of the river... We started down the great river in a canoe, with two Indians paddling. They sat perfectly quiet and dipped their paddles in silence, as the road ahead became louder and the rush of the current more overwhelming every moment... After a time...the deafening roar was coming very near and the awful leap of a whole great river was just ahead... Then a quiet, not unmusical Indian voice said "shall we go ashore on that rock?" In an instant we were standing on a flat ledge that sloped downward just a little into the quiet eddy, as if made on purpose for a landing. As we walked on we obtained, from the top of the wooded bank, a view of the whole scene, and lo! we were but a few rods above the magnificent falls! With one sheer leap the powerful mass of water landed itself in a circular basin nearly 300 feet below us; a basin whose walls were everywhere perpendicular rock and, in some places, overhanging; perpendicular save where the outlet of the river cut through, its further progress toward the sea ...Some of us cut branches for a wildwood booth over our Artist, for the July sun was seething in its heat. And then, by sliding down fallen trees and leaping down rocks, we succeeded in reaching the level of the basin below...It took us the rest of the afternoon, by a long circuitous route, to reach camp again...our Indians were ready at the appointed time to paddle our canoe up the river again and, taking with us several rare species of moss, as souvenirs, we bade the grand, secluded, mountain-and-water scene goodbye forever, with a sigh" (Cawley 1995).

A New Parish in McMinnville, Oregon

Although Robert's term as parish priest in Seattle was initially successful, church membership declined after a few years, and he seemed to have fallen out of favor among the church community. Perhaps his interest in natural and cultural history was stronger than his interest in building the church as an institution. Cawley (1995) has much more to say about these details of church history. Whatever the reason, Robert and Lucia found themselves reassigned in 1873 to the Episcopal Parish in McMinnville, Oregon, where they made their home until 1881. This was a homecoming of sorts for Robert, since he had homesteaded in the nearby Eola Hills nearly 20 years earlier.



Robert Summers was the minister at St. James Episcopal Church, later named St. Barnabas Episcopal Church, in McMinnville. The church building, which stood at 5th and Davis Streets, was torn down in 1964. Image courtesy of St. Barnabas Episcopal Church, McMinnville.

The Summers's eight years in McMinnville were undoubtedly filled with the duties of a parish priest and his wife, but these daily activities are scarcely documented. It is known that Robert and Lucia designed and supervised construction of the parish church, which stood on the corner of Fifth and Davis Streets in McMinnville until it was removed in 1964.

Lucia Connects with the American Botanical Community

The oldest of Lucia's surviving botanical collections date from the time of the Summers' residence in Oregon. Surviving correspondence between Lucia and Daniel Cady Eaton, Professor of Botany at Yale University, provide insight in to Lucia's increasing activity as a collector and supplier of natural history specimens to both professional and amateur naturalists in the eastern United States:

*McMinnville, Oregon
Sept. 7th 1874
To Prof. D.C. Eaton,
Dear Sir,*

In the California Horticulturist for January of last year I have just finished reading over again an article from your pen on collecting Algae. At its close is this announcement: "It remains only to add that the writer of these notes will receive with thanks any collections, large or small, from all parts of the world, & will endeavor to name all American specimens sent to him, if so decided".

Does this offer still remain open? I have a small collection of them, very small, from Puget Sound & Tillamook Bay & Sandwich Is., rough dried. There is also a sponge among them, & a coralline or two. I should be most happy to have these named, if I send a suite to your address can you return me their names? I am collecting plants also, & would like to furnish someone a suite for the names. Can you give me the address of any botanist who will do this?

Being the wife of a very busy missionary, whom I assist in many ways, I have not the time for these studies that I once had. My husband, Rev. R.W. Summers, having given over to my care his beautiful cabinet of geology & natural history; but most of the plants in my herbarium of Oregon and W.T. I have a written analysis of, prepared by careful microscopic

examination. Any such information of difficult or unknown plants I can furnish from my notebooks.

*Hoping a favorable reply
I am Yours Truly
Lucia Summers
McMinnville Oregon*

Professor Eaton's response, we assume, was encouraging, and thus began a long correspondence that provided Eaton with specimens from a poorly botanized region of the country, and Lucia Summers



Kincaid's lupine (*Lupinus sulphureus* ssp. *kincaidii*) is listed as a threatened species by the US Fish and Wildlife Service, and still survives in a few prairie remnants and on roadsides in Yamhill County. It is the food plant for the larvae of the endangered Fenders' Blue Butterfly. Photo by Ed Alverson/TNC.



Mule's ears (*Wyethia angustifolia*) still survives in a prairie remnant on The Nature Conservancy's Yamhill Oaks Preserve west of McMinnville. Lucia's specimen of *Wyethia* helped Robert and the Indian Poyusah determine the identity of the plant whose seeds Poyusah hoped to use to heal his friend. This flower is being visited by a Valley Checkerspot butterfly, which itself has become quite uncommon in the Willamette Valley. Photo by Ed Alverson/TNC.

with a connection to the American botanical community.

At one point in their correspondence, Eaton apparently shared news that one of Lucia's moss specimens had been determined as a new species, and would be designated with the epithet *Hypnum summersae*. This news threw Lucia into a flight of fanciful writing, as follows from a letter dated January 20, 1879:

Your very kind letter reached me two or three weeks since, & gave great pleasure to both Mr. Summers and myself. The naming of the new moss, Hypnum summersae, for the honor of which name we consider ourselves primarily indebted to you, lays us under deep obligations of gratitude, & we hope you will accept the sincerest thanks of both. That my name should thus be made one of earth's enduring things in this way is what I have sometimes dreamed of, but really never entertained as so much as a wish, till the receipt of your last letter. There are so many men in every dep. of botany, - so many who have visited this region in special pursuance of their special science, that it seemed impossible that one who falls so far below them should ever be happy in new discoveries. I have often said to myself in the last two or three weeks that one of God's works was called after my name; & have

looked at the tiny, shining plant as if it had in some way named me, as priestess in the kingdom of nature. I would rather be thus associated with the works of the Great Creator, than with the noblest and the best that can come from the hand of mortals. I shall be very happy to see a description of it, whenever you shall have leisure to publish it, as you mention. I have delayed sending away any till the present time, but this month shall begin to do so, as several collectors have asked for it. I am much obliged for the names of my plants contained in your pages. It is a most agreeable thing, when setting a name down, to feel sure it is right.

Unfortunately, Lucia's hopes were dashed in a letter that arrived a few weeks later, for her next letter to Eaton, on April 1, 1879, began with the following entry:

*Your letters of Feb 5th and 6th arrived safely in McMinnville a number of days since, & were read with much gratification. I regret the mistake about the Hypnum summersae, which seems to be no H. sum--- but *Antitrichia curtispindula*, var. It seems very odd that one like Dr. Schimper should commit such an error, but only proves that human judgement, however great, is still fallible.*

Traded the Dress Off Her Back

Robert's journals describe a variety of excursions around Oregon between 1873 and 1881, including local outings around Yamhill County, multiple trips through the coastal mountains to the Oregon Coast, and even an extended expedition to the Klamath Indian Reservation in June of 1876. Lucia's few existing plant collections at the Oregon State University herbarium also document these travels, as they come from Yamhill County (McMinnville), Lincoln County (Yaquina), Tillamook County ("Coast Mountains"), and Douglas County (Roseburg). This suggests that Lucia was present on many, if not all, of Robert's excursions around Oregon. One of the oldest of her collections in the Oregon State University Herbarium is a specimen of death camas, *Toxicoscordion venenosum* (S. Watson) Rydb. (syn. *Zigadenus venenosus*), collected in Yamhill County in 1873. That this is a poisonous species similar to the important edible common camas (*Camassia quamash*) suggests a connection between Lucia's botanical collections and Robert's interest in ethnography and Indian artifacts.

Robert's journal describes an episode that involved Lucia's personal herbarium. On April 30, 1876, the Summers were visited at their home by a group of Indians from Grand Ronde, including Poyusah, with whom they were acquainted from earlier visits to the Reservation. A friend of theirs was ill, and they had brought a small quantity of seed of a yellow-flowered composite that they hoped to grind into meal using a mortar and pestle from Robert's collection of Indian artifacts. Apparently the Indians felt that eating the ground seed would help their ill friend. According to Robert's journal,

"...to identify the plant they had brought, I showed him (Poyusah) specimens of various dried plants with golden flowers. He at once picked out a sunflower and said their plant was like that in color and growth. Theirs, however, was a little flower, and the sunflower seeds were much larger, but by-and-by their flower would be full of them. Then, when it was ripe, the Indians would pick the head off it and turn it upside down and shook [sic] the seeds out." All this he illustrated as he went along, having my dried Wyethia in his hand. I judged the seed was a Madia." (Cawley 1995).

Robert and Lucia's 1876 trip to the Klamath Indian Reservation in southern Oregon was their longest journey during their residence in the Pacific Northwest, lasting from late May through late July. Cawley (1995) speculates that Robert was invited to Fort Klamath to provide a clerical presence for their celebration of the 1876 US Centennial. Whatever the justification, the Summers turned the trip into an extended natural history collecting expedition. An entry in Robert's journal from July 13th, soon after they began the return leg of the journey, describes their caravan:

"The head of an antelope is brought to me today, which I add to the horns of two deer shot by us on this trip and the large head of a mule deer obtained from Mr. Dyer. Our carriage is beginning to assume quite the aspect of a naturalists', for we have tied on to its outside not only these horns but also the great cones of the Cascade needle trees. And inside we have stowed all the things preserved in cans of alcohol, and of course, the flowers in their presses." (Cawley 1995).

These journal entries were apparently written following their return to McMinnville, for the entries contain the names



The Summers undoubtedly would have spent time in Gopher Valley, west of McMinnville, in the late 1800's. While the landscape has changed and the native prairie flora has been greatly reduced, The Nature Conservancy's Yamhill Oaks Preserve still supports remnants of native prairie vegetation, including Kincaid's lupine, which blooms in late May and early June. Photo by Ed Alverson/TNC.

[Summers Lucia (Mrs P.W.)]
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The first page of Lucia Summers' letter to Dr. Eaton dated April 1, 1879, in which she laments the identification error that led to her dashed hopes of having a new species of moss named for her. Letter courtesy of Yale University Library, Manuscripts and Archives.

of many of the plants they observed in each day's journey. At the time, of course, there were no regional floras that they could carry for reference. In fact, the journal specifically noted that all of their specimens were examined by Professor Daniel Cady Eaton of Yale University; Lucia and Professor Eaton corresponded extensively about specimen identifications. Presumably, many, if not all, of these specimens are still in the herbarium at Yale.

On this expedition, the Summers started south from McMinnville on the west side of the Willamette Valley, travelling through Polk, Benton, and Lane counties. The first night they camped on the Luckiamute River, and the second night on the Marys River. On the fourth day, June 3rd, their botanical sightings along the Long Tom River and Coyote Creek were described:

"Only a few plants have added themselves to the Yambill list, i.e. a white larkspur, variety of species *elatatum*, the tricolored *Mimulus*, *Menzies'* *Calandrinia*, the *ebracteate* *Gratiola*. Then on the Big Hill and the Coyote Creek Hills, the mountain flora so familiar to the Coast Chain, and the added *monticola* pine and a fragrant laurel, low and abundant, scenting all the forest, (we think it a *Ceanothus*). The richly tinted Oregon *Thermopsis* lastly arrays itself with the humble herbs along the way." (Cawley 1995).

They continued on south through the Umpqua Valley and over the divide from Canyonville to Grants Pass in the Rogue Valley, and then on to Ashland. From Soda Springs, south of Ashland, they turned eastward to ascend over the crest of the Cascade Mountains. In Robert's journal he noted for June 20th:

"We make our camp alone in this vast solitude, one lonely cabin or cabin store-house for the California Stage, being the only human sign for many hours. We name it Mountain Camp par excellence. Soon after leaving it, we begin to descend on the east side... The whole face of the country has changed. Not a familiar plant greets the eye beneath or beyond the cones themselves. Open glades abound, but the lupines, brilliant blues, white and yellow, the *Eriogoni*, pink or yellow, yes, even the *compositae* – all luxuriant and abundant each in its stations – are unfamiliar." (Cawley 1995).

Finally, on June 25th, after a journey of nearly four weeks from McMinnville, they arrived at their base camp on the Klamath Reservation. The Summers spent nearly two weeks on the Klamath Reservation, making day trips to nearby destinations, visiting the fort, and interacting with members of the Klamath tribe. Robert's journal describes the setting of their camp on the Wood River:

"Our tents under the weird black pines are beginning to seem like home and we nightly return to them with increasing delight. Tent life has a charm like nothing else: free and close to nature; a flickering blaze from great red embers; the stars at night shimmering through needle leaves and small slender cones; mountain, plain, and ice-cold river all within reach; the golden *mumilion* a great mossy log in the middle of it, and the blue *mimuli* on the borders of it; soldiers marching along with military precision; Indians stalking hither and thither, with unmilitary freedom and dignity – all so many elements of a picture cut out of a world so different from the one we habitually live in." (Cawley 1995).

Robert was keen to learn about their artifacts and customs, often bartering with individual Indians for their objects: tools, hats, jewelry, moccasins, etc. On one occasion, Robert tried to barter with an Indian woman for a necklace of shell beads and a beaver charm or *pomonskis*. However, the woman showed no interest in any of the items Robert offered her in exchange. Eventually Lucia, who was in the tent nearby pressing her plant specimens, and offered the very dress she was wearing in exchange for the necklace. "Instantly the *pomonskis* was removed from the Indian neck and extended towards her. Then, with a very indifferent air, the Botanist stepped into the tent, changed her dress, and handed it to the young Klamath as her price. It was only a calico affair, and not new, but it was a made garment, freshly laundered, and the women here are none of them seamstresses."

Finally, after celebrating the 100th anniversary of the Declaration of Independence with a large assembly of military officers, enlisted men, and Native Americans, the Summers departed the Klamath Reservation on July 7, 1876. Their north-bound return route followed the east side of the Cascades, crossing into the Deschutes River drainage. They continued to collect natural history specimens along the way, and Robert's journal is filled with detailed observations. After camping at Crescent Lake on July 19, they crossed the Cascade crest at Emigrant Pass, just south of Diamond Peak, and descended down the Middle Fork of the Willamette River. Once they reached the Willamette Valley, they headed north along the eastern side of the Valley and arrived at their home in McMinnville before the end of the month.

The Final Years, in San Luis Obispo

After living five more years in McMinnville, Robert resigned his ministerial post. In the spring of 1881, Robert and Lucia left the Pacific Northwest after more than a decade of residency. Their next, and final, home was San Luis Obispo, California, where Robert became the minister of the fledgling Episcopal Church. He resigned the position in 1885 and became the first paid librarian at the San Luis Obispo public library. Lucia continued to teach music and art, and to collect plant specimens. Robert died on July 5th, 1898; he was 70 years old. Only six months later, Lucia died on December 27, 1898, at the age of 63.

Our First Resident Botanist

It is difficult to summarize Lucia Summers' contribution to Pacific Northwest botany from 1871 to 1881. No doubt her specimens, most of which were sent back east, were important sources of information to the prominent East Coast botanists of her time (Pruski 1987). However, none of them saw fit to commemorate her contributions by naming a new species for her, and it is not clear whether any of her specimens were utilized as type specimens of newly described taxa. Certainly, she collected many specimens in the Pacific Northwest: her collection number series in Oregon spans over 1,000 numbers, from #1000 to at least #2100. Her later California collections, which are databased by the UC Berkeley Herbarium, include over 500 records.

After Lucia's death, Phoebe Hearst purchased her herbarium (Jepson 1931). Hearst, a regent of the University of California, donated the collection to the University of California herbarium in 1903. The herbarium consisted of 3,493 sheets (University of California 1904). While the significance of the herbarium to the University was based upon her collections from California, it also apparently included thousands of non-California specimens. Unfortunately, Summers' non-California specimens at the University of California are not data-based at this time, but if, as the math suggests, nearly 3,000 of Summers' herbarium sheets were not California collections, many of this total would likely have been collected in Washington and Oregon. Thus, this collection represents a valuable and largely untapped resource of early Pacific Northwest botany! In addition to the UC specimens and the small number at OSC, Lucia's collections are also found in major herbaria including the New York Botanical Garden, Yale University Herbarium, and the Gray Herbarium at Harvard University.

Even in their time, the Summers were a bit archaic, viewing the western landscape and its overwhelmed native cultures through the lens of the Romantic Period. Robert's descriptions of landscapes and encounters with native people read very much like the journals of William Bartram, who explored the southeastern United States a century earlier, and whose journals were an important influence on the artists and writers of the Romantic Period. But by the late 1800s, the cultural zeitgeist in ascendance in western North America was clearly looking forward, with the closing of the frontier, an emphasis on developing technology, and exploiting the region's natural resources for economic benefit. The work and writings of Lucia and Robert Summers show us that this worldview was not unanimously accepted at the close of the nineteenth century.

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Ed Alverson serves as Willamette Valley Stewardship Ecologist for The Nature Conservancy, a position he has held since 1991. He completed a Masters of Science degree in botany (biosystematics of the fern genus *Cryptogramma*) in 1989 at Oregon State University, and has been working as a field botanist in the Pacific Northwest for 30 years. He has written over 50 technical and popular articles about the flora

and vegetation of this region, and his photographs have appeared in a variety of publications including cover photos on Art Kruckeberg's book, "Gardening with Native Plants in the Pacific Northwest" and the cover of the book "Restoring the Pacific Northwest: The Art and Science of Ecological Restoration in Cascadia." Ed's interests include history of botanical exploration, pteridology, floristics and biogeography of the Pacific Northwest, and the conservation and management of prairie and oak habitats in the Willamette Valley-Puget Trough-Georgia Basin Ecoregion. He lives with his family in a 100+ year old house in a former oak savanna in the suburbs of northwest Eugene. Photo by Peter Zika.