

Mary Vaux Walcott; “Audubon of Botany”

Photographer and Citizen Scientist

1860 – 1940



Mary Vaux Walcott and Dr. Charles Walcott; photo courtesy of the Smithsonian

Mary Vaux Walcott is the author/illustrator of the impressive 5 volume collection of “North American Wild Flowers.” The collection was published between 1925 and 1929 and included watercolor plates and narratives for each plant. The paintings are of various trees, shrubs and flowering plants found in North America with an emphasis on the Northern Rocky Mountains of British Columbia and Alberta. These volumes are unique in comparison to the scientific and precise taxonomic treatments describing regional floras during her lifetime. Her watercolor sketches were intended to introduce the diversity and beauty of North American plants to the general public while maintaining the rigor of an accurate botanical illustration.

Mary Walcott’s interests were not limited to botanical illustration. She was an accomplished landscape photographer and was part of an effort coordinated with her brothers to track the recession of large glaciers in the Canadian Rockies. This is among the earliest known attempts to document a changing climate. She also brought the majestic beauty of the Northern Rockies to a largely unaware eastern populace through her lantern lens slide shows. The slides were produced from picture negatives and hand colored.

She became was the first woman of European descent to climb to the top of Mt. Stephens in British Columbia. Later in life, with her marriage to Dr. Charles Walcott, she helped to catalog the Cambrian fossils discovered at the Burgess Shale site in British Columbia. This area is now designated as a UNESCO world site and is a significant fossil bed which displays the explosion of life form diversity during the Cambrian period. She is fascinating with respect to her talents despite the limitations placed on women during the time in which she lived. The influence of her Quaker faith complimented her love of science and botanical illustration allowing her the freedom to express her life's work.

Selections from the narratives which Mary Walcott wrote for “North American Wildflowers” to accompany her watercolor plates are incorporated in the following highlights of her life. Her narratives often included the species distribution, plant growing requirements, time of flowering, any available pollination information or herbal properties, and other reflections of the author that often revealed her close knowledge and intimacy with the plants that she painted.

Epigaea repens, Trailing –Arbutus, plate 126



A poem by John Greenleaf Whittier (also a Quaker) was included within the narrative for the Trailing-arbutus.

Sad Mayflower watched by winter stars,
And nursed by winter gales
With petals of the sleeted spars
And leaves of frozen sails!
.....
But warmer suns ere long shall bring
To life the frozen sod,
And through dead leaves of hope shall spring
Afresh the flowers of God.

Mary Morris Vaux (pronounced Vox) was born on July 31, 1860 to Sarah Morris Vaux and Charles Vaux VIII in Philadelphia. As biographer Marjorie Jones (2015) notes it was, “the eve of the civil war.” Two brothers would complete the family, George born in 1863, and William in 1872. The Vauxs’ were an affluent, well-educated and recognized Quaker family. They owned a home in Philadelphia and a country estate in Bryn Mawr. Mary attended a private Friends Select School which emphasized, math, science, astronomy, and geography (Jones 2015).

The Quaker traditions into which Mary was born did not suppress women from public speaking, holding meetings, taking minutes, and writing. William Penn the founder of, “the city of brotherly love,” was to have said, “in souls there is no sex,” (ibid.). This provided an atmosphere which was more supportive of equality for women although, the more traditional autocratic family structure was characteristic of Charles Vaux VIII. Additionally, Quaker values emphasized the pursuit of science, engineering and medicine. The study of natural history and geology flourished at this time and was held in high esteem versus the “trivial” pursuits of art and dance.

Sarah Morris Vaux had a strong interest in the study of botany and gave her daughter a box of watercolor paints. At the age of eight, Mary had started lessons with a skilled artist for four years. Botanical art and paintings which portrayed nature were considered science, and natural history studies documented the evidence of “God’s work on earth,” (Jones 2015). Despite the emphasis the “Society of Friends” (Quakers) had for religious tolerance, marrying outside the faith was not viewed by Charles Vaux Sr. as an acceptable practice. This would weigh heavily on Mary later in life.

With her mother’s sudden death in December of 1880, Mary at the age of twenty would be left in charge of the Vaux household and become the caretaker for her father and brothers. This included their second home at Bryn Mawr and adjacent farm where they “bred Guersey cows, raised pigs and chickens and experimented in horticulture,” (Smith 1989). Biographer, Cyndi Smith quotes correspondence where Mary wrote, “what with my regular work, and the farm, and the demands that father makes on my time, I find the days all too short to accomplish many things.” It seems the “dead leaves of hope” referred to in the Whittier poem may have taken the form of an extended family vacation to the western U.S. and Canada in 1887, when Mary had the opportunity to pursue her journaling and sketching while traveling.



***Erythronium grandiflorum*, Glacier Lily, plate 68**

The glacier lily “seems to radiate the spirit of high places, and with bright sunshine and pure air helps to entice the lover of nature to the mountain tops....”

Mary Vaux was 27 when her father Charles and two brothers departed on a 10,000 mile trip through the American West and the Canadian Rockies. They traveled by train, carriage, stagecoach, ferry, horseback, and foot (Jones 2015). As observed by Edward Cavell (1983), and included in the biography by Marjorie Jones, “The Vaux family could hardly be considered as average tourists by today’s standards. Advantaged, well-educated Quakers, they were the epitome of the well-rounded Victorian: committed, inquisitive, and dedicated to the advancement of man’s understanding and appreciation of nature. Talented amateur artists and scientists, they fell under the spell of the Canadian Alps.” Mary would write and sketch a 150 page travelogue of the three month western trip. Their explorations included Santa Fe, New Mexico, Yosemite, San Francisco and the California coastline up through

Portland Oregon before finally returning home via the Canadian Pacific Railroad (CPR).

Glacier House, British Columbia was a significant stop for the Vaux family on the Canadian Pacific route. The site developed by the CPR provided a chateaux for lodging adjacent to the Illecillewaet Glacier. The lodge was a needed layover for the railway in its navigation of the mountainous terrain of the region. It eliminated the need for the extra weight of dining cars and sleeping berths on the train. At Glacier House, the Canadian wilderness would captivate the family through its magnificent scenery and draw them back on many successive trips.

Observant that the Illecillewaet Glacier was indeed receding between their frequent visits, Mary's brother William established photo points from which to photograph and document the rate of glacial change over time. The photo points were permanent iron plates set into the ice and rock from which they then triangulated compass lines with adjacent peaks to determine the photo retake position (Smith 1989). Large format, heavy cameras, which required glass plates were used. Mary was in charge of developing the negatives from the plates, often using their hotel closets as a darkroom (Jones 2015) or saving the fragile glass plates for development at home (Smith 1984). While the initial observations of the receding Illecillewaet Glacier had prompted this documentation, the Vaux family eventually included other glaciers in the Yoho, Lake Louise and Moraine Lake areas within the area of British Columbia and Southern Alberta. The photos were aesthetic, as well as scientific with regard to the handling of northern light, and given the picturesque, dramatic composition, (Cavell in Laviolette, 2012). Jones (2015) states that the family's glacier photography was at the forefront of Alfred Stieglitz's movement of photo-secessionism which transformed twentieth century photography into an art form. Mary and her brothers became accomplished landscape photographers.

Obtaining the glacier photographs was arduous work with respect to the cumbersome heavy equipment, difficult terrain and distance to the photo points. As Smith (1989) notes, the discipline of Glaciology was only about 40 years old at the time. Indeed, in a different mountainous region, John Muir's classic first writing about the living glaciers of Yosemite, Sierra Nevada Mountains, was dated 1871. This had sparked debate with Professor Whitney of the Geologic Survey regarding the formation of the Yosemite Valley. Muir maintained that the rugged Sierra landscape including the valley had been carved by glaciers while, Whitney insisted that a geologic event had caused the area of the valley floor to collapse.

Perhaps these earlier discussions, though in a different region, caused the Vaux family to be especially observant to Canadian glaciology.

During the time period that the Vaux family planned repeat yearly visits to photograph the glaciers, the Canadian Pacific Railroad provided free passes from Montreal to support their work (Smith 1989). Often Mary and her father would spend the summer in the Canadian Rockies with William and Charles Jr. present at various intervals when they were able to leave work responsibilities. Mary and Charles Jr. especially, shared an avid interest in exploring the Canadian Wilderness. In 1900 she would become the first women of European descent to climb Mt. Stephen with a climbing party comprised of two guides and her brother Charles. While allowing Mary to participate, her father, Charles Sr. was often ill and did not share his family's backcountry adventures. She would have been around 40 years old when she climbed Mt. Stephens.

With the support of the Canadian Pacific Railroad, the Vaux family would write and illustrate the informational pamphlet, "The Glaciers of the Canadian Rockies and Selkirks." Smith (1989) wrote that the guide would be updated many times with Mary providing the last revision in 1922. During the latter years of the glacial studies Mary would take responsibility for all phases of the work. It is interesting to note, that while skipping a generation, grandchildren of William and Charles Jr. would again re-document the effort and provide yet even more striking portrayals of glacier recession (Vaux 2014).



Lantern slide of Lake Louise taken by Mary Vaux Walcott and meticulously hand colored; photo courtesy of the Whyte Museum.

When at home in Philadelphia, the family would provide lantern-slide presentations of their photographs to both lay people and scientists. Lantern-slides predated the slide projector and power point presentations of today. The slides were created by developing a positive print of a photograph onto a glass plate. The pictures were then meticulously colored using a tiny brush. Upon completion, a second glass plate was adhered to the first to prevent scratching the image when handled (Shteyenberg 2009). As Cyndi Smith comments (1989), “the artistic coloring of the slides was done by Mary; it was very detailed, demanding and time-consuming work.”



Gentiana affinis, Riverbank Gentian, plate 87

“The purple flowers with white markings on the petals are elusive, since they are often hid by neighboring plants. We found them near a ‘lick’ where twenty mountain sheep, ewes and lambs, were enjoying the salty soil kept moist by snow water from the rushing river near-by, which overflowed its banks every afternoon.”

Mary throughout her younger years had developed into an accomplished watercolorist and painted both landscapes and plants. While on a one of the prolonged stays at Glacier house, she was approached by a botanist to paint in detail a small *Arnica* (Smith 1989). This was a turning point as she switched the focus of her art work almost exclusively to the intricate detail of plants. Perhaps considering her skills as a landscape photographer and, with respect to the enormous amount of lantern slides she had been creating, detailed botanical illustration would become a welcome opportunity.

On a parallel journey of sorts, her Philadelphia childhood friend, Mary Schaffer, also began to spend time in the Canadian Rockies with her plant enthusiast, physician husband. Also an accomplished watercolorist and Quaker, Mary Schaffer's husband would encourage his wife to illustrate a plant guide covering the area from Rogers Pass, British Columbia to Banff, Alberta (Laviolette 2012). This would eventually lead to the publication "An Alpine Flora of the Canadian Rocky Mountains," which included 163 of her illustrations. Mary Schaffer traveled extensively in the Canadian Wilderness and explored terrain and trails which had previously been known only to the Native Americans that lived there. She and her friend Mary Vaux shared this mutual love of the region and embarked on some trips together. The botanical paintings of Mary Schaffer were an inspiration to Mary Vaux (Jones 2015).

It is interesting to note, these two women, living on the transition of the Victorian era were creating a path of sorts for others of their gender to follow. They used Swiss guides to navigate glacier fields and mountain summits, and traveled using guides and pack horses for extended periods of time in the wilderness pursuing their interests and love of the region. While good friends and at times sharing some mutual adventures, for the most part they were on separate trajectories in accomplishing their life's work. While Mary Schaffer was a talented and stunning botanical artist, with the death of her husband, she would continue to explore and eventually publish a book "Old Indian Trails of the Canadian Rockies," in 1911 (Smith 1984). Mary Schaffer would name a mountain peak situated in Jasper National Park, "Mount Mary Vaux," in honor of her friend. While old photos exist of the two ladies sipping tea from their china cups and saucers at their respective base camps, both women were founding members of the Canadian Alpine Club.



*Lantern slide, "On the Trail to Burgess Pass" taken by Mary Vaux Walcott in 1910.
Courtesy of the Whyte Museum*

In 1908 Mary Vaux's brother William would die from tuberculosis at the age of thirty-six (Smith 1984). Mary then assumed the primary responsibility for the glacial recession studies they had initiated. During the years that followed, she would meet Dr. Charles Doolittle Walcott and his family when they were documenting fossils found in the Burgess Peak area. Dr. Walcott was an esteemed paleontologist and secretary for the Smithsonian Institution in Washington D.C. He had also served as the former head of the U.S. Geological Survey. He and his wife Helen are credited with discovering the Burgess Shale fossil beds. The Burgess Shale site is unique in that it is a rich fossil deposit 505 million years old of well preserved, soft bodied, sea dwelling creatures such as trilobites (Smithsonian Institute 2017). The site serves as the foundation for studies during the Cambrian period and documents an explosion in the diversity of life, including many lineages of present day life-forms. Dr Walcott would collect 65,000 fossils from this area.

Helen Walcott was tragically killed in a train collision in 1911. At that time, Mary Vaux was already respected in the fields of glacial studies, photography and mountaineering (Jones 2012). After several years of corresponding over their mutual interests, and visiting both in the Canadian Rockies during the field season and also on the east coast during the winter, Charles Walcott and Mary were married in 1914. The marriage was a month before her 54th birthday.

Dampening the enthusiasm of the happy occasion which united two such like-minded individuals, Mary's outraged autocratic father Charles Sr. denounced her from the family. It seems a contributing reason was that Dr. Walcott was a Presbyterian (Jones 2015). Her father's perception was that Dr. Walcott was a "man of the world" and was "out of meeting" (Ibid.) (Quaker services are referred to as meetings). Perhaps most importantly, her father felt a sense of abandonment as Mary would no longer be available to manage the family estate and care for him as he was often of ill health (Jones 2015). However, it seems likely, based on the letters which Marjorie Jones notes from Mary to her father, expressing her deep affection towards him, that, she would have tried to continue to assist her father had he not reacted in such a vehement manner. Upon his death in the spring of 1915, Mary would observe the full year of mourning for her father and canceled all of her engagements (Smith 1989). While her father expressed forgiving her before he died, he never re-instated her in his will.

With her marriage, Mary Walcott's winter home became Washington D.C. If Philadelphia had been a center of creative influences, Washington and Dr. Walcott's position with the Smithsonian, would bring even more scientists and political society to the doorstep of Mary Walcott. In addition, during their summer forays, Mary would assist with the cataloguing, creating sketches, photography and shipping of the fossils. Yet, she also pursued her botanical art with the encouragement of her husband. By the early 1920s, Mary's work was displayed in museums and galleries in Washington, Chicago and New York (Smith 1989). She received further encouragement to develop a publication of the sketches and the idea of "North American Wild Flowers" was envisioned.

Lychinis
Campion, plate
Nodding campion
boulders of old
summits. Its
ground are
was made from a
McArthur,
Hector, British
7,000 feet.



apetala, Nodding
179
grows among the rocks and
moraines or on alpine
flowers, turned toward the
inconspicuous.....The sketch
specimen found near Lake
fourteen miles by trail from
Columbia, at an altitude of

This small
family is, with
revision, known

Silene uralensis, (FNA vol. 5 2005). Mary Walcott used the most current taxonomic treatment of her time to identify plants. For the Northern Rockies that would have been “Rydberg’s Flora of the Rocky Mountains.” Botanical terminology is very precise. Specific vocabulary and measurements are used as a word picture to identify a plant to genus and species. Even for trained botanists word pictures can leave questions. For a lay person desiring to enjoy wildflowers, using a technical plant key to identify a flower can turn into a miserable experience with a questionable outcome. Illustrations provide reference images of plants and communicate botanical knowledge to a wider public. Since Mary Walcott approached her illustration from a science perspective, she had an eye for detail. She was skilled at both identifying, as well as pressing plants (Laviolette 2012) and, included the use of photography to create a reference specimen for her work.

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current taxonomic
by the scientific name of

Perhaps Mary Walcott’s own words recorded in the first volume of “North American Wild Flowers” provide the best picture of her botanical explorations in the Northern Rockies:

“Wild flowers were a joy and inspiration in the happy days of childhood when I was taught to observe and sketch them under the direction of a skilled artist....During the past ten years I have spent from three to four months of each season in the Canadian Rockies, where Dr. Walcott was carrying on geological explorations, covering in all more than 5,000 miles on the mountain trail. This afforded me a wonderful opportunity for intimate study of the flora, my aim being to collect and paint the finest specimens obtainable, and to depict the natural grace and beauty of the plant without conventional design. Many of the western sketches were made under trying conditions. Often, on a mountainside or high pass, a fire was necessary to warm stiffened fingers and body. In camp, the diffused light of the white tent was a great handicap, and considerable ingenuity was required to obtain the proper combination of light and shade. The paint box and

pads found safe conveyance on the back of the saddle, except in unusual storms of rain or snow, and many times while waiting for the pack train to be made ready, a sketch was begun or completed. The short lives of the blooming plants definitely limit the number of sketches that can be made during a single field season, for many hours of work are needed to finish a single sketch, and wild flowers whither quickly.”

As noted above many of the illustrations for “North American Wildflowers” were sketched on site. When camped in the Rockies she would often gather plants and, as described in the narrative for Mist Maiden, (*Romanzoffia sitchensis*) (plate 98), if the sketch was not complete she would leave the specimen in a tin of water overnight. However, upon inspection of her specimen the next morning, she found to her dismay that the mist maiden plant was frozen into a solid block of ice. Fortunately, upon thawing the specimen was still fresh and useful for her work (Walcott 1925). She used this experience to explain how mist maiden, found in rock crevices adjacent to melting snow survives and is adapted to the freezing nighttime temperatures. With her beautiful illustration of the complex flower of Beargrass, (*Xerophyllum tenax*) (plate 302), Mary noted that, “On steep slopes, sterile plants often form a close sward, which is so slippery that it is difficult to traverse,” (ibid.). Accompanying her painting for Rocky Mountain Kalmia, (*Kalmia microphylla*) (plate 284), Mary explains that the first warm days cause the corolla of the flower to fall away.

It is also interesting to note, in her descriptions for pale strawberry, (*Fragaria glauca*) (plate 362), the personal observation that, “a tea made from the leaves is most efficacious in intestinal complaints.” Jones (2015) describes her attempts to dry various foods for use in their camping expeditions and notes that the “dried cabbage was a failure.” When illustrating Lyall larch, (*Larix lyallii*) (plate 381) Mary Walcott describes, “On arriving at Banff, I left my precious specimens on the rack beside the dining room door, while I got my supper. When the meal was finished, the bunch of larch had disappeared. On investigation, I found two botanists sitting on the floor, with the Lyall larch between them, filled with enthusiasm....” (Walcott 1925). One can only imagine the variety of experiences she garnered in attempting her illustrations. It seems that keeping her stiffened fingers warm by the campfire (Smith 1989) was, at times, the least of her inconveniences.

As the narrative excerpt for nodding campion (above plate 179) describes, she and Dr. Walcott were 14 miles into the Canadian backcountry using horses for transportation and to pack their gear. They were accompanied by guides and a

Smithsonian employee that would set up camp prior to their arrival and was noted as “an incredible cook” (Smith 1989). Some of their camps they would return to on an annual basis. To reach “Wild Flower Camp” in the Canadian Rockies required a one and a half day ride on a “circuitous trail.” From that base camp she traversed the steep slopes above the trail to collect and sketch Sweetvetch, (*Hedysarum mackenzii*) (plate 97) from “North American Wildflowers. Her sketch of Elkslip, (*Caltha letosepala*) (plate 287) was completed near Mt. Assiniborne, a fifty mile pack trip from Banff, Alberta.

Dr. Walcott and Mary would also travel extensively within the continental United States to incorporate the broad scope of North American plants in the artwork for the volumes. Later, as a widow, she would travel to Alaska with her brother Charles Jr. Some plants were given to Mary, such as the Southern Magnolia was sent to her from the White House garden by First Lady Grace Coolidge (Jones 2015). Following Dr. Walcott’s death in 1927, she would continue to receive letters from various National Parks advising her of the best time to capture the blooming periods for various plants. Her work on capturing wildflower sketches continued throughout her life.

Mary Walcott painted over one thousand botanical “sketches” during her lifetime.



Cornus sericea, Red-Osier Dog wood, plate 38

“The red-osier dogwood is an attractive shrub, not only when in bloom but also in the early fall, when it bunches of bluish white berries are borne in abundance, and the leaves change in color to scarlet, purple, or gold.”

Mary Vaux Walcott in her introduction to “North American Wildflowers” mentions studying under a skilled artist. Biographer Marjorie Jones (2015) speculates that artist may have been George Cochran Lambdin. As an artist living in Philadelphia, Charles Lambdin specialized in the painting of vignettes and flowers, especially roses. Mary Schaffer studied under Charles Lambdin and, it seems plausible that the two friends met in childhood through their teacher. The Smithsonian has a watercolor dated 1868 by Mary Walcott of some pansy like flowers which she named her “first painting” (Laviolette 2012). At that time, Mary Walcott was 8 years old.

Mary-Beth Lavillette (2012), in her book “A Delicate Art,” referred to the artwork of both Mary Walcott and Mary Schaffer as “naturalism.” This art form requires an accurate rendering of the plant using tighter traditional watercolor brushwork and, attention to detail, color, light, and perspective. Lavillette writes further that; “neither of the two Marys’ work could be called a remarkable example of “technique” when compared to painters such as France’s Pierre-Joseph Redoute’ (1759-1840) or, much earlier, in Holland and far off Suriname, Maria Sibylla Merian (1627-1717), but they did persevere with great focus and a willingness to work in tough outdoor conditions. Each work of the two Marys is unique and unrepeatable.”

When considering Mary Walcott’s work, the use of botanical grays to depict the shading needed to portray white flowers is very beautiful. She dealt with the challenge of extremely tiny floristic details in her studies of wildflowers. The painting of gray pussytoes, (*Antennaria howellii*), (plate 104) which she found growing at the base of glaciers could blend in with the actual plants. Her studies of plants from other parts of the United States, such as, rosebay rhododendron, (*Rhododendron maximum*), (plate 254) and, Atamasco-lily (*Atamosco atamasco*), (plate 255), found in North and South Carolina respectively, could easily be plates from the “Highgrove Florilegium,” a present day stunning presentation of watercolor paintings completed by some of the finest contemporary botanical artists. Her work setting for accomplishing the rhododendron and lily, as well as many others in the “North American Wild Flowers” collection may have been less challenging than the “lantern light” of her tent.

In her work Mary Walcott did not use light pencil lines to guide her application of watercolor. From the available literature, she did not spend time with pencil sketches prior to beginning a painting (Smith 1989). She referred to her work as sketches. However, perhaps that term was used lightly in respect to both her descriptive narratives in combination with the painting; like a vignette of sorts which displayed an illustration and written prose to familiarize the viewer with something she cherished. Her paintings are very complex watercolor pieces. All of her plant illustrations are life-size without any scaling for small versus large plants. And, for the most of the paintings, she did not paint roots. Perhaps this also kept her work within the volumes consistent as she painted trees, shrubs, large perennials, as well as smaller plants. For the latter she would often paint a small patch of soil or moss.

The printing of “North American Wildflowers” was completed by William Edwin Rudge of New York City (Smith 1989). The Rudge family was known for their

generational legacy as printers (Wikipedia 2017). William Rudge Jr. took printing to a higher level of artistic quality and had entered 100 prints in the 1920 National Arts Club Exhibition. As Cyndi Smith (1989) states in her biography, the publication of “North American Wild Flowers” was “a triumph for the artisans of paper-making and color printing.” The new reproduction process entailed, placing the paper through a battery of four color presses. The print was then immersed in a tub of water and finally towel dried. To ensure color retention and needed durability, pure rag paper was used. This was a labor intensive effort would later be known as the “Smithsonian process.”



Eriophorum chamissonis, Cotton grass, (plate 12)

“In all parts of the Rocky Mountains of Canada one’s attention is drawn in mid-July to the masses of sedge growing along the wet borders of alpine lakes, oftentimes out of the water itself. If there have been a few dry days, the cottony heads are waving in the breeze as it fitfully blows over them.....It is a circumpolar plant occurring in Northern Europe and Asia as well as North America. On this continent it perhaps survived the glacial period in Wyoming and adjoining states, where it still grows, but since the ice retreated it has spread into Alaska, and eastward across Canada to Ontario and even to New Brunswick.”

The above narrative excerpt for cotton grass reflects both Mary Walcott’s appreciation for the beauty of the plant and its habitat, as well as, her scientific knowledge with respect to the species historic distribution.

When at their home in Washington D.C., Mary spent several years selling subscriptions to the volumes to finance printing costs even though the book was produced by the Smithsonian. The patrons list included names such as DuPont, Carnegie, Rockefeller, the Canadian Pacific Railway, National Geographic Society and Girl Scouts Incorporated (Laviolette 2012). Her close friend Lou Hoover, wife of President Herbert Hoover, was a champion for the Girl Scouts of America. \$750,000 went into the effort of printing all five volumes by the end of 1929. This would be roughly an equivalent of 9.9 million today (ibid.). The volumes would be printed a second time based on the success of the first printing (Smith 1989). Library copies of the original work were completed for the second printing.

It is interesting to note that a small pocket guide, “Wild Flowers of America” was produced in 1993 based on the paintings of Mary Vaux Walcott. Unlike the original five volumes, the meticulous attention to color reproduction was lost. H. W. Rickett, former Senior Curator of Botany for the New York Botanical Garden, edited the pocket guide and provided technical descriptions of the plants based on botanical terminology. Rather than keeping Mary Walcott’s original sequence of plant sketches the paintings are organized by plant family. The intimate connection with the artist Mary Walcott is missing in this publication. However, it does bring her work forward to a present day audience and perhaps it will inspire the reader to discover her original work. With time, possibly another publication could become a compromise in maintaining her intimate approach to the plants she illustrated, and preserving her sense of wonder with the natural world, but not, requiring five coffee table size volumes.

Mary would celebrate her 77th birthday with a 30km.ride in the Canadian Rockies (Smith 1989). She had continued with the annual horseback rides with the Alpine Club of Canada. At 78 she gave a lantern slide presentation to a group of 2,000 wild flower enthusiasts in Toronto. Earlier in her life (1892), her scientific

contributions had been recognized by her election to the prestigious Academy of Natural Sciences of Philadelphia. Throughout her life she remained observant and active within her Quaker faith. She was instrumental in procuring the funding for a “meeting house” for President Herbert and wife, Lou Hoover.

Several years before the end of her life she would accept an appointment as a Commissioner for the Bureau of Indian Affairs, BIA (Jones 2015). She traveled by chauffeured car and visited many of the Indian schools and reservations throughout the west. The appointment was in service to President Coolidge when the position was vacated with the death of her brother Charles. As established earlier by President Grant, appointees, “were to be leading philanthropists and humanitarians, to serve without pay” (ibid.). Mary Walcott, despite her insightful approach to science and natural history, was not able to be empathetic to the enforced cultural transformation of Indigenous Americans (ibid). For all of her accomplishments and tremendous work ethic, she had lived a life of privilege which perhaps, left her unable to bridge a chasm separating her from the plight of native peoples desperate for their own place and traditions of home. Biographer Marjorie Jones (2015) reminds readers that Mary Walcott, as other historic figures, lived within the “context of their times.”



Calypso bulbosa, the Calypso Orchid, plate 105

“In mountain woods, where pine needles cover the ground and preserve the moisture underneath, the dainty calypso is often found and is a joy to recall ever after. This lovely little orchid, waving with each passing breath of wind, is poised on a slender stem that seems too delicate to support its weight....” (The specimen sketched was found in Glacier National Park, Montana)

Mary Walcott continued her wildflower illustrations into her seventies. Her last publication was, “Illustrations of North American Pitcherplants” which contains fifteen of her paintings. The monograph was published in 1935 by the Smithsonian. Co-authors included Edward Wherry, who provided descriptions and distributional information on the plants, and Frank Morton Jones, documenting the insect associates of individual plants.

Her last trip west was in June of 1939 when she visited both the Grand Canyon and Canadian Rockies (Jones, 2015). While visiting her Quaker friends at St. Andrews-by-the-Sea in New Brunswick, Canada, Mary Vaux Walcott suffered a heart attack in her sleep and died on August 22, 1940. She had been working on

two additional volumes of botanical watercolors for publication (Smith 1989). Her watercolor paint box that was given to her when she was ten years old, “from which all the sketches were painted” and, all the flower sketches were given to the Smithsonian. She was buried at Rock Creek Cemetery alongside her husband, Charles Walcott and his family.

My impression from learning about this fascinating artist and scientist, was that the Northern Rockies were to Mary Walcott, as “The Range of Light” (Sierra Nevada Mountains) were to John Muir. Both were extremely appreciative of the natural history of various regions, and, were afforded the opportunity to travel extensively. However, the grandeur of their respective beloved mountain topography captured the concept we refer to as home. And, in some way, when the “breath of wind” that causes the little calypsos to wave in the breeze occurs, I think that Mary Vaux Walcott is there too, loving, appreciating, and cherishing the intimate landscapes and plants of her heart.

Literature Cited

Jones, Marjorie G. 2015. *The Life and Times of Mary Vaux Walcott*. Schiffer Publishing, Ltd. Atglen, Penn. 176 pgs.

Laviolette, Mary-Beth. 2012. *A Delicate Art, Artists, Wildflowers and Native Plants of the West*. Chapters 1 &2. Rocky Mountain Books. Pp.21 – 58.

Rabaler, R.A. and R.A.Hartman 2005. Caryophyllaceae. In: Flora of North America Editorial Committee, eds. 1993+, Flora of North America North of Mexico. 20+ vols. New York and Oxford. Vol. 5.

Rickets, H.W., Editor. 1993. Wild Flowers of America. Abbeville Press Publishers, New York. 400 plates and revised descriptions.

Shteyenberg, Catherine. 2009. Understanding the Magic Lantern. Smithsonian Institute Archives. <https://siarchives.si.edu/blog/understanding-magic-lantern>, accessed June 1, 2017.

Smith, Cyndi. 1989. Off the Beaten Track, Women Adventurers and Mountainers in Western Canada. Chapters 1&2. Coyote Books, Waterton Park, Alberta, Canada, Pp 22 – 68.

Smithsonian Institution 2017. Charles Doolittle Walcott, 1850 – 1927. <https://siarchives.si.edu/history/charles-doolittle-walcott> accessed May 23, 2017.

Vaux, Henry Jr. 2014. Legacy in Time: Three Generations of Mountain Photography in the Canadian West. Rocky Mountain Books. 128 pgs.

Walcott, Mary Vaux. 1925. North American Wildflowers, Volumes 1-5., The Smithsonian Institution, Washington D.C. Plates 1-400.

Wikipedia. 2017. William Edwin Rudge. https://en.wikipedia.org/wiki/William_Edwin_Rudge accessed May 23, 2017.



***Balsamorhiza sagittata*, (plate 69)**

“When in bloom these plants brighten the whole mountain sides with gold.The horses love to feed upon it, and will never pass a fine clump in perfection of leaf and bloom, unless urged on.”

This paper was completed for fulfillment of the History of Botanical Art, Catherine Watters, instructor. I am so grateful to have found the volumes of “North American Wild Flowers” at the Montana State University Herbarium and, to have discovered the botanical artwork and life of Mary Vaux Walcott.

Elizabeth Bergstrom, Spring 2017