

## The Greene-Nieuwland Herbarium at the University of Notre Dame

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The arrival of Edward Lee Greene at the University of Notre Dame in February, 1915 with "bag and baggage" to use his description, was the last stop in the peregrinations of one of the outstanding figures in the history of American botany. Bag and baggage consisted of "a most select library of botanical science of some thirty-five hundred bound books and rare printed documents, together with several hundred unbound; (2) An unique collection of some hundred thousand unmounted herbarium specimens, the most valuable ever offered for sale in America, this as being a kind of voluminous reference work which future generations of botanical authors will need to consult for verification of my own published genera and species; (3) A large accumulation of autograph letters from botanists of all degrees of eminence, from both sides of the Atlantic during more than forty years of my own activity in the science." (1)

These forty years of avid collecting and prodigious publication began in the mid-west, in Wisconsin, where the young Greene initiated his botanical career stimulated by his mother's interest in plants and under the tutelage of Thure Kumlien, a pioneer Wisconsin naturalist. As a nineteen-year-old soldier in the Civil War he wrote Kumlien in consecutive sentences of the horrors of war and his interest in botanical collecting; "They lay side by side and probably were both killed by the same merciless bomb shell. I have seen a great many new things in the vegetable world since I left home but it has not been much more than an aggravation to me to see when I could not have a chance to collect anything."

Nevertheless, he managed to pursue his botanical interests and later wrote, "I have a book which I keep in my knapsack in which I can press small plants quite well. I sent a few home about a week ago and wrote mother to divide them with you." (2) Various hazards attended his military botanizing as indicated in his comments on a fox glove he had marched by "It was pretty, but I did not dare leave the ranks to notice it closely"; and on a rapid retreat, "I had well nigh lost all my botanical and other little collections on my last march. We were ordered away from Claysville soon after my last letter to you and were obliged to burn up a good many valuable things to prevent them from falling into rebellious hands after our departure. I managed to crowd most of my plants into my knapsack by carrying some of my clothing in another manner and have preserved now the most of them." (2)

During his military service Greene wrote, "I have almost made up my mind that I would make my home somewhere in that trans-Mississippian region though possibly farther to the southward than Kansas." (2) It was in the post bellum west that Greene's botanical reputation was established and his botanical collection grew. During his early years in Colorado, where he arrived in 1870, he became an established botanical collector known to Asa Gray, George Engelmann, John Torrey and other leading American botanists of the day. He also completed his theological studies, was ordained in the Episcopal Church, and persuaded his bishop to assign him rural parishes so he could pursue his botanical and religious

roles "in order that the care of souls might be lightened by the pursuit of botanical studies." (3) He ranged over the then little known areas of Wyoming, northern Colorado down to New Mexico adding to his knowledge of western plants, discovering several species and, "had a fine time, also have worked my way into the pulpit so as to have no trouble about the wherewithal to pay my expenses. . . . I have a large congregation and a good salary but with all that so much pastoral work, that my scientific studies are interfered with not a little." (2)

Pastoral work notwithstanding, by 1885 Greene had established himself as the leading botanist of the west, so that when he gave up the ministry he founded the department of botany at the University of California. Here he continued his collecting and entered the most productive period of his publishing career becoming a world renowned figure in botanical circles. By 1892 he was named a member of the International Committee on Botanical Nomenclature; of which he wrote later, "As far as the rules of nomenclature of the last botanical congress I have never read them; although I am a member of the International Commission. If you knew how these congresses are composed and how the business of them is done you would have no great deference to pay their rules." (1) Perhaps his earliest association with Notre Dame was in 1894 when the University awarded him the LL.D. In 1895 he was chosen president of the Botanical Congress held at Madison, Wisconsin.

That same year he left California taking with him his herbarium and library at his own expense, and became professor of botany at the Catholic University of America in Washington, D. C. He remained here until 1904 working on his systematic and historical studies. In 1904 he became an honorary associate in botany at the Smithsonian Institution, his herbarium and library being transferred to the U. S. National Herbarium. The agreement with the National Museum was that Greene's collections were not to be removed for ten years and within that time the Museum could purchase the plant collection and library for thirty thousand dollars, or in the event of his death the collections would become the property of the Museum. During this period Greene devoted himself in large part to his studies in the history of botany the first volume published in 1909 as "Landmarks in Botanical History," the second volume unfortunately being unpublished to this day.

It was during this period that the events took place which led eventually to Greene and his "bag and baggage" arriving at Notre Dame. Greene's tenure at the Catholic University was not an entirely happy period but one of his students there was Father Julius Nieuwland, C.S.C., who upon his return to Notre Dame in 1904 became professor of botany. Father Nieuwland did his thesis in chemistry and subsequently became famous as a chemist. However, in his early career he devoted his attention to botany and his correspondence with Greene, beginning in 1905, dealt with botanical subjects. In October of 1907 he wrote "I am doing my level best to build up a botanical library and have lost all interest in chemistry." (1) Greene had infected his student with his own interest in old and rare botanical books and Father Nieuwland became another botanical bibliophile writing of books, "since I have thrown chemistry practically overboard I am intensely interested in these things." (1) Nieuwland

acquired a considerable library of botanical works from the proceeds of the sale of slides of botanical materials which he made and sold.

During this period Father Nieuwland frequently urged Greene to visit Notre Dame pointing out "the cost of living is nothing divided by two at Notre Dame," and commenting, "I badly feel the need of some encouragement in this work." (1) As early as 1907 Greene wrote, "I should be very happy were it so ordered that I should join you at Notre Dame for weeks, for months, or for years." (1) However, he desired to stay in Washington because the libraries there favored his historical work.

Nevertheless during these years Greene was instrumental in stimulating Father Nieuwland to pursue his botanical studies and urged him to develop the herbarium at the University. In 1908 Greene wrote to Nieuwland "You will need a great herbarium in a place such as Notre Dame is destined to become" (1) and in the same year he even provided directions for the labels for the herbarium.

The initial herbarium of the University had been destroyed in a fire in 1879. (4) In Father Nieuwland's early years at Notre Dame he mentions the difficulty of working without a herbarium. His own extensive botanical studies and collecting began to remedy this lack and by 1945 the Nieuwland Herbarium contained some fifty thousand specimens. Much of this is Indiana and midwestern material, but many specimens from other regions were obtained by exchange.

In response to Father Nieuwland's repeated urgings Greene, in 1909, visited the University and went on collecting trips with Nieuwland and his students. This was the first of almost annual visits he made to South Bend before he moved there permanently. That he was pleased with his reception and prospects at Notre Dame is evidenced in a letter to Nieuwland written in December, 1909. In it he said that he had asked the Smithsonian to release him from his contract so he could move his books and herbarium, and that two places on the Atlantic coast, one on the Pacific were waiting "to claim me, my equipment and all." None of these interested him and he wrote "If I were assured the University (Notre Dame) would accept the above as a gift, publish all I write without cost to me and give me shelter and food—all this to the end of my days—I am not sure I would not prefer that to any other place." (1) Father Nieuwland wrote back "I certainly did lie awake a good part of last night after reading your letter. You can hardly imagine how glad I would be if you would decide to come to Notre Dame." (1) Thus, some six years before his arrival at Notre Dame, Greene was considering the move to South Bend.

During this period Greene was obviously concerned by his situation at the National Museum and was anxious to move. He wrote Nieuwland of a discussion with a friend in the United States Senate, "My senator . . . advised me to procure release from the contract of deposit here and, when I am ready, betake myself to that Indiana place." (1)

However he was bound by contract to leave his herbarium and library on deposit at the National Museum for ten years and at any time the Museum secured the money it could, according to the contract, purchase the collections. In January, 1910 a bill was introduced in Congress to appropriate thirty thousand dollars to buy Greene's herbarium and library. Both Greene and Nieuwland were much concerned about this and Father Nieuwland wrote to Greene asserting he would, if Greene wished, try to

prevent passage of the bill. Continued efforts to procure the appropriation prompted Greene to take action as well, "I had to leave all yesterday and go lobbying to prevent that." (1)

In November of 1912 he wrote to Father Cavanaugh, then president of Notre Dame, the statement of an offer of his herbarium, library and correspondence in return for a modest annuity and living quarters for the duration of his life. He remarks in this letter that the proposed annuity was "less than half what I am sure of being able to take from one or another of four different great seats of botanical study and research. . . ." (1)

In spite of the inducements offered him by several other universities and museums Greene persisted in his resolve to go to Notre Dame. In November, 1913 he wrote Father Cavanaugh, "Shall you be ready next May to receive and set in order for use—my use also—the massive botanical collections?" (1) It was not, however, until February of 1915 that Father Cavanaugh reported that the freight car with books and herbarium had arrived and cases were being constructed, according to Green's specifications, to receive the collection.

Greene was never to pursue his botanical studies at Notre Dame for within the year of his arrival he was dead. His plan to do a flora of Wisconsin was unfulfilled and his history of botany and projected "American Botany in My Time" were never completed, an irrevocable loss to the history of the science.

Nevertheless his mark was firmly placed on the botanical work of the University ably carried on by Father Nieuwland and later Theodore Just. Greene was responsible for the stimulation and encouragement which enabled Father Nieuwland to establish a considerable herbarium of his own. The addition of his own invaluable collections, which are kept separate as the Greene Herbarium, to the Nieuwland Herbarium made the botanical collection at Notre Dame one of the largest and most significant in the country; in Greene's words "a kind of voluminous reference work which future generations of botanical authors will need to consult. . . ." (1)

#### Literature Cited

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