Liberty Hyde Bailey—Father of American Horticulture

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Liberty Hyde Bailey, the first President of the Society for Horticultural Science (renamed the American Society for Horticultural Science in 1916), 1903-1905, was a man of many talents. He has been called "Father of American Horticulture", and "Dean of Horticulture" throughout the world. Bailey was a rugged individualist with tremendous energy for thinking and doing. He set goals, worked hard, but enjoyed life in addition to making contributions and achievements that will benefit mankind forever.

Bailey was born 15 Mar. 1858 in South Haven, Mich., the son of Liberty Hyde Bailey, Sr., a Vermont Puritan who migrated to Michigan and established a frontier farm cut out of a primeval forest. Bailey's father was a successful fruit farmer, and Bailey's second book, *Field Notes on Apple Culture* (Bailey, 1886a), was dedicated: "To my father, the results of whose teachings are embodied in this book." At age 10, Bailey top-grafted apple trees and had one tree with 40 cultivars; his father had assembled a collection of more than 320 cultivars.

What was the origin of the name, Liberty? Bailey's grandfather was a New England farmer and an abolitionist. When asked what to call his son, he said: "Call him Liberty—for all shall be free." The name was passed on to the grandson, who used Jr. on early publications, but dropped the Jr. around 1886.

As a boy, Bailey had a keen interest in nature and studied the birds, animals, and plants in the wild. At age 11, he read with interest Darwin's *On the Origin of Species by Means of Natural Selection*, and a few years later was introduced to systematic botany through a cousin's book, *Gray's Field,*

Forest, and Garden Botany (1895). Later his interest was stimulated by Lucy A. Millington, an ardent naturalist and skillful botanist, who walked through woods and dunes with Bailey studying plants. She listened to the joys of his discoveries, told him the names of plants, and pronounced the strange words. She encouraged him to study botany, and even gave him her plant collecting case, which he treasured and used throughout his life. She also provided a microscope, which was a rarity in that area.

Bailey's formal education began at age 5, when he entered a village schoolhouse and received instruction in grammar, Latin, and geometry. Teachers taught him the value of direct observation of nature. At age 19, without graduating from high school, he enrolled at the Michigan Agricultural College (MAC). He did not have formal courses in horticulture until his junior year, but did have excellent teaching in botany by William J. Beal, a professor of botany, who emphasized direct observation and experiments with plants as a supplement to instruction from textbooks. Bailey was an excellent student and graduated in 1882 at age 24 (Fig. 1), having been delayed by a year of illness between his junior and senior years. At that time he went to Springfield, Ill., where he served as a newspaper reporter and editor.

As founder and editor of the *College Speculum* at MAC, he wrote serious articles on public affairs, science, and agriculture, as well as editorials in which he challenged the faculty and college boards to action on many facets of college life, such as the need for boarding clubs, a full-time librarian, street railway to Lansing, and a mechanical engineering curriculum. While a student at MAC, he also served as teacher in the Carl Grade School, a one-room log building with eight grades, in East Lansing.

During his college years, Bailey published two papers: "Michigan Lake Shore Plants" (1880) and "Limits of Michigan Plants" (1882). Following graduation from MAC, he took a major step in his career by going to Harvard Univ. as an assistant to Professor Asa Gray, from 1883 to 1885. He sorted and classified plant specimens from the Kew Gardens in England, cataloged dried specimens from the herbarium, memorized details of plants in botanical gardens, attended lectures, and studied German. This greatly developed his abilities in taxonomic classification. While at Harvard, he published six papers on the genus *Carex* in the *Botanical Gazette* (1884, 1884a).

He returned to Michigan for his marriage to Annette Smith in June 1883. On 1 Jan. 1885; at age 27, Bailey went to MAC as Professor of Horticulture and Landscape Gardening, and Superintendent of the Horticulture Dept. Interestingly, this fit into his plan for life, which was 25 years for training and learning his profession, 25 years in gainful employment and public service, and 25 years in retirement, doing as he pleased. Fortunately, the last period proved to be 41 years.

When Bailey announced his return to MAC, Harvard botanist John Merle Coulter supposedly prophesied: "You will never be heard from again." How wrong he was!

Bailey's years at MAC, and, later, at Cornell, provided the opportunity to implement several philosophies. With his training in botany and horticulture, he stated: "Horticulture must reflect the application of basic botanical knowledge." Throughout his career, he worked to transform horticulture from a craft to an applied science, and he succeeded. Harold B. Tukey, Sr. (1957), quoted Bailey: "The horticulturist is the man who

Received for publication 12 Mar. 1990. Appreciation is expressed to David M. Bates of the Liberty Hyde Bailey Hortorium at Cornell Univ., Jane L. Taylor of tire 4-H Youth Programs, and Frank C. Dennis, Jr., Dept. of Horticulture, Michigan State Univ., for their suggestions. I especially want to thank my wife, Catherine, for her support throughout the writing of this paper. Information for this paper has come from many printed sources, including the literature citations, and references for further reading. Photographs are from the Cornell Univ. Archives and Cornell Univ. Photography.

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Fig. 1. Liberty Hyde Bailey, age 24, at Michigan Agricultural College. Note the vasculum given to him by Lucy A. Millington.

joins hands with the plant biologist on one side and with the affairs of man on the other, and whose energies are expended in every way in which plants appeal to men." Bailey certainly bridged the gap between the botanist and the horticulturist.

During his 3 years as professor at MAC, Bailey developed horticulture as a science, and he pioneered the concept of laboratory work, field trips, and student experiments as a supplement to the standard classroom lectures and discussion. This format of instruction expanded to other agricultural colleges, and now is standard practice in horticultural instruction. His horticultural lectures attracted students from many fields at MAC. While Bailey was at MAC (1885-87), the state legislature appropriated money for the first building in the nation to be used solely for the study of horticulture at a university. Bailey designed it with classrooms, laboratories, office, and darkroom. Photography always was an important part of his botanical work. Eustace Hall was completed Nov. 1888, and still stands on campus. The department moved into a new building in 1926, and into the new Plant and Soil Sciences Building in 1986.

While at MAC, Bailey continued writing papers about *Carex* (1885a, 1886) and wrote his first three books: *Talks Afield: About Plants and the Science of Plants* (1885), followed by *Field Notes on Apple Culture* (1886a) and *The Garden Fence* (1886b). In the latter, he urged that botany, with its scientific techniques, "cross the fence" into the garden, where it could improve the practice of horticulture.

A major step in Bailey's life was in 1888 when, at age 30, he went to Cornell Univ. as Professor of General and Experimental Horticulture with the mandate, and opportunity, to build the kind of horticulture de-

partment and program he envisioned. Other inducements were a trip to Europe to study what was going on in horticultural research and education, and a promise of a new departmental microscope to cost "not less than \$150". The trip to Europe was enlightening and successful in broadening Bailey's horticultural background. He was accompanied by his spouse and 'their two daughters. Sara May and Ethel Zoe.

At MAC and Cornell, he taught many horticulture courses as well as the evolution and the botany of cultivated plants, and related these to horticulture. In addition to inspiring lectures, he had walks and talks in the orchard and gardens, work in the laboratory, and field trips to other regions. He continued to set forth his philosophy about the relationship between botany and horticulture.

Research was part of his responsibilities at Cornell. In 1891, he reported his first experiments on electro-horticulture and wrote: "On the whole, I feel it will be possible some day to use the electric light in floricultural establishments to some pecuniary advantage." His prediction is borne out by present-day use of radiant energy from high-intensity-discharge lamps to supplement natural light in growing flower and vegetable plants. His Cornell Agricultural Experiment Station Bulletin 30, "Some preliminary studies on the influence of the electric arc lamp upon greenhouse plants" (1891), was selected for *Classic Papers in Horticultural Science* (Janick, 1989).

Horticultural writing continued. There was *The Horticulturists' Rule Book* (1890), a 236-page compendium of useful information for fruit growers, truck gardeners, florists, and others, and *Cross-breeding and Hybridizing* (1892). In 1895, the Macmillan Company offered to publish any book he wrote. In the space of 5 years, he sent manuscripts, all in long hand, for 11 books and manuals. During a 15-year period (1883-1903), he authored 25 books. He, and associate editor W. Miller, produced the *Cyclopedia of American Horticulture* (1900-02), a complete record of American horticulture at the turn of the century. Also, he started the *Nature-Study* series. During his tenure on the faculty, he wrote 60 agricultural experiment station bulletins and edited many more. In regard to his extensive writing, his formula was: "There are 2 epochs essential in any enterprise. To begin and get done."

In 1903, at age 45, Bailey became Dean and Director of the Cornell College of Agriculture. Following a vigorous legislative struggle, and overcoming strong opposition from some other individuals at Cornell and from some other colleges in New York State, he saw the establishment of the New York State College of Agriculture in 1904. He served as Dean of the Faculty, Director of the College and its Experiment Station, and Professor of Rural Economy for 10 years, until his retirement on 31 July 1913, at age 55.

During his deanship, his pioneering spirit continued as he reorganized and expanded the college. Horticulture was divided into three departments: pomology, vegetable crops, and

floriculture. He established a department called experimental plant physiology, which later became plant breeding. He created a department of plant physiology, which, in 1913, expanded into a balanced department of botany. Other departments established by the time of his retirement were plant pathology, farm management, farm practice and farm crops, soil technology, forestry, entomology, dairy industry, animal husbandry, poultry, farm mechanics, agricultural chemistry, home economics, drawing, rural economy, meteorology, extension, rural school education, and landscape art. The last formerly was the department of rural art, which had been established in 1906 and offered a complete undergraduate program in landscape architecture. Eventually, after many years in the college of architecture, Bailey's dream materialized again with the establishment of the landscape architecture program in the Department of Floriculture and Ornamental Horticulture in the College of Agriculture and Life Sciences in 1968, with full accreditation in 1974. During Bailey's decade as dean, the college of agriculture expanded tremendously, with the number of students growing from 100 to 1400, and faculty increasing from 11 to more than 100. There was expansion of land for research and teaching. New buildings were constructed, and some are still in use today.

Another notable achievement was the development of agricultural extension courses for men and women. Also, Bailey convinced state officials that agricultural courses in high school should be accepted by the board of regents and given academic recognition equal with other high school subjects.

An outstanding event with far-reaching results was Bailey's acceptance of President Theodore Roosevelt's invitation in 1909 to serve as Chairman of the Commission on Country Life. Under Bailey's leadership, agriculture received several major benefits. There were established a nationwide federal extension service, a U.S. Parcel Post system, agricultural education on a national scope in public high schools, and federal support of electrification programs and communications facilities for rural areas.

After his retirement" in 1913, Bailey embarked on 41 years of "using his abilities as he chose", and "doing what he wanted to do". This was a great period of travel to many remote parts of the world to collect plants and of writing many taxonomic papers. Palms were a special interest that started with a visit to Jamaica in 1910. His first taxonomic paper on palms was in 1930, and, from then until 1949, he published 45 papers on members of the *Palmaceae*. More than 20 collecting trips resulted in one of the finest herbarium collections of palms in the world.

Other writing and editing continued, with four cyclopedias, including *The Standard Cyclopedia of Horticulture* (1914-17), originally published in six volumes of 3639 pages. The outstanding *Hortus* (1930), by Bailey and his daughter, Ethel Zoe, was followed by the 778-page *Hortus Second* (1941).

Another tremendous contribution was the

establishment of the Hortorium. Bailey's personal herbarium had collections from his early studies in Michigan dating from 1881, and became an institution after he returned from an extended collecting trip to China in 1920. According to Lawrence (1956), Bailey coined the word "hortorium" to be a repository of things of the garden, a place for the scientific study of plants of the garden, their documentation, their classification, and their naming. By garden, he meant anyplace where humans grow plants, whether a wheat field, an orchard, a bed of flowers, a conservatory, or similar sites.

In 1935, when Bailey found that his private herbarium of 125,000 specimens and library of ≈ 3000 volumes were beyond his ability to maintain and perpetuate, he and his wife donated them to Cornell Univ., and the Liberty Hyde Bailey Hortorium was established. Bailey served as Director until 1952. Ethel Zoe Bailey was appointed Curator and served until 1983, when she died at age 93. She also had served as editor of many of her father's books and articles, and as field assistant on collecting trips to China, Japan, and Latin American jungles.

In 1952, when the Mann Library building on the Cornell campus was completed, the Hortorium was relocated there. In 1987, it was reported to have nearly 800,000 herbarium specimens, a library of >12,000 volumes, and a large world-wide collection of nursery and seed catalogs. The faculty and staff also have increased greatly.

A unique feature at Cornell is the Cornell Plantations, a name given by Bailey. He believed in the establishment of living plantations and an arboretum where interested researchers, teachers, and students could study plants first hand. The Cornell Plantations is flourishing and expanding its scope of service.

In Dec. 1949, Bailey fell and broke his thigh in New York City, where he had been, on his way to tropical Africa for another plant-collecting trip. He returned to Ithaca, where his injury confined him to his home. He continued to work and write, his last book being *The Garden of Bellflowers in North America, with Decorations* (1953).

Liberty Hyde Bailey died late in the evening on Christmas Day, 1954, at the age of 96. Thus ended the life of an extraordinary individual. He set lofty goals, worked diligently, and had pleasure out of life along with making tremendous contributions to horticulture and botany. An individual with great energy for thinking and working, he was a man of action!

Bailey received many honors and awards in recognition of his contributions and his service to horticulture, botany, and mankind. These include honorary doctorate degrees from the universities of Wisconsin, Vermont, Puerto Rico, and from Alfred Univ. George H.M. Lawrence (1955) lists 36 other honors, recognitions, and awards from around the world. In addition to ASHS, Bailey was a founding member and president of the Botanical Society of America and the American Nature-Study Society, and served as president of many other organizations.

Fig. 2. Bailey studying herbarium specimens in the Liberty Hyde Bailey Hortorium, Jan. 1948.

At Cornell Univ., on 29 Apr. 1948, an event was held in recognition of the 90th anniversary of Bailey's birthday. On his "real" birthday anniversary (15 Mar.), he was on--a plant collecting trip in the West Indies. More of his philosophy of life was expressed at the conclusion of his comments, published by Cornell Univ. (1948), when he said: "It is a marvelous planet on which we ride. It is a great privilege to live thereon, to partake in the journey, and to experience its goodness. We may cooperate rather than rebel. We should try to find the meanings rather than be satisfied only with the spectacle. My life has been a continuous fulfillment of dreams." And another quotation: "The measure of life is in the daily living of it and the acceptance of it for all it is worth or, at least, for all you can make of it. And you can make much of it."

Bailey's life certainly should serve as an inspiration and a model for all horticulturists. He was a man of many talents with activities and achievements that qualify him as horticulturist, botanist, taxonomist, author, editor, teacher, extension educator, research scientist, administrator, public servant, explorer, philosopher, poet, and politician.

HORTICULTURIST

The horticulturist is evident from his productivity as a teacher, researcher, extension educator, and administrator in horticulture, as well as from his writing and/or editing many books and papers in horticulture, such as *The Nursery Book* (1891a), *The Forcing Book* (1896), *The Principles of Fruit Growing* (1897), *The Pruning Book* (1898), *The Apple Tree* (1922), and *The Gardener's*

Handbook (1934a). His virtues as a horticulturist are extolled by Tukey (1956).

BOTANIST

Bailey's books and papers are a "monument" in botany. His first article (unsigned), published in the *MAC College Speculum* in 1881, was a review of *Catalog of Michigan Plants* by C.F. Wheeler and E.F. Smith.

Bailey's writings brought botanical science within the grasp of the ordinary person. *Talks A-field about Plants and the Science of Plants* (1885) explains botanical structures and functions, written in the parlance of the farmer, amateur botanist, and youth. To provide botany books for students, he wrote *Lessons with Plants* (1898b), a text followed by *Botany: An Elementary Text for Schools* (1900), and *Beginner's Botany* (1908).

As president of the International Botanical Congress in Ithaca, N. Y., in 1925, his efforts led to amending the international rules of nomenclature, and influencing their use by American botanists.

TAXONOMIST

Bailey had a myriad of taxonomic papers (Fig. 2). In 1884, he published the first of a series of 20 papers on the genus *Carex*. Between 1929 and 1949, he published more than 100 scientific papers concerning revision of genera, many related to horticulture, such as the blackberry series (1932, 1933a, 1934), as well as monographs or revisions of *Cucurbita*, *Hosta*, and *Vitis*. He founded *Baileya*, a quarterly journal devoted to the botany of cultivated plants and especially to their identification, nomenclature, classifi-

cation, and history in cultivation. He established the Liberty Hyde Bailey Hortorium as a repository for taxonomic materials and research. In 1920, he initiated *Gentes Herbarum* (kinds of plants), which still exists with papers primarily by hortorium staff. *The Manual of Cultivated Plants* (1924, revised in 1949), is a standard reference for identification of the most common or significant plants in the United States and Canada. *Hortus* (1930) was an outstanding taxonomic contribution.

AUTHOR

Bailey was a prolific writer, with a facility to write appropriately for his audience and purpose, spanning the spectrum from books to bulletins to journal papers to articles in garden and other popular magazines. His major audiences were commercial farmers, gardeners, scientists, and students in horticulture and botany, and, one of his favorites, school children. He based his writings on his broad expanse of knowledge gained from working experience, keen observation, and scientific research. Thus, his writings cover many fields, and are a legacy for all of us in horticulture and botany.

His facility for writing is described by Colman (1963). In 1 year, from June 1894 to June 1895, Bailey wrote 30 articles, brought out the 3rd edition of *The Horticulturists'*

Rule Book (1890), contributed more than 40 articles on plants to *Johnson's Universal Encyclopedia*, of which he was associate editor, and revised and extended Asa Gray's *Field, Forest and Garden Botany* (1895).

Books

A complete bibliography of Bailey's publications covering 81 years of writing does not exist. Lawrence (1955) lists 63 books of Bailey's authorship, and four of joint authorship, plus six cyclopedias and directories edited by Bailey (Fig. 3).

In addition to books for school and college teaching, he wrote many for the farmer, nurseryman, and florist, but also had a keen interest in home gardening and landscaping. A few examples are *Garden Making* (1898a), *Manual of Gardening* (1910), *Home Grounds and their Planning* (1918 c), *Gardeners Handbook* (1934a), and *The Garden of Larkspurs, with Decorations* (1939). Bailey wrote *How Plants Get their Names* (1933) "for those who may wish to read it but with the horticulturist and garden-lover particularly in mind." His impact on the amateur gardener was well-outlined by Irving (1958).

While professor of Practical and Experimental Horticulture, and chairman of the new Dept. of Horticulture at Cornell University, he produced many Cornell Agricultural Experiment Station Bulletins. Between 1891 and

1897, he wrote at least 18 bulletins, totaling 1514 pages, with a great diversity of subjects from his first on supplementary lighting of plants in greenhouses to planting of shrubs, spraying of trees for cankerworm, and care of fruit trees and other crops, including mulberry, dwarf cherry, apricot, peach, strawberry, quince, Japanese plum, and chrysanthemum.

Journal papers

Bailey's substantial contributions (more than 100 titles) to taxonomic literature include his *Announcement of Catalog of North American Carices* (1884) covering 293 species and 84 cultivars. Sixteen of his papers from 1920 to 1943 in *Gentes Herbarum* totaled more than 3100 pages. Volume 5 (1945) on the genus *Rubus* is an outstanding monograph of 932 pages. His continued interest in palms led to *Flora of Panama: Palmaceae* (1943).

Bailey also had many papers in other journals, such as *Science*, *Bulletin of the Torrey Botanical Garden*, and *Proceedings of the American Society for Horticultural Science*.

Nature-study and rural school leaflets

Bailey's interest in having nature-study work begin in the primary grades is evidenced by the series of *Nature Study Leaflets* from 1896 to 1904, reprinted by the state of New York as *Nature-Study Bulletin #1* (1904), with 594 pages devoted to Teacher's and Children's Leaflets. The first four, written by Bailey, were "what is nature-study?," "The nature-study movement, an appeal to the teachers of New York State," "What is agricultural movement?" There were several others, such as "The birds and I" and "How a squash plant gets out of the seed," and 50 Teacher's Leaflets and 29 Children's Leaflets by various authors.

For Bailey, the outdoors was a favorite classroom (Fig. 4). He stated: "The nature-study process and point of view should be a part of the work of all schools because schools train persons to live. Particularly should it be part of rural schools because the nature-environment is the controlling condition for all persons who live on the land. A laboratory of living things is a necessary part of the best nature-study." This also was the beginning of the nature-study movement and the rural leaflets.

More about Bailey's philosophy of nature, and his admiration for his father, is embodied in *The Outlook to Nature* (1905), in which he wrote: "To my father whose more than four-score years have been lived on the farm—naturalist without knowing it—I dedicate this book."

American Society for Horticultural Science papers

As our first President, Bailey's 1904 Presidential Address was followed by other thought-provoking papers (Table 1), which should be read by Members today.

Fig. 3. Bailey, at age 83, surveying stack of books of his authorship. Books shelved at his right are of his editing.

Fig. 4. Bailey's down-to-earth teaching style emphasized informal exploration of the wonders of nature in a favorite classroom, the outdoors.

Table 1. Early papers of Liberty Hyde Bailey in the *Proceedings of the Society for Horticultural Science* and *Proceedings of the American Society for Horticultural Science*.

Year	Title	Volume and pages
1904	What is horticulture?	1:53-60
1905	Recent progress in American horticulture.	3:7-14
1907	The teaching, experiment, and research phases of horticulture.	5:12-16
1909	The field of research in horticulture.	6:42-49
1916	Report, of the committee on research and experimentation. Part I.	13:110-112
1919	The impartiality of research.	16:197-203
1926	Current tendencies in horticulture.	23:16-18.

EDITOR

Bailey edited scores of books, including 117 titles by 99 authors between 1890 and 1940, as well as the publication *The American Garden*. He compiled and edited five cyclopedias, including *Cyclopedia of American Horticulture* (1900-02), 2016 pages, edited with W. Miller; *Cyclopedia of American Agriculture* (1907-09), 2057 pages; and *The Standard Cyclopedia of Horticulture* (1914-17), 3639 pages.

TEACHER

As professor at MAC and Cornell Univ., Bailey taught many courses and pioneered in new methods of teaching by introducing student laboratory and field experiments, and field trips. His interest in youth led to development of the "Nature-Study Leaflets for Teachers and Children" and "The School Book of Farming: A Text for Elementary Schools, Homes, and Clubs" (1920).

His interest in students is evidenced by his informal discussions with students after club meetings (Fig. 5), and his founding of the "Lazy Club" at Cornell so students and professors could get together and talk about research and various facets of horticulture.

EXTENSION EDUCATOR

In addition to writing many extension publications, Bailey introduced unique methods, such as a program of farm trains to carry information to farmers and other rural folks. He established demonstration plots and experiments in farms and gardens. He would even go to a farm to help solve a problem. His chairmanship, and report, of the Country Life Commission led to passage of the Smith-Lever Act, establishing the Co-operative Extension Service and its youth component, 4-H programs.

RESEARCH SCIENTIST

Bailey showed leadership in addition to conducting his own research at MAC and Cornell. He was an early investigator in many fields. For instance, one of his early books was *Cross-Breeding and Hybridizing* (1892), and he continued plant breeding research until 1904.

In regard to pure science vs. applied science, in the *Society's Proceedings* (1909), he wrote: "Knowledge is knowledge and the quest for it under conditions of control is research, and all research is worthwhile. Because certain knowledge is not of immediate

practical application, the importance of it as an object of human quest is not lessened thereby; and because certain knowledge is of direct practical use, neither is the value of it lessened, nor is it thereby unworthy of pursuit."

ADMINISTRATOR

As department chairman at MAC and Cornell, and as dean and director at Cornell, Bailey established his new concepts of teaching, research, and extension education. He implemented horticulture as a science, and wove together teaching, research, and extension education into a fabric of service to the needs of children, secondary school and college students, farmers, gardeners, and a host of other citizens. He was a leader in New York in the establishment of agricultural extension courses for men and women on the farm, many years before federal support was authorized.

Because of his skills and knowledge, Bailey served as one of the founders and first President of ASHS, one of five founders and president of the Botanical Society of America, first president of the American Nature-Study Society, as well as president of the American Association of Agricultural Colleges and Experiment Stations, American Pomological Society, American Association for the Advancement of Science, American Country Life Association, and American Society of Plant Taxonomists.

PUBLIC SERVANT

Bailey served, not only as chairman of the Roosevelt Country Life Commission to improve country life by better business and better living, but also as chairman of the New York State Park Commission and the New York State Agricultural Advisory Board, and, of course, as a faculty member of the State Agricultural Colleges in Michigan and New York.

EXPLORER

As reported by Moon (1958), between 1919 and 1951 Bailey made at least 68 excursions to many countries, usually to see new material of specific plants or plants of a particular region. At age 59, he went 1600 km (1000 miles) into China. At age 80, he went into the dense forests of Guadalupe, and, a few years later, into the wilds of Mexico by plane, truck, wagon, dugout canoe, horseback, and on foot. At age 86, he returned to Mexico and, at age 90, had his 10th trip to Brazil and the West Indies. At age 91, he collected palms on nine islands of the Lesser Antilles and Tobago.

PHILOSOPHER

Bailey's "background books" give some of his conservation and political philosophy. *The Holy Earth* (1918) is a combination of religious and ethical thoughts on the implication of man's relation to earth, and earth's goodness to man, and expresses his philos-

Fig. 5. Bailey's interest in students is exemplified by his discussion after presenting a talk at the Cornell Floriculture Club meeting, Nov. 1949.

ophy of life. It is a treatise on conservation, and may be called a forerunner of the ecological movement. According to Bailey, it was written in 1 week, mostly on a ship in the South Seas.

Ground Levels in Democracy (1916), *What is Democracy?* (1918a), *Universal Service* (1918b), *The Seven Stars* (1923), *The Harvest of the Year to the Tiller of the Soil* (1927), and *The Garden Lover* (1928) present additional aspects of his philosophy. Actually, his philosophy of life appears in subtle ways in many of his horticultural writings.

POET

His output as a poet is assembled in a booklet *Poems* (1908a), in *Wind and Weather* (1916a), and in *My Great Oak and Other Poems* (1952).

POLITICIAN

As dean of the College of Agriculture at Cornell, Bailey worked diligently with the legislature regarding government support for operation of the college, for new faculty positions, new buildings, and equipment.

At an informal reception after the dedication of the new horticultural building at the MAC in 1926, it is reported that he saw some who attended, as horticulturists and some as young ones trying to be, and he said: "Let me give you one piece of advice. Most horticulturists are inclined to focus all their attention on the commercial growers. That is a mistake. Never neglect the amateur for one reason. His vote counts."

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