



Annual Report 1927-1928

TO THE PRESIDENT OF THE UNIVERSITY:

SIR,

As Supervisor, I have the honor of submitting the following report on the progress and condition of the Arnold Arboretum.

In 1919, [Professor Sargent](#) emphasized among the needs of the Arboretum, the services of a plant pathologist and a department of plant breeding. These needs have been supplied by the appointment of Dr. Joseph Horace Faull as Professor of Forest Pathology, and by the appointment of [Dr. Karl Sax](#) as Associate Professor of Plant Cytology. Professor Faull will devote his time to research in plant pathology with special emphasis on woody plants, and Professor Sax will develop a department of plant breeding with emphasis on the cytological aspects of the subject. Professor Faull reported for duty on July first, and Professor Sax joined the Arboretum staff at the end of August, 1928.

A new greenhouse with a laboratory attached has been erected on land of the [Bussey Institution](#), near the South Street Gate. The laboratory has been thoroughly equipped for research in forest pathology.

The opportunity to enlarge the research staff and to provide the costly equipment essential to good work in plant pathology and plant breeding, came as a result of successful efforts on the part of loyal friends of Professor Sargent to establish the Charles Sprague Sargent Memorial Fund of one million dollars.

[Professor John G. Jack](#) continued his botanical explorations in the vicinity of Cienfuegos, Cuba. From July 23rd to October 10th, 1927, and from January 19th to May 10th, 1928, he collected approximately 10,000 specimens for the Arnold Arboretum, and made the beginnings of a reference collection of dried and living specimens for the Biological Laboratory and Botanic Garden at Soledad. The greater part of his work was done within four or five miles of the Laboratory, but two trips to the Trinidad Mountains, twenty miles distant, and a trip to Gavilan, a district bordering the sea, yielded interesting material. It has been found that a detailed knowledge of the herbaceous and arborescent flora in the neighborhood of the Laboratory and Garden is essential, not only for our professors and students, who are chiefly occupied with botanical problems, but for the entomologists, who need to know the component species of

the area in which their studies are conducted. Commendable progress has been made in the undertaking, especially with regard to the arborescent flora, but much remains to be done. The ecological conditions are so varied, and the development of the trees and other plants is so complex, that every group needs repeated examination, if anything approaching a complete record of the species observed and the localities visited is to be obtained. It is significant that many species of Cuban trees, which are already rare, some of them possessing economic value, are being exterminated by the extensive clearings that make way for the cultivation of sugar cane. A number of these species, which, perhaps because of increasing rarity have been neglected by the local inhabitants, have already shown promising qualities as timber trees, and may prove valuable in proposed plans for reforestation.

[Alfred Rehder](#) in addition to his regular duties in the herbarium, undertook field work in Cuba where he paid special attention to the native palms and to the large collection of palms cultivated in the Cuban Garden. In July, he went to Europe to study in the herbaria of England, Scotland, Holland, Finland, Sweden, Denmark, Germany, and Russia.

As a matter of record, the report of the Keeper of the Arnold Arboretum is submitted: in Massachusetts the winter of 1927-28 will be remembered for its mildness and absence of heavy snowfalls. While ground covering plants suffered on this account, the trees and shrubs in general were uninjured.

During the autumn of 1927 and the spring and early summer of 1928, good rains fell and the Arboretum shows the benefit of two successive favorable years. In recent years the important work in the Arnold Arboretum has been the finding of proper space for the different collections so that the individuals might develop into healthy specimens. Last autumn rearrangement of tile Azalea group on Bussey Hill was completed, and the spreading out of many Chinese plants was undertaken.

Near the Administration Building, a planting of Crabapples and groups of the new Chinese Conifers was planned and completed. In a year or two, this planting should make a very pleasing appearance at the Jamaica Plain Entrance.

In 1927-28, 3,964 plants (including grafts and cuttings) and 1,518 packets of seeds were distributed in the United States, Cuba, Great Britain, Germany, Poland, Holland, Sweden, France, Canada, Nova Scotia, Russia, New Zealand, Australia, India and Czechoslovakia. There have been received 4,460 plants (including grafts and cuttings) and 419 packets of seeds from the United States, Cuba, Great Britain, France, Japan, Sweden, Canada, New Zealand, India, Germany, Greece, Holland, Denmark, and Manchuria.

The Herbarium now contains 297,018 sheets; 11,196 sheets having been added during the year. Among the accessions approximately 1,850 plants came from North America, 1,600 from Europe and Western Asia, 3,050 from China, about 650 from southern Asia and Malaysia, 850 from Australasia and 750 from tropical Africa.

Among the more important single collections received may be mentioned 1,627 plants collected by [J.F. Rock](#) in northwestern China and northeastern Tibet; 1,465 plants from the United States National Herbarium collected primarily by Paul C. Standley in Central America; 589 plants collected by D. H. Linder in tropical Africa; 568 plants collected by [J. G. Jack](#) in Cuba; 1,384 plants received through the National Southeast University at Nanking; 454 plants collected by [E. J. Palmer](#) in southwestern United States; 510 plants of Australasia collected by [L. J. Brass](#); 346 plants of Greece collected by J. Mattfeld and 747 plants from Europe and western Asia received from J. Bornmuller.

There have been distributed from the Herbarium 11,863 specimens among thirty-nine institutions in the United States, Canada, Europe, Asia, Australia and Africa. This is one of the largest distributions in the history of the institution.

During the year, 590 bound volumes, 380 pamphlets and 558 photographs including 305 taken by Mr. J. F. Rock, 75 from Greece and 12 from Czechoslovakia were added to the Library, making the total of 37,736 bound volumes, 8,939 pamphlets, and 13,915 photographs, together with 200 unbound volumes.

Of the 350 periodicals coming from all parts of the world, 178 were received in exchange from botanic gardens, universities and other institutions and societies. About 100 books and reprints have also been received as exchanges from Russia and Lettland.

Books of special interest added to the Library during the year include Nuttall's Original drawings for his *North American Sylva*; R. B. Hough's *American Woods*; the third volume of Mary V. Walcott's *North American Wild Flowers* (a gift from Mrs. L.A. Frothingham); John Pechey, *The compleat herbal of physical plants*, 1694; a photographic copy of Batsch, *Beytrage und entwirfe zur pragmatischen geschichte der drey naturreiche, Gewachsreich, theil 1*, 1801; and photostats of William Prince's nursery catalogues, 1771 and 1790.

During the year, four parts of the [Journal of the Arnold Arboretum](#) and eighteen numbers of the *Bulletin of Popular Information* were issued. The circulation of the *Bulletin* now exceeds 2,000. It has subscribers in forty-three states of the union and eighteen foreign countries. Visitors to the Arboretum were more numerous than usual.

On June 7, 1928, a delegation of ladies representing the Philadelphia Horticultural Society made a two days' pilgrimage.

Artists, photographers and plant lovers in general visit the Arboretum in increasing numbers every year. The newly established bus service over the Parkway will doubtless bring many additional visitors.

Some 796 persons registered at the Administration Building. Among them were visitors from such foreign countries as Great Britain, Formosa, Japan, Holland, Denmark, China, Germany, Panama, South Africa, Palestine, Philippine Islands, Federated Malay States, Poland, France and Hungary.

E. H. WILSON, Keeper, Arnold Arboretum.

From this report it is clear that the Arnold Arboretum is playing an influential part in its highly specialized field of botanical work and is profiting from contacts with institutions in many lands. I want to emphasize the fact that members of the Botanical Department of the University and our students make extensive use of the collections in the preparation of material for research. A part of the research work done by members of the Arboretum staff is undertaken with a view to clarifying the materials that may have a bearing on problems awaiting solution by research students of the Botanical Department and the [Bussey Institution](#) for Applied Biology.

In brief, the Arnold Arboretum is coming into close cooperation with the broad botanical interests of the University while extending its operations in dendrological undertakings.

OAKES AMES, Supervisor.