



Annual Report 1915-1916

TO THE PRESIDENT OF THE UNIVERSITY:

SIR,

I have the honor to submit the following report on the progress and condition of the Arnold Arboretum during the year ending June 30, 1916.

The abundant rain which fell during the summer of 1915, and in the spring of 1916, has been a great benefit to the Arboretum which for several years had suffered from insufficient moisture. The trees and shrubs have made a satisfactory growth and the different collections have never been in better condition.

Many of the trees planted in the early years of the Arboretum have now grown to a considerable size, and are large enough to be interesting and instructive to the students of trees who come to the Arboretum in increasing numbers. How to provide sufficient space for the proper display of the great collections which have been accumulated in the last twenty years is a problem which confronts us and which must be solved if the Arboretum is to maintain its reputation as a museum of living plants of the first importance, and as one of the most useful stations for increasing the knowledge of trees.

When the Arboretum was first planted the number of trees and shrubs known to botanists was small in comparison with the number which it is now known can be grown in this climate and which must find a place in a Massachusetts arboretum with any pretence to completeness.

In the last twenty-five years more than two thousand species and varieties of trees and shrubs previously unknown have been added to the Arboretum collections. Something of this increase of material for which space must be provided can be seen in the following comparative census of a few well-known genera.

When the Arboretum was planned five species and a few hybrid and varieties of Lilacs were known; now there are cultivated in the Arboretum twenty-two species and some two hundred distinct hybrids and varieties. Twenty-five years ago only sixteen American Hawthorns were known to botanists; now some six hundred species are established in the Arboretum. Western China alone has furnished the Arboretum with more species of Spruce trees than were known twenty years ago in the whole world.

The number of species of Oaks which can be successfully grown in the Arboretum has nearly doubled since Oak trees were first planted here.

Forty years ago two or three Barberries were cultivated in New England; in the Arboretum collection there are now nearly one hundred species, varieties, and hybrids of these plants. As large an increase of species in many other genera which can be grown in this climate has occurred, and genera entirely unknown in the early days of the Arboretum now have to find a place here. This great increase in material is the result of exploration in North America and in eastern Asia, largely carried on by the Arboretum itself, and of the skilful work of the hybridizer.

There is still much botanical exploration to be done in this country; and Manchuria, Korea, and western China still offer a field which may be expected to yield richer harvests of new plants than they have already sent to western gardens. Although great results have already been obtained by the hybridizer in the production of new forms of trees and shrubs, this art is really only in its infancy, and there is still much to expect from it, and if exploration and hybridization produce as good results in the next twenty-five years as they have in the past the number of species and varieties which should have a place in this Arboretum may equal the number it now contains.

Unlike museums of inanimate objects, where a selection from the collections can be made for display and the selection changed from time to time, an exhibition of living plants cannot be rearranged as fashion or popular interest may demand; and unless more land can be secured for this Arboretum either only a small part of the trees and shrubs which should be seen in it can be displayed, or the collections must be so crowded that the beauty of the Arboretum as a garden must be destroyed and the health, beauty, and educational value of individual plants injured.

The exploration of the Missouri-Texas region, on joint account with the Missouri Botanical Garden, and that of the southeastern United States, has been continued during the year with good results.

The library now contains 30,918 bound volumes and 7,531 unbound pamphlets. Five hundred and ninety-eight volumes and 388 pamphlets have been added during the year.

The printing of the second volume of the [catalogue](#), in which the books in the library are to be arranged according to subjects, is in progress and it is hoped that the volume will be issued before the end of 1916.

The herbarium has again made during the year its largest annual gain, 10,447 sheets having been inserted in its cases. Nine hundred and ninety-nine duplicate sheets have been distributed during the year.

The interchange of plants and seeds with other horticultural and botanical establishments has been continued, 5,938 plants, including grafts and cuttings, and 391 packets of seeds having been distributed as follows: To the United States, 5,698 plants and 250 packets

of seeds; to Great Britain, 140 plants and 80 packets of seeds; to Canada, 100 plants; to France, 28 packets of seeds; to Denmark, 8 packets of seeds; to Japan, 25 packets of seeds.

There have been received 3,075 plants and 251 packets of seeds as follows: From the United States, 2,781 plants and 180 packets of seeds; from Great Britain, 294 plants and 45 packets of seeds; from France, 16 packets of seeds; from Japan, 10 packets of seeds.

During the year instruction in dendrology has been given in the Arboretum by Assistant Professor [J. G.] Jack to twelve students connected with other departments of the University, and in May and June he conducted the usual field meetings, which have been attended by sixteen persons, principally teachers.

The study of Wilson's Chinese collections has been continued and two parts of the [*Plantae Wilsonianae*](#) have been issued. This work has been in progress for six years, and has largely occupied the attention of the herbarium staff, aided by several European experts. During the year, the third volume of the [*Bradley Bibliography*](#) has appeared and good progress has been made in printing the fifth and final volume.

To study the Cherry trees of Japan and methods of cultivation which would make it possible successfully to grow these trees in this country was one of the objects of Mr. E.H. Wilson's [*visit to Japan*](#) in 1914. The results of this investigation have appeared during the year as *Publications of the Arnold Arboretum* No. 7, with the title "[*The Cherries of Japan*](#)." This is an octavo volume of sixty-eight pages, with eight reproductions of photographs made by Wilson.

During the year sixteen numbers of the *Bulletin of Popular Information* have been issued.

The activities of the Arboretum have been made possible only by the assistance of the Trustees of the Massachusetts Society for Promoting Agriculture, and by the interest of the members of the Visiting Committee appointed by the Overseers of the University, and other generous friends who have substantially increased the income derived from the small Arboretum endowment.

C. S. SARGENT, Director.