



Annual Report 1913-1914

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, 1914.

During the year plants of 276 species have been transferred from the nurseries to the permanent plantations. The woods and the collections of living plants are generally in satisfactory condition, in spite of the exceptionally severe winter and the constantly increasing number of insects injurious to vegetation which can be held in check but cannot be exterminated.

During the year attention has been paid to the distribution of Chinese plants raised at the Arboretum from the seeds collected by [Mr. Wilson](#) among cultivators in the United States and Europe willing to multiply and distribute these plants, particularly those which are too tender for New England and cannot be successfully grown in the Arboretum. To further this work the Director made a short visit to the Pacific coast states during the summer and arranged with the Director of the new Agricultural Experiment Station at Sydney in the Island of Vancouver, with the Park Commissioner of the City of Portland, and with the Superintendent of the Golden Gate Park in San Francisco, to undertake the cultivation and distribution of these plants. Chinese plants raised in the Arboretum are now established at these three centres and have also been distributed to a number of competent gardeners in California. Nearly all the trees and shrubs from western China maybe expected to flourish in the Pacific states, and the Arboretum has been fortunate in its ability to enrich gardens in that part of the world.

The Arboretum has for many years been interested in the flora of Japan, and has been successful in introducing into the United States and Europe many interesting Japanese trees and shrubs. This work, however, was not finished, and in December Mr. Wilson was sent to Japan with instructions to remain there for a year, to study the distribution of Japanese trees, to gather herbarium specimens in all parts of the empire, to collect the seeds of trees and shrubs not in cultivation, to photograph trees growing singly and in the forests, and to try to solve some of the problems which have long puzzled the students of Japanese conifers.

Mr. Wilson reached Japan early in February, and his reports show that he has been successful in securing a large amount of material and information. Money to pay for part of the cost of this journey has been found in England. By arrangement with the California Academy of Sciences the Curator of Botany of the Academy visited the valley of the Yukon River in the spring to collect for the Arboretum specimens and seeds of the woody plants of that region. A large amount of material has been collected and this expedition has been in every way successful. It has been paid for by an anonymous friend of the Arboretum. For more than thirty years officers and agents of the Arboretum have been studying the flora of southern Missouri, Arkansas, and eastern Texas, a region unusually rich in species of trees and shrubs, and many of the Arboretum's interesting introductions are from this part of the country. Much exploration is still needed, however, before the flora of this region is known, and the Arboretum and the Missouri Botanical Garden at St. Louis have arranged to employ, on joint account, a collector to devote his time to collecting in this field. This arrangement went into effect during the year, and [Mr. E. J. Palmer](#) of Webb City, Missouri, has been selected to do the work, which he began in September.

There is still much to learn about the trees and shrubs of the southeastern United States, and for several years the Arboretum has employed a collector to make spring and autumn journeys in Georgia, northern Florida, Mississippi, and Alabama. From these journeys much information has been obtained, the herbarium has been benefited, and plants before unknown in cultivation have been introduced into gardens. It is desirable that this work should be continued.

The library now contains 29,700 bound volumes and 6,876 unbound pamphlets, 1,196 volumes and 128 pamphlets having been added during the year. The printing of the first volume of the catalogue is nearly completed and the volume will appear in a few months.

During the year 8,396 sheets have been added to the herbarium, and 11,373 duplicate specimens have been distributed. In this distribution are included sets of Wilson's Chinese plants, numbering 10,425 specimens, which have been purchased by botanical museums in the United States and Europe.

The interchange of plants and seeds with other horticultural and botanical establishments has been continued during the year. Eighteen thousand, three hundred and nine plants, including grafts and cuttings, and 480 packets of seeds have been distributed as follows: To the United States, 15,764 plants and 332 packets of seeds; to the Dominion of Canada, 720 plants and 11 packets of seeds; to Great Britain, 1,133 plants and 48 packets of seeds; to the continent of Europe, 692 plants and 89 packets of seeds. There have been received 4,375 plants and 517 packets of seeds.

During the year instruction in dendrology has been given in the Arboretum by [Assistant Professor Jack](#) to eight students of forestry and to a class of sixteen special students, principally teachers.

The study of Wilson's Chinese collections has been continued and the fourth part of the [Plantae Wilsonianae](#), of 262 pages, has appeared during the year. In the preparation of this part the staff of the Arboretum has been assisted by Dr. A. B. Rendle of the British Museum, who has elaborated for it *Arundinaria*, *Phyllostachys* and *Bambusa*, and by Dr. J. S. Gamble, formerly of the Indian Forest Service, who has elaborated the *Lauraceae*. Mr. W.G. Craib and Mr. S. T. Dunn of the Herbarium of the Royal Gardens at Kew have studied for us several genera of *Leguminosae*; Mr. H. Takeda of Japan has described Mr. Wilson's species of *Cladrastis* and *Maackia*, and Dr. A. K. Schindler of Halle, *Lespedeza* and *Campylotropis*.

During the year the fourth volume of the [Bradley Bibliography](#), devoted to works on forestry, has appeared in advance of Volume III, which is partly in type. During the year [Mr. George R. Shaw's Genus Pinus](#) (Publications of the Arnold Arboretum, No. 5), prepared at the Arboretum, has been published. This work, illustrated with twenty-nine plates from drawings by the author, is the result of many years' devotion to the study of this genus. Thanks to Mr. Shaw, the herbarium of the Arboretum now contains specimens of every species and of many of the forms of *Pinus*.

During the year fourteen numbers of the *Bulletin of Popular Information* have been issued to the constantly increasing number of applicants for this publication.

My thanks are again due to the members of the Visiting Committee, who have aided me in increasing the income of the Arboretum; and my thanks, too, are due to the Trustees of the Massachusetts Society for Promoting Agriculture, for their continued grant to the Arboretum to increase the knowledge of trees.

C. S. SARGENT, Director.