

The Director's Report

THE ARNOLD ARBORETUM DURING THE FISCAL YEAR ENDED JUNE 30, 1975

The observance of the Bicentennial of the United States began in the spring of 1975 in Lexington and Concord, Massachusetts. The additional publicity given to the Commonwealth has cited the Arnold Arboretum in brochure and maps, resulting in an increase in the number of visitors to both Jamaica Plain and Weston. The Case Estates of the Arnold Arboretum in Weston is shown on many of the route maps of the colonial battles. The Jamaica Plain location of the living collections is one of the stops in the Museum Loop Shuttle Bus service, furnished free to visitors, and operating from Boston Common to the Franklin Park Zoo, with numerous intermediate attractions. Special attention has been given by the Arboretum staff to the appearance of the grounds and the handling of these visitors on weekends.

National problems have affected the Arboretum through the continuing increase in costs of supplies, in shortages, and in the need for fuel conservation. The Arboretum followed the University policy as far as possible in observing fuel-saving days during the Christmas holidays, and by reducing temperatures in all buildings. The only exception made was in the greenhouses where reducing the temperature the previous winter had serious effects on the research projects and the quality of the collections.

The annual meeting of the American Association of Botanical Gardens and Arboreta was held in Boston in October with headquarters at the Arnold Arboretum. Representatives of approximately 100 botanical gardens, arboreta, and horticultural societies gathered for these meetings which were hosted by the Arboretum staff with the valuable assistance of the Arboretum's Volunteers.

The previous fiscal year saw an attempt by the City of Boston to acquire the South Street tract of the Arnold Arboretum for a campus-style high school. No sooner had the City agreed to seek an alternate site, than a bill was filed in the legislature of the Commonwealth to acquire the same site for athletic facilities for Boston State College.

Much time is required of the Arboretum staff, the officers of the University, and even representatives of the National Historic Site Commission in Washington, to combat such bills. The land in question is classified as "wetlands," is inadequately fenced and has relatively few organized collections. It is, however, included within the boundaries of the Arnold Arboretum as recognized in the National Historic Landmark designation. The land is used in teaching and research programs, will be needed in the future for the development of the living collections, and should not be lost to the use of the Arboretum. Convincing legislative committees that open land is useful for current biological studies and is needed for future plantings seems to be difficult.

Finally it should be noted that the changes in governance and fiscal operation of the University in recent years have had an ever-increasing effect on the Arnold Arboretum. Additional charges for University operation have been made against the endowment and gift funds of the Arboretum. Other departments have chosen to de-emphasize the status and role of the curator in their operation. The decision by some organizations and departments to appoint only professors with stipulated and required teaching assignments within the University has been proposed as a University-wide policy. The role of the Arnold Arboretum has been quite different from that of other departments, or even some museums, in its association with the public and with the City of Boston, in the emphasis of curatorial excellence in living and other collections, and in its traditional method of staff appointments for research and service with an option of compensated teaching within the University. These and other problems of academic life in 1975 have been the subjects of continuing discussions within the staff, with the Committee to Visit the Arnold Arboretum, and with Deans and administrative officials of the University. The complex and difficult role of a self-supporting arboretum with a significant autonomous reputation must be considered in its association with a special public, as well as with one of general interests, with a city and with a university.

Staff

There were staff changes in the several sections of the activity of the Arnold Arboretum. Mrs. Patricia Hall resigned as Librarian of the Gray Herbarium and the Arnold Arboretum, and we were fortunate to secure the services of Mrs. Lenore Dickinson on transfer from within the University. In the herbarium, Dr. Norton G. Miller, appointed jointly with the Gray Herbarium as

Associate Professor and Associate Curator, arrived to assume his duties on January 1. With regret we received the resignation of William Grimé, Curatorial Assistant, to accept a position at the Field Museum in Chicago. Dr. Shiu-Ying Hu was given a leave of absence for the second half of the year to teach at Chung Chi College in Hong Kong, and to continue her work on the vegetation of Hong Kong. Miss Kathleen Clagett was promoted to the role of Technical Editor of the *Journal of the Arnold Arboretum*.

In the horticultural area Mr. Robert Hebb, Assistant Horticulturist, resigned to accept a position at the Cary Arboretum, and Miss Pamela Bruns, Illustrator, resigned to relocate in New Hampshire. Mr. Edward H. Flaherty, III, was appointed Curatorial Assistant to work with the labeling, mapping and record keeping of the living collections. Mr. Arturs Norietis of the greenhouse staff reached the mandatory retirement age and retired at the end of the year.

Dr. Yin-Tse Lee was reappointed a Mercer Research Fellow, and honorary appointments were approved for Mrs. Constance Derderian (Honorary Curator of the Bonsai Collection) and for Dr. Arturo Gómez-Pompa (Honorary Research Associate of the Arnold Arboretum and the Gray Herbarium).

Horticulture

The living collections of the Arnold Arboretum are grown on 265 acres in Jamaica Plain and 110 acres in Weston. By an agreement nearly a century old with the City of Boston, the grounds, and therefore the collections in Jamaica Plain, are open to the public at "reasonable hours." The care and development of the collections are the responsibility of the staff, while the maintenance of roads, paths, benches, and fences are the responsibility of the City of Boston, which also supplies police and fire protection. Not all of the Arboretum is fenced in, and even the fenced areas cannot be closed due to nonfunctioning gates. In fact, the Arboretum collection is open all of the time.

A periodic review by staff and Visiting Committee of the problems of nighttime parties, vandalism to plants, labels and buildings, litter, undisciplined visitors, illegal behavior, fires, etc., commonly results in recommendations of additional guards, better fences, locked gates and admission fees. Contrasting recommendations have also been received from legal advisors, security agencies and the Police Department. Although the problems remain unresolved, they are less than those experienced by arboreta in other major cities — a small consolation.

During April and May, Captain L. Quinlan of Station 13, Boston Police Department, had a 12-hour patrol from 10:00 A.M. to 10:00 P.M. in the Arboretum each day. This resulted in a marked improvement in the crowd behavior and in the litter problem.

The original indenture directed the staff of the Arnold Arboretum to grow all plants hardy in the vicinity of West Roxbury. Sargent and subsequent directors limited this directive, for the most part, to woody plants appropriate in an arboretum.

Many plants are acquired and placed on the grounds only to be lost through a lack of hardiness, improper environmental conditions, theft, injury or other factors. The grounds of the Arnold Arboretum were mapped carefully in the 1940s and the location of each plant recorded in the permanent files. It is today one of the most carefully documented living collections. The collections in 1949 numbered 3,861 taxa. Additions and losses have been variable in subsequent years, but in 1974-1975, 6,186 hardy taxa, as species, varieties and cultivars, are within the living collections in Jamaica Plain and Weston. Other taxa are in greenhouses or nurseries as young plants or research collections and are not counted. Each taxon is repre-



sented by one or more plants, and often by several collections from different geographic areas or different sources.

In recent years the records of the Arnold Arboretum living and dead collections were incorporated in the data bank of the Plant Sciences Data Center, an organization recently renamed from the Plant Records Center. The original printouts of the computer records of the living collections revealed duplication of numbers, misidentifications, misspellings, and the lack of information really needed for some entries. During the past year Mr. Hebb, assisted by several Volunteers, worked over the computer printout and submitted corrected entries to the Plant Sciences Data Center. When these have been incorporated, an up-to-date printout will be available.

The greenhouses and plant propagation efforts are fundamental to the care and maintenance of a quality living collection. Mr. Fordham and his staff handled 617 taxa within the greenhouses for replacement of plants on the grounds (339), for information on methods of propagation (220), for general observation (12), for distribution (20) and for staff research (26). Requests are received from other organizations for seeds or propagation material, and these are filled whenever possible. Thus, 99 shipments representing 468 taxa of plant materials were consigned within the United States, and 11 shipments of 69 taxa were made to 7 foreign countries. We received from United States sources 71 shipments of 161 taxa, and from 8 foreign countries 12 shipments of 37 taxa. Although it is easier to ship and receive materials as seeds, these have genetic variability and may be less than satisfactory for research purposes. Nevertheless we requested and received 114 shipments of seeds of 589 taxa from the United States and 30 other countries, and distributed on request 48 shipments of 186 taxa to 11 countries.

The area around the greenhouses contains many interesting plants of small stature, espaliers and bank plantings. This area is open to the public daily. The greenhouses themselves contain no display material, but only research and maintenance collections. Classes and special groups are admitted as scheduled, and the greenhouses are open to the public one afternoon a week. We are indebted to Volunteers who serve as guides during these open afternoons.

The major landscape development on the summit of Bussey Hill was completed during the first part of the fiscal year and formally opened in October with a special invitation to the Friends of the Arnold Arboretum. The construction was done

by Delmonico Construction of Hull, Massachusetts under the supervision of Mr. Vincent Merrill of Shurcliff, Merrill and Footit. The plantings were done by the Arboretum grounds crew. The attractive new area, with benches and walls, has drawn many visitors to its special plantings of summer blooming plants.

Labeling and mapping of the plants has been the responsibility of Mr. Edward Flaherty, III, who received support from Volunteers as well as from summer student trainees in checking maps and plants for labels. Hopefully the labels can be prepared during the winter months and placed next spring.

The Case Estates

The Case Estates in Weston comprises approximately 110 acres, and serves as a general nursery area for recent introductions, an area for accessioned collections either not wanted, or for which there is no room in Jamaica Plain, and for display collections of special educational value.

Staff research projects also can be accommodated in Weston, and to facilitate this use new irrigation lines are being installed by our staff on a program to take several years. The ground cover plant collections are also under renovation on a schedule, and other beds were lined with new edging material and improved in quality during the spring season. The collection of medicinal herbs has been difficult to maintain due to the rapid spreading of some taxa by vigorous rhizome development. Sections of metal barrels have been prepared and used to contain the most rampant spreading species.

Two buildings in Weston are used for teaching, as class rooms or informal laboratories. The central portion of the brick barn has excellent acoustics and is used for meetings of 50 to 150 people. During the winter the wood paneling of this area was cleaned and refinished.

At the request of the Director, the Harvard Corporation voted to permit the town of Weston to take 10,446 square feet of land of the Arnold Arboretum in Weston for a compensation of one dollar (\$1.00). This taking is associated with a long-planned and equally long-delayed action to widen Wellesley Street in order to permit sidewalk and bicycle paths for the protection of pedestrians and visitors to the Case Estates. Although construction is delayed again for reasons of fundings, eventually a larger measure of safety will result.



New Bussey Hill plantings are shown to tour group by Joyce Fantasia, Volunteer Guide. Photo: P. Chvany.

Herbarium

In a multifaceted trade for space involving the Botanical Museum and the Museum of Comparative Zoology, the herbaria acquired three units within the MCZ representing approximately 3,000 square feet. With funds supplied largely by the Dean of the Faculty of Arts and Sciences, the rooms were renovated for herbarium, research and office space. Professor Carroll E. Wood, Jr., moved his office into one of the units along with the resources and staff of the project on the Generic Flora of the Southeastern United States. The herbarium cases containing the herbarium of the New England Botanical Club, a responsibility of the Gray Herbarium, occupies slightly more than one unit, and the remainder of the space now holds the collections of ferns and related nonflowering plants. The shift of these collections permitted some expansion of the storage of each. Special attention has been given during the year to curating the ferns, with funds from the NSF curatorial grant. This collection is now in superb condition.

The removal of the New England Botanical Club collection from the fourth floor of the Harvard University Herbaria building has permitted further adjustments within the building. A suite of three rooms, forming an office and laboratory complex, has been designed for Professor Rolla Tryon of the Gray Herbarium, and his associates. This will be completed and occupied during the next fiscal year. A small room has been created for archival material previously scattered in miscellaneous files. Dr. Miller has acquired space adjacent to his office which will be remodeled as a laboratory. Dr. Schubert will obtain a larger office and Dr. Howard will acquire a small laboratory area.

While additional space is welcomed by the recipient staff members, the problems of overcrowding of library and herbarium collections remain critical. The University did approve the hiring of an architect to prepare drawings for an addition to the Herbaria building. A prospectus, including such drawings, will be needed when funding for construction is solicited. Hopefully the addition contemplated will offer proper housing for herbarium specimens and library resources, as well as supply the laboratories and offices for professors of biology.

The herbarium of cultivated plants and general herbarium storage area maintained in the administration building in Jamaica Plain were fumigated by the Waltham Chemical Company during the Christmas holidays.

An Herbarium Committee was formed under the chairmanship of Professor Miller. An initial duty of the committee was



Staff members Dr. Richard E. Weaver, Jr., and Ida H. Burch collect herbarium specimens. Photo: P. Chvany.

to seek a replacement for Mr. Grimé, and Mrs. Jackie Smith was selected to begin her duties in the next fiscal year. Following the changes in the herbarium location of specimens, a new Information for Visitors leaflet was prepared, and the leaflet on loans and the handling of specimens was revised. At the end of the year all microscopes in the herbaria were inventoried, and were cleaned and adjusted on a special contract.

The curatorial grant received from the National Science Foundation was renewed for the third year of a possible five-year period. The grant to Harvard is administered in the office of the Gray Herbarium on behalf of the Arnold Arboretum, Botanical Museum, Farlow Herbarium and Library, and the Gray Herbarium. The grant has permitted the hiring of additional personnel for mounting of specimens and for curatorial work; the result of this additional labor is evident and welcome.

The herbarium is an active one. The collections are funda-

mental to the research of many of the staff, and are regarded as a significant national systematic collection. The requests for loans honored during the year comprised 129 loans of 18,288 sheets to 46 institutions within the United States, and 55 loans of 8,105 sheets to 32 institutions in other countries. Specimens mounted and inserted in the herbarium totaled 15,014, bringing the accessioned herbarium to 1,026,459 specimens of which 154,044 comprise the herbarium of cultivated plants in Jamaica Plain. A total of 16,339 specimens was received: 10,012 by exchange, 2,101 as gifts, 3,632 by subsidy, and 594 in return for identification. In contrast 3,894 specimens were sent in exchange. The herbarium collections housed in the Harvard University Herbaria building in Cambridge require repeated adjustments due to the lack of sufficient space for proper storage and curating. Another 25 Merrill cardboard boxes were added during the year, making a total of 2,396 such containers holding regular herbarium specimens, used in stacks or on top of other cases. In addition it has been necessary to remove unidentified specimens from the generic sequence in the herbarium in order to house properly regular and identified collections. At present the basement area holds 25 cases of such material, identified only to genus or family and removed from the regular sequence. This admittedly is improper care of valuable collections, but is the best that can be done until additional space and facilities become available.

The research of the staff includes floristic studies, monographs, and investigations of single taxa. The bibliography of published papers indicates the type of projects completed and published during the past fiscal year.

Library

Mrs. Lenore Dickinson assumed the duty of head Librarian on August 1, 1974, in a joint appointment with the Gray Herbarium. Mrs. Dickinson is assisted in Cambridge by three full-time Library Assistants, also shared with the Gray Herbarium, and in Jamaica Plain by one Library Assistant. Students are employed for shelving of books and routine cleaning in Cambridge, and Volunteers have assisted materially in Jamaica Plain. A Library Committee consisting of staff members from the Gray Herbarium and the Arboretum was appointed under the chairmanship of Dr. Bernice Schubert to assist the library staff in policy decisions.

The number of botanical periodicals pertinent to areas of staff interest seems to increase yearly. The subscription costs

of both new and existing periodicals have increased, as have expenditures for binding, supplies and equipment. Throughout the University library system, efforts to restrict budget increases have led to an examination of library holdings. In the Biological Laboratories, for example, periodical subscriptions are being canceled if the journal is in another library in Cambridge or Boston. This is certain to increase the demands upon the Arboretum library. To the present, however, no journal has been dropped from the Arboretum holdings.

Since its beginning, the library of the Arnold Arboretum has had an individual system of cataloguing and book arrangement. This was feasible while the library was small or increased slowly, while the primary use was by a cooperative staff, and while management was through the personal interest of a Librarian familiar with the arrangement through long years of service. All these permissive factors have been changed in recent years, and the necessity of adopting a standard system has become evident.

Thus, the Library of Congress system of cataloguing has been adopted for new accessions, and as time permits volumes or sections of the current library will be changed to conform. Catalogue cards under this system can be obtained from the Library of Congress, other research libraries such as the National Agriculture Library, or from the publishers when ordering books. The reference collections in Cambridge and Jamaica Plain will be the first areas where the Library of Congress classification can be put into effect. In time the staff adapts to the methods being taught to library personnel.

There has been an 18 per cent increase in total library circulation over the past year and the use of books by other than staff and students within the Herbaria building is now 20 per cent of total circulation. The requests for books on loan has been handled largely by photocopies, and only three volumes were sent on interlibrary loan during the year, while the 277 photocopy requests filled represented a 20 per cent increase in such service. Following the discovery of vandalism of rare books, an alarm system was installed in the library, greatly restricting the off-hour use of the library by the scientific staff.

With financial assistance provided by the Massachusetts Council on the Arts and Humanities it was possible to repair and restore the bindings on a number of valuable books of the 18th and 19th centuries. The curatorial grant from the National Science Foundation has provision for some retrospective binding and restoration of volumes, as well as the acquisition of

book boxes for the storage of unbindable materials. The regular binding program for periodicals is continued with unrestricted funds of the Arnold Arboretum.

Archival materials associated with the library holdings include catalogued collections of kodachrome slides and historic negatives of Wilson and Rock expeditions. Many hours of labor were contributed in Jamaica Plain by Volunteers during the year in renovating both the kodachrome slide collection and the negative files. The glass negatives exposed by Wilson have been placed in special plastic envelopes for better protection and the legends have been carefully restored on these and the Rock pictures.

The library was increased during the year with the addition of 1,433 catalogued items to total holdings of 84,346 volumes and pamphlets.

Education

The staff of the Arnold Arboretum must function within several distinctive educational levels in the Boston community. By terms of the endowment the Arnold Professor and Director of the Arnold Arboretum is required to teach the knowledge of trees within the University. The role of other staff members in college and university teaching has varied over the years. The opportunity to teach at Harvard has been extended to qualified staff members who have had various joint appointments, usually as lecturers, but occasionally as assistant or associate professors in addition to their regular curatorial appointments. Some departments and museums within the University have now adopted a policy of appointing only professors who will be required to teach a minimum number of courses. Curatorial work in these museums will only be supervised by the professors, and no public service function will be required. Traditionally, and in practice, the Arnold Arboretum has not been solely a teaching organization, but one devoted to research, offering its collections for public visitation or scholarly use to horticulture as well as botanical need. Both teaching and service roles of some or all of the staff have involved contacts with a general public in answering questions, lecturing or conducting tours, supplying material, preparing exhibits or displays, and writing at various levels. However, the role of the curator in maintaining collections is still valid and fundamental to an organization whose traditional work is based on collections of living plants, dried specimens and library books.

Dr. Wood taught all or part of three regularly scheduled

Harvard courses in Biology during the year: Biology 103, The Taxonomy of Vascular Plants; Biology 11a, Diversity in the Plant Kingdom; and Biology S-105, Plants of the Tropics. Dr. Howard shared the summer course with Dr. Wood and also offered in the fall, Biology 209, The Phylogeny of the Flowering Plants. Drs. Howard, Schubert and Wood all supervised the work of graduate or undergraduate students in numbered research courses.

Two Summer School classes were offered at the Arnold Arboretum in Jamaica Plain. Biology S-110, Principles of Practical Horticulture, was taught by Dr. DeWolf, and Dr. Weaver offered Biology S-109, Taxonomy of Cultivated Plants. An evaluation is now being made of the participation by Arboretum personnel in the Summer School program in view of the distance from Cambridge, the lack of air-conditioned lecture rooms as well as proper laboratories and equipment, and the difficulties of involving the staff in summer instruction programs without additional direct compensation.

The staff members of the Arnold Arboretum are invited to present seminars or lectures at other colleges, and they meet college classes that visit the Arnold Arboretum. Mr. Fordham has the greatest contact in this area, for most biology or



horticultural classes visiting the Arboretum request explanation of the propagation work or the procedures used in the greenhouses and nurseries. For tours of the collections, primarily in the spring, the Volunteers are willing and able to lead visiting garden clubs or plant study groups, but the curatorial and professional staff is involved in the explanations and tours of college groups in the library, herbarium, greenhouses and laboratories.

Nationally and internationally, members of the Arboretum staff have had roles in professional organizations. As selected examples, Dr. DeWolf has served on the International Orchid Commission on Classification, Nomenclature and Registration. He attended the Eighth World Conference in Frankfurt, Germany, and was elected chairman of the commission. Dr. Schubert has attended the Mexican Botanical Congresses and served as an active section chairman. In preparation for consideration at the International Botanical Congress, Dr. Schubert has served as chairman of the Standing Committee on Stabilization of Specific Names. For the past two years Dr. Howard has been president of the American Association of Botanic Gardens and Arboreta.

Many requests are received for staff members of the Arnold Arboretum to speak, or to take part in various ways in local organizations and projects. Staff members usually will speak without charge within the communities where the Arboretum is located: i.e., Jamaica Plain, Cambridge, and Weston. Our instructional programs are coordinated with those offered to the public by such local organizations as the Garden in the Woods, the Massachusetts Horticultural Society, Wellesley College, the Massachusetts Audubon Society, Habitat, Inc., and the Cambridge and Boston Adult Education programs. Mr. George Pride serves as coordinator for the Arboretum in these programs. He has also represented the staff at the Earth Week inner city environmental conference on the theme of changing vacant lots to garden plots. As these gardens developed, he served as a judge for the Street Scene exhibits in Cambridge and the 4-H Club vegetable workshop in Dorchester-Roxbury.

The nationwide interest in conservation, particularly the category of endangered plant species, has also involved the staff. Dr. Wood was invited to participate in a discussion at River Front Farm in Virginia, where twelve botanists and a total of fifty people attempted to prepare a list of such taxa for publication. Dr. DeWolf chaired a session on plant materials for the International Conference on Preservation and Restoration of Historic Gardens and Landscapes, held at Dumbarton Oaks in

Washington, D.C. Locally, Dr. Howard has attempted to contribute a "reasonable approach" in advising on some drastic legislation proposed for the Commonwealth of Massachusetts by concerned citizens.

Staff handling of sales and rentals of our two educational films has proved costly in time. We asked for and received competitive bids from film distributors, and contracted with Macmillan Films for the distribution of *The Arnold Arboretum* and *Poisonous Plants*. With extensive advertising by this company the films will receive wider use; the staff has the right to retain several copies for local use. We plan to apply the royalties and additional gifts to the development of another film.

Displays explaining the work of the staff or the plants grown at the Arnold Arboretum are often requested by schools and libraries. The lecture room in the Administration Building in Jamaica Plain offers wall space for other exhibits. One, "Plants in Many Moods," comprising the photography of Peter Chvany, was followed by photographs of botanical gardens and arboreta of the United States by Dr. Howard. An exhibit of books, specimens, and photographs of poisonous plants was prepared by Sheila Geary and displayed in Widener Library during the summer and fall. Specimens of species roses embedded in plastic by Mrs. Sheila Magullion, an Arboretum Volunteer, has made an attractive exhibit that has been displayed in libraries in the suburbs of Boston. Another exhibit, of cones and needle foliage, has been displayed similarly. The transparency display panels used in Jamaica Plain have formed part of an exhibit in the Information Office in Holyoke Center, and artifacts of the Wilson expedition to China were supplied to the Boston 200 Committee for the exhibit "Where's Boston?" staged at the Prudential Center.

During travel for field work or vacation, the staff acquires specimens or photographs useful in teaching and demonstration programs. During the year Dr. Weaver visited the Canary Islands; Mr. Pride, the West Indies; Dr. Stevens, herbaria and gardens in Europe; Dr. Spongberg, gardens and collections in England. Ms. Annette Aiello, a graduate student working on the ornamental genus *Portlandia*, visited Mexico and Jamaica during the year, supported in part by a grant from the Atkins Fund, and in part by the Arnold Arboretum.

The James R. Jewett Fellowship was awarded to Mr. Larry Morse, a graduate student, for support of field work in a study of the species of *Hudsonia* in the coastal areas of eastern North America.



Publications

An Editorial Committee was appointed during the year to aid Dr. Bernice Schubert, who has served as Editor of the *Journal of the Arnold Arboretum* since 1963. In October of the fiscal year, Miss Kathleen Clagett was appointed Technical Editor, Dr. Schubert continuing as chairman of the Editorial Committee which will assume responsibility for the botanical content of the manuscripts submitted. The publication schedule of the four numbers comprising a volume of the *Journal* was upset during the year by the employee strike in the Printing Office. The four numbers issued included 26 articles by 32 authors, and totaled 626 pages. The new cover for Volume 56, 1975, represented a mass collection of leaves of *Sassafras albidum* drawn by Karen Velmure.

The six numbers of *Arnoldia*, edited by Mrs. Jeanne S. Wadleigh, totaled 550 pages. A treatment of "Low Maintenance Perennials," by Robert Hebb, was issued in two numbers. One number was devoted to "Wild Plants in the City," by Nancy Page and Richard E. Weaver, Jr. "Lichens," by Weaver, and "Poison-ivy," by Gillis, were major articles of other issues.

The first volume of *Flora of the Lesser Antilles* was published by the Arboretum during the year. A grant from the Stanley Smith Horticultural Trust made possible the printing. The first volume contains a treatment of the Orchidaceae by Leslie Garay and Homer Sweet, and introductory historical and phyto-geographical data by Dr. Howard.

Hastings House Publishers, Inc., issued Stephanie Sutton's biography of Joseph Rock under the title, *In China's Border Provinces*. This work utilizes many of the historical records and photographs among the collections of the Arnold Arboretum. Rock made one trip to China sponsored by the Arnold Arboretum during the administration of Charles Sargent.

Quadrangle/The New York Times Book Company reprinted "Wild Plants in the City"; it also plans to reprint and distribute "Low Maintenance Perennials."

Harper and Row Publishers, Inc., published *A Student's Atlas of Flowering Plants: Some Dicotyledons of Eastern North America*. This work was planned and prepared under the direction of Dr. Carroll E. Wood, Jr., who was assisted by Dr. Elizabeth Shaw, Karen Velmure, and Dr. Kenneth Robertson. The volume features 120 illustrations, representing habit sketches and detailed drawings and dissections. The work is enhanced by an "atlas of descriptive terms," with references to illustrations, and a comparable list of adaptations for pollina-

Top left: Spring dresses the hillside adjacent to the Administration Building in Jamaica Plain. Photo: P. Chvany.

Below: The quiet beauty of the Arboretum in winter. Photo: P. Bruns.

tion and seed dispersal. The original printing was soon depleted, and a second printing, with a new title page, was issued during the year.

The staff also prepared a new brochure and map for the collections in Jamaica Plain, incorporating additional data on publications and on the Friends of the Arnold Arboretum.

Gifts and Grants

Dr. Wood received a grant from the National Science Foundation for a one-year extension of the research associated with a generic flora of the Southeastern United States. Dr. Howard received a grant from the Stanley Smith Horticultural Trust to aid in the publication of a volume of the *Flora of the Lesser Antilles* issued during the year. The Friends of the Arnold Arboretum generously contributed monetary gifts as well as gifts in kind. Donations of books for the library were accepted from Mrs. F. S. Deland, Mrs. S. C. Lee, and Mrs. Maud E. Upton. Memorial gifts were received in the names of Mrs. Peter Boshco, Stephen Britton, Loring Conant, William Coulter, Sr., Virginia S. Jewett, Elisha Wilson Morse, and Stanley Woicik.

RICHARD A. HOWARD



Staff of the Arnold Arboretum — 1974-1975

Richard Alden Howard, Ph.D., Arnold Professor of Botany, Professor of Dendrology and Director

Donald Wyman, Ph.D., Horticulturist, Emeritus

Pamela Anne Bruns, B.A., Artist and Art Director of Arnoldia (Resigned April 18, 1975)

Ida Hay Burch, B.A., Curatorial Assistant

Michael Anthony Canoso, M.S., Manager of the Systematic Collections*

Kathleen Ann Clagett, M.A., Technical Editor of the Journal of the Arnold Arboretum

Constance Tortorici Derderian, A.B., Honorary Curator of the Bonsai Collection

Gordon Parker DeWolf, Jr., Ph.D., Horticulturist

Lenore Mikalauskas Dickinson, M.S., Librarian* (Appointed September 1, 1974)

Alfred James Fordham, Propagator

Edward Herbert Flaherty, III, Curatorial Assistant (Appointed July 15, 1974)

Sheila Connor Geary, B.F.A., Assistant Librarian

Arturo Gómez-Pompa, Dr. Sc., Honorary Research Associate*

William Ed Griné, B.A., Curatorial Assistant* (Resigned February 28, 1975)

Patricia Dick Hall, M.S., Librarian* (Resigned August 31, 1974)

Robert Stephen Hebb, B.S., Assistant Horticulturist (Resigned October 31, 1974)

Shiu-Ying Hu, Ph.D., Research Fellow in Temperate Asiatic Botany

Thomas Matthew Kinahan, Superintendent, Case Estates

Norton George Miller, Ph.D., Associate Curator and Associate Professor of Biology* (Appointed January 1, 1975)

George Howard Pride, M.A., Associate Horticulturist

Kenneth Ray Robertson, Ph.D., Assistant Curator

Bernice Giduz Schubert, Ph.D., Curator and Editor of the Journal of the Arnold Arboretum

Stephen Alan Sponberg, Ph.D., Assistant Curator

Peter Francis Stevens, Ph.D., Assistant Curator

Karen Stoutsenberger Velmure, B.A., Botanical Illustrator

Jeanne Stockbarger Wadleigh, B.S., Editor of Arnoldia

Richard Edwin Weaver, Jr., Ph.D., Assistant Curator

Robert Gerow Williams, B.S., Superintendent

Carroll Emory Wood, Jr., Ph.D., Curator and Professor of Biology

* Appointed jointly with the Gray Herbarium

Bibliography of Published Writings of the Staff

July 1, 1974 — June 30, 1975

- DeWolf, G. P., Jr., Plant registrations. A.A.B.G.A. Bulletin 9(2): 44–47. 1975.
- Fordham, A. J., Notes from the Arnold Arboretum. Arnoldia 34(6): 425–430. 1974.
- , Why some conifers deviate from normal. Internat. Pl. Prop. Comb. Proc. 24: 472–477. 1974.
- Gillis, W. T. (with G. R. Proctor), *Caesalpinia* subgenus *Guilandina* in the Bahamas. Jour. Arnold Arb. 55(3): 425–430. 1974.
- , Phantoms in the flora of the Bahamas. Phytologia 29: 154–166. 1974.
- , Poison-ivy and its kin. Arnoldia 35(2): 93–123. 1975.
- (with G. R. Proctor), Additions and corrections to the Bahama flora — II. Sida 6(1): 52–62. 1975.
- Hebb, R. S., Low maintenance perennials. Arnoldia 34(5): 253–384. 1974; 35(1): 1–91. 1975.
- Howard, R. A., Karl Sax, 1892–1973. (With portrait.) Jour. Arnold Arb. 55(3): 333–343. 1974.
- , Foreword in J. F. Morton, Folk Remedies of the Low Countries. Seeman Co., Miami, Fla. 1974.
- , The director's report, The Arnold Arboretum during the fiscal year ended June 30, 1974. Arnoldia 34(6): 385–423. 1974.
- , Flora of the Lesser Antilles. Vol. 1. Orchidaceae, by L. A. Garay and H. R. Sweet. [Includes foreword and phytogeographic and floristic relationships by R. A. Howard.] Harvard Univ., Cambridge, Mass. 1974.
- , Further comments on *Styrax* L. Sida 5(5): 334–337. 1974.
- , *Gaultheria swartzii*, nom. nov. and the combinations in Raeuschel's Nomenclator. Jour. Arnold Arb. 56(2): 240–242. 1975.
- , The Arnold Arboretum. Plant Sci. Bull. 21(2): 18–23. 1975.
- Lee, Y. T. (with J. H. Langenheim), Additional new taxa and new combinations in *Hymenaea* (Leguminosae, Caesalpinioideae). Jour. Arnold Arb. 55(3): 441–452. 1974.
- Page, N. M. (with R. E. Weaver, Jr.), Wild plants in the city. Arnoldia 34(4): 137–252. 1974. [Reprinted by Quadrangle/The New York Times Book Co. x + 117 pp. 1975.]
- Pride, G. H., 'Constant Nymph' Updated. Arnoldia 35(2): 124–127. 1975.
- Robertson, K. R., The genera of Rosaceae in the southeastern United States. (Continued from Jour. Arnold Arb. 55(2): 303–332. 1974.) Jour. Arnold Arb. 55(3): 344–401; 55(4): 611–662. 1974.
- , The Oxalidaceae in the southeastern United States. Jour. Arnold Arb. 56(2): 223–239. 1975.

- Schubert, B. G., Report of the standing committee on stabilization of specific names. *Taxon* 24: 171-200. 1975.
- Spongberg, S. A. (with E. Shaw), Nomenclature proposals to the Leningrad Congress, 148. *Taxon* 23: 878. 1974.
- (with C. E. Wood, Jr.), Nomenclature proposals to the Leningrad Congress, 150. *Taxon* 23: 879, 880. 1974.
- , Changes of botanical names. *Brooklyn Bot. Gard. Rec., Plants & Gardens* 30(4): 45-47. 1975.
- , Lauraceae hardy in temperate North America. *Jour. Arnold Arb.* 56(1): 1-19. 1975.
- Stevens, P. F., The hybridisation and geographic variation of *Rhododendron atropurpureum* and *R. womersleyi*. *Papua New Guinea Sci. Soc. Proc.* 25: 73-84. 1973. (1974.)
- , The circumscription and relationships of *Dimorphanthera* (Ericaceae), with notes on some Papuan species. *Contr. Herb. Austral.* 8: 1-34. 1974.
- , A review of *Chisocheton* (Meliaceae) in Papuasias. *Contr. Herb. Austral.* 11: 1-55. 1975.
- Sutton, S. B., In China's Border Provinces. 334 pp. Hastings House, N.Y. 1974.
- Wadleigh, J. S., (pseud. J. Kilborn), Gardening in these times. *Horticulture* 53(3): 41-43. 1975.
- , The worthy Kerrias. *Arnoldia* 35(3): 160-161. 1975.
- Weaver, R. E., Jr., Lichens: mysterious and diverse. *Arnoldia* 35(3): 133-139. 1975.
- (with B. Maguire), The neotropical genus *Tachia* (Gentianaceae). *Jour. Arnold Arb.* 56(1): 103-125. 1975.
- (with N. Page), Wild plants in the city. *Arnoldia* 34(4): 137-252. 1974. [Reprinted by Quadrangle/The New York Times Book Co. x + 117 pp. 1975.]
- (with L. Rüdénberg), Cytotaxonomic notes on some Gentianaceae. *Jour. Arnold Arb.* 56(2): 211-222. 1975.
- Wood, C. E., Jr., A student's atlas of flowering plants: some dicotyledons of eastern North America. 120 pls. Harper & Row, New York, N.Y. 1974.
- , Illustrated angiosperm families. pp. 852-877 in A. E. Radford et al., *Vascular Plant Systematics*. Harper & Row, New York, N.Y. 1974.
- (with S. A. Spongberg), Nomenclature proposals to the Leningrad Congress, 150. *Taxon* 23: 879, 880. 1974.



Howard, Richard A. 1975. "The Director's Report." *Arnoldia* 35(6), 241–261.

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