Volunteer Keepers of the Arnold Arboretum: Effective Program Design Yields Reciprocal Benefits

Jeanne Christianson and Sandra Elsik

"Working in the program has transformed me from a devoted but passive domestic gardener into a fervent disciple of horticulture."

Structuring for Success
This quote by volunteer Mary Harrison captures the spirit of commitment felt by the many individuals who, with their contribution of time, support the curation and management of the living collections at the Arnold Arboretum. In three separate but interrelated areas, they have collected specimens for the verification project, field-checked for the plant records office, and mounted specimens in the herbarium. Other dedicated volunteers work on virtually every aspect of the Arboretum. (See past and future issues of Arnoldia for articles on their work.) Although only about half of the Arboretum's volunteers are described in this article, we are deeply indebted to all of them. Using the words of the volunteers themselves, we hope to make others aware of how much our volunteers have contributed and express our gratitude for their tremendous help.

There is no typical profile of the Arnold Arboretum volunteer; their backgrounds and interest in the program differ greatly. This diversity has added an element of interest and enjoyment for everyone involved. The group includes retired people now studying botany, horticulture, or home gardening as a second career; avid home gardeners who desire to help a worthwhile institution while gaining useful knowledge and contact with a professional staff; people working in related careers (as landscape designers, nurserymen, or arborists) seeking to enhance their knowledge of plants; others (secretaries, nurses, administrators, or homemakers/mothers of young children) who are involved in unrelated careers but are seeking a balance in their lives; and a few who simply enjoy the altruistic satisfaction of helping a worthwhile institution. "To contribute in any small way to help at the Arboretum is rewarding to me," reported Helen Hagopian. Some go to great lengths to find the time to help: one volunteers on his vacation days, one day at a time; a few work on limited weekend shifts. The amount of time worked by each volunteer ranged from ten to hundreds of hours. Many have become devoted to the Arboretum: some have worked in more than one area and ten have participated for the entire five years covered by this article.

Of the three interrelated areas, the verification project has required the most massive input of volunteer hours. (See the article on collecting by Sandra Elsik.) Without volunteer assistance, the project would have taken many years and been prohibitively costly. Fortunately, working with the plants on the grounds has proven a highly desirable volunteer position, so there has never been a shortage of enthusiastic assistants; since January, 1984, 84 volunteers have worked a total of 6809 hours. They have collected herbarium specimens, gathered the data needed for the specimen labels, and performed numerous less-exciting, but equally important, associated indoor tasks. During the collection
phase of the verification project, teams of two volunteers and one staff member have worked a regularly scheduled three-hour shift each week of the collecting season. The number of volunteers needed for collecting has steadily decreased as this phase of the project has neared completion. The first collection season, in the spring of 1984, required 38 volunteer assistants; in the fall of 1988, only 13 were needed to collect the few remaining specimens.

In the plant records office volunteers have field-checked countless acres of the grounds, replacing damaged and missing labels and helping to provide the information necessary to the curation of the collection; they have assisted in records retrieval and maintenance and in the updating of nomenclatural reference files. Nine volunteers have worked in this department, three of them for the entire five years. (See the article on the plant records office by Jennifer Quigley.)

In the herbarium 15 volunteers have mounted herbarium specimens. The process of arranging and gluing a dried specimen onto a sheet of archival paper is meticulous and time consuming, requiring artistic and scientific sensitivity as well as great patience. It does, however, offer the opportunity to examine a number of interesting plant specimens closely. Elaine Foster noted that "volunteering... has made me much more aware of what goes on in an arboretum and given me a greater appreciation of plants and their importance to the environment, [as well as allowing me to work] with friendly, helpful staff in pleasant surroundings."

Volunteer satisfaction, productivity, and longevity has been unusually high on living-collections projects. "I never have had a more satisfactory or rewarding volunteer job," said Mary Wolcott, and Kathleen Warren felt that "the system appealed to my sense of order and to my training as an indexer." One factor contributing to this success has been the organization and structure of the volunteer work assignments. Clearly structured, sensitively supervised responsibilities have provided volunteers with room to grow into increasingly independent functions with a sense of accomplishment at the end of each shift. They have had the additional satisfaction of working on a long-term project that is making a very valuable contribution to both the institution and the science of botany. Susan Dumaine noted that she was "fascinated by and learned from the complex yet facile organization and resourcefulness of both the plants and the project's leader over the past five growing seasons."

Survey Elucidates Volunteer Motivations
To assess the feelings of our volunteers about their involvement in the project, we conducted an informal survey. We discovered that
their sense of reward for their labors was far
more than the tangible benefits of free mem-
bership and courses. The unique opportunity
for detailed, experiential learning from a liv-
ing botanical collection and a professional
staff was frequently cited as a highly valued
benefit. Below are some of the statements that
we received:

As a student in the Radcliffe Landscape Design
Program, [I have found that] the hands-on education
has been invaluable. Rather than being intimidated
by lists of plants in books, we were able to learn the
plants one at a time while we collected their flowers,
described them on the field label, and made mental
notes about their ornamental characteristics. Later,
collecting the fruits reinforced our knowledge.
—Sandra Jonas

[I remember] sitting on the grass dissecting a tiny
flower to finally learn the difference between a bract,
a petal, and a sepal, or finding and identifying the
ovary, style, and stigma. [We had] lengthy team dis-
cussions to give an exact color: “Is it red?” “Scarlet?”
“Try rust.” . . . I had resisted the metric system at the
gas tank, but by using it in the project it became a
part of my vocabulary and I could think in terms of
it.—Barbara Epstein

[Volunteering gave me] the opportunity to pursue
a love of botany and taxonomy with a staff who
patiently answered all my questions and generously
shared knowledge of nomenclature, plant lore, and
botanical structures.—Roberta Zmin

Hard to summarize 25 years. In addition to the fel-
lowship of working with the staff, the Arboretum
has “opened our eyes” to what goes on with plants—a
rare opportunity for anyone lucky enough to have
access to it.—Richard Warren

Even after 15 years of volunteering, I find that I
learn something each time I go—from the collection,
and from contact with the staff and other volunteers.
Where else could I find such an opportunity?—Mane
Dempsey

Working at the Arboretum is a marvelous oppor-
tunity to observe plants at all seasons with an eye
toward their use in landscaping: their forms, seasonal
effects, disease and drought resistance, and hardiness.
[It has been] a gold mine of horticultural informa-
tion.—Ellen Bennett

Mounting leaf specimens for the Arnold Arbore-
tum is a pleasant way to educate yourself about geog-
raphy, botany, and artistry.—Lillian Hagopian

I loved learning the Latin names. It helped me to
understand the value of classical Latin—its root
words and descriptive terminology are universally
understood.—Susan Hardy Brown

Volunteers sometimes became poetic when
describing how the program allowed them to
develop a greater sophistication in their per-
ception of beauty, noting the subtleties in tex-
tures and shades within a monochrome,
forms of bark, plant architecture, miniature
designs, and fruiting structures. For Sophie
Kulik these new images allowed her to “gain
a greater appreciation of the Arboretum as a
place of natural beauty for all to enjoy.” Others
cited similar experiences:

Of course one could go on about the endless oppor-
tunities for discovering and appreciating the natural
life in the Arboretum . . . I especially remember the
amazement and joy that swept over me when I first
saw a Populus and an Acer flower under
magnification—the intricacy and splendor were
beyond words!—JoAnn Whitehead

“After seeing the fantastic-looking acorns of Quercus
variabilis, we purchased a seedling at the plant sale
and gave it to some friends when their child was
born” (Mima Weissmann). The large acorns of this
species, an East Asian oak, are enclosed in a bold
and dramatic cup. Such details, often overlooked by visi-
tors, are frequently encountered by volunteers. Pho-
tograph courtesy of Racz and Debreczy.
“Observing a leaf pattern—the bark of a tree—it was a horticultural class hard to come by” (Genevieve Good). Shown here are the barks of a Japanese cherry, Prunus apetala (left), and an East Asian oak, Quercus variabilis (right). Photographs courtesy of Rác and Debreczy.

Working as a volunteer in the verification project has provided me with a very special familiarity with the Arboretum, to meet plants at both flowering and fruiting times and to discover the amazing variety of forms that exist. It is truly refreshing to the soul to be outdoors each week, appreciating the natural beauty abounding in the Arboretum.—Anne Gamble

I have been introduced to so many wonders Stewartia, its exquisite branches decked with gardenias in July; the bright red seeds of Magnolia dancing on silken threads; the fruit of Cornus kousa, as safely edible as it looks; Calycanthus with its discrete dark red flowers blooming shyly behind the main borders of the roadway; autumn witch hazel quietly blooming in October unseen amid its yellowing leaves. These are the bounties of the volunteer... I have lived with the Arboretum on my doorstep for half my life and am grateful to the program for enabling me to get to know it intimately at last.—Mary Harrison

Working with the living collections gets you off the... beaten paths of the Arboretum. You see genera and species you might not otherwise see. And you get a chance to observe them closely, not just when they are blooming. How rewarding that can be! For instance, when we were checking the mapping and labeling in the Prunus collection, it was in October and the Prunus plums were fully ripe—yellow, purple, orange, and blue. Our job description did not call for fruit sampling, but taste them we did. Tiny in comparison to their supermarket relatives but much more flavorful Shall we call this a fringe benefit?—Bob Siegel

Once while out collecting we stopped to look at the Symplocos, also known as sapphire berry. There it was, right on the road between the lilac beds and the greenhouse, and it was covered with the most incredibly blue berries! Apparently they only last a few weeks before the color darkens or the birds eat them. In 18 years of visits to the Arboretum, I had never walked by at the right moment!... Last week someone looked at one of the vases I had made and said it reminded her of water and trees—no drawings or any graphic representations—just the vase itself. I took it as a great compliment, and I know that being out on the grounds has been a constant inspiration to me.—Mima Weissmann
My five-year collection trip at the Arnold Arboretum—the landscape was spectacular, the species exotic, and the natives very congenial.—Sue Erwin

We would like to give special recognition to the following Arboretum visitors that we have observed on the grounds. The Globetrotter Award: to the Brazilian cardinal seen flitting around the Visitor Center in the fall of 1986. The Most Dedicated Workers Medal: to the rangers who stalked us as we were submerged in the ten-foot flowering Jerusalem artichokes. The Best Hunters: to the red-tailed hawks who routinely catch the odd snake and the not-so-odd Norway rat. The Most Perfect Timing Award: to the mystery picker with his rake who combs the lowbush blueberries under the pines just before we get there.—Nell Walker

The discovery of unusual fruits [such as] those tennis-ball-green osage oranges. To actually be allowed to pick the blossoms and collect the fruits at their peak of development was such a privilege. It was like being Eve in the Garden of Eden and being given permission to pick the apples. Collecting the silverbells (Halesia) was special. I had known about them from the poem “In Praise of Silverbells,” which my mother had written. To describe them on the label became a challenge. Was the flower “shell-pink, like a tropical atoll,” as my mother described?—Susan Hardy Brown

Volunteers and staff were challenged, both physically and mentally, by the rigors of working on the grounds (and in an old building lacking adequate climate control). Fortunately, such difficulties were usually perceived as part of the fun; camaraderie and dedication prevailed. Again, as our volunteers tell it:

Regardless of exhaustion from the rain, heat, or cold in which we might have worked, I still felt exhilarated over what we had accomplished.
—Barbara Epstein

There is life after retirement! It's good to be able to participate in something ongoing... and that in beautiful surroundings, out of doors, and in congenial company. The physical challenge is there for anyone aged 72, and a lot more fun than contrived exercises.—Ruth Griffin

The staff is fun to work with, rain or shine, hot or cold, grubbing on knees or high in trees.—Ellen Bennett

... helping to unravel and set straight the confusion caused by missing and misplaced labels [I can still hear the shouts of triumph when one of us would discover a label, presumed missing, under half a foot of oak-leaf mulch] and the satisfaction that I was part of the laudable effort to assure the taxonomic correctness of the Arboretum's records.—Dick Brooks

Volunteers also enjoyed working with a team that provided opportunities for socializing while the work was being accomplished. The friendships developed and ideas exchanged were a valuable bonus. In addition, the team format provided a predictable work environment and an interdependency that encouraged consistent attendance and involvement. In their words:

Pleasant work with pleasant people made my time here each week a special segment of my life; a time to be with nature and a time to learn.—Priscilla Ryan

Working with a team was great because it provided the opportunity to explore the deepest, remotest areas I wouldn't have felt comfortable exploring alone. The people were great. We seemed to speak a common language, loving nature and our environment. I've made very special friends who have taught me so much and brought a richer dimension to my life and to my art—Susan Hardy Brown

Although many of the volunteers surveyed for this article reported deriving great benefits and pleasures from their work at the Arboretum, the interaction is clearly reciprocal. It is difficult to say who benefits more. In addition to the tasks accomplished, the Arbore-

“In my mind’s eye it is always January, the month of my first visit to the Arboretum, when the tree architecture and the distinctive colors and markings of the bark are most apparent. I now know it at every month of the year, each month with its own special beauty” (Pauline Perkins). Although this winter study shows them to have a wide range of branching patterns, all of these linden trees (Tilia) would have the same canopy profile in the summer. Since a living collection is located within a particular climate, these structural differences in cultivated specimens reflect genetic differences inherent in the plants rather than environmental factors. Left to right, top to bottom: Tilia × flavescens, T. paucicostata, T. cordata, T. neglecta, T. japonica, T. americana, T. tomentosa, T. petiolaris, T. platyphylllos. Photographs courtesy of Racz and Debreczy.
tum gains another important, less obvious long-term benefit. The involvement of members and supporters educates them about the role and function of an arboretum. For Westy Lovejoy the frequent and intimate contact with the living collections, and the process of curation, gave her "a better understanding of the quantity and quality of the Arboretum's collections," as well as an appreciation for the scientific role of the institution and its importance to the world at large. Volunteers develop a sense of ownership and pride. For Caroline Blake her work meant "learning more of the Arboretum, and thus feeling more a part of it." Thus they become more determined in their support and spread their enthusiasm to friends.

**Never-Ending Curation**

If the Arboretum is to flourish, it must continue to encourage this kind of involvement and commitment by the public as well as the scientific community. Part of the Arboretum's mission must be to educate and inspire people to appreciate and make a commitment to their environment. Curation of a world-class botanical collection requires enormous long-term effort and resources. Although the effective management of a comprehensive volunteer program requires an investment of staff time and facility resources, the benefits to the organization make it clearly worthwhile.

In the words of Peter Ashton, "Each year new plants are tried in the Arboretum collections, some never before cultivated. Each year we must curate these introductions and celebrate their first flowering. So the greatest news of all is that the work will go on, and we will continue to need you, our volunteers!"

Jeanne Christianson is the membership, volunteer, and visitor-services coordinator at the Arnold Arboretum. Sandra Elsik supervises the collecting phase of the verification project.
Living-Collections Volunteers, January, 1984, to December, 1988

VERIFICATION PROJECT
Sue Avery, Medford
John Bailey, Dover
Ellen Bennett, Weston
Caroline Blake, Dover
Dick Brooks, Concord
Tony Bryan, Boston
Susan Burke, Brighton
John Carey, Norwood
Janet Christrop, Jamaica Plain
Tom Coulson, Chestnut Hill
Susan Davis, Boston
Carin Dohlman, Weston
Margaret Donahue, Watertown
Paul Donnelly, Squantum
Jean Dricker, Brookline
Susan Dumaine, Weston
Susan Dwyer, Norwood
Barbara Epstein, Newton Centre
Susan Erwin, Cambridge
Don Falk, Cambridge
Esther Fich, Winthrop
Gerhold Fitzgerald, Roslindale
Ruth Fried, Roxbury
Sandra Friedman, Wellesley
Barbara Frishkopf, Lexington
Anne Gamble, Brookline
Barbara Gard, Norwell
Niki Gilsdorf, Cambridge
Genevieve Good, Cohasset
Ruth Griffin, Brighton
Kathy Groves, Sherborn
Helen Hagopian, Wellesley
Susan Hardy Brown, Jamaica Plain
Mary Harrison, Cambridge
Laverna Haskell, Cohasset
Isabel Horan, West Roxbury
Shirley Hyland, Cambridge
Sandra Jonas, Newton
Anne Joseph, Whitman
Andrea Knowles, North Billerica
Amy Kosmidis, Roslindale
Sophie Kulik, Roslindale
Mary Jeanne Langevin, Milton
Anne Lomuto, Wellesley
Westy Lovejoy, Boston
Betty MacKenzie, Dorchester
Barbara Mahon, Jamaica Plain
Louse Makepeace, Warwick, Rhode Island
Phyllis Marx, Newton
Melinda McCall, Jamaica Plain
Melana McCann, Jamaica Plain
Terry McKiernan, Cambridge
Jane McKinnell, Boston
Peg Megowen, Carlisle
Jane Morss (deceased), Chestnut Hill
Melanie Moses, Cambridge
Vincent O’Gorman, Chestnut Hill
C. J. Patterson, Norwell
Pauline Perkins, Brockton
Robert Perkins, Jr., Cambridge
Karen Peterson, Cambridge
Margaret Pfitzer, Boston
Betty Porter, Concord
Jean Rosenberg, Arlington
Liz Ruth, Brookline
Priscilla Ryan, Somerville
Liz Sargent, Boston
Anne Stuhler, Cambridge
Hiltrud Siegel, Belmont
Marge Smith, Cambridge
Magen Solomon, Northampton
Lester Stockman, Roxbury
Kathy Teteri, Jamaica Plain
Elaine Tsonidides, Brookline
Jan Wampler, Jamaica Plain
Kathleen Warren, Dedham
Richard Warren, Dedham
Ann Waters, Jamaica Plain
Mima Weissmann, Jamaica Plain
Jan Whitaker, Jamaica Plain
JoAnn Whitehead, Jamaica Plain
Mary Wolcott, Manchester
Karen Wolkoff, Somerville
Robert Zimm, Newton

PLANT RECORDS OFFICE
Betty Jacobson, Dover
Amy Kosmidis, Roslindale
Joseph Merriam, Brookline
Jean Rosenberg, Arlington
Donna Rowland, Jamaica Plain
Bob Siegel, Hingham
Nell Walker, Lexington
Jan Wampler, Jamaica Plain
Richard Warren, Dedham

HERBARIUM, SPECIMEN PREPARATION
Mary Ashton, Carlisle
Caroline Blake, Dover
Kathleen Daly, Jamaica Plain
Mary Dempsey, Lexington
Elaine Foster, Chestnut Hill
Sandra Friedman, Wellesley
Lillian Hagopian, Wellesley
Susan Hardy Brown, Jamaica Plain
Mary Harrison, Cambridge
Sophie Kulik, Roslindale
Barbara O’Connor, Auburndale
Ciba Vaughan, Cambridge
Kathleen Warren, Dedham
Mima Weissmann, Jamaica Plain
Karen Wolkoff, Somerville

Five-year commitment.