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Connecticut College Arboretum

2003

Arboretum Annual Report, 2003

Connecticut College

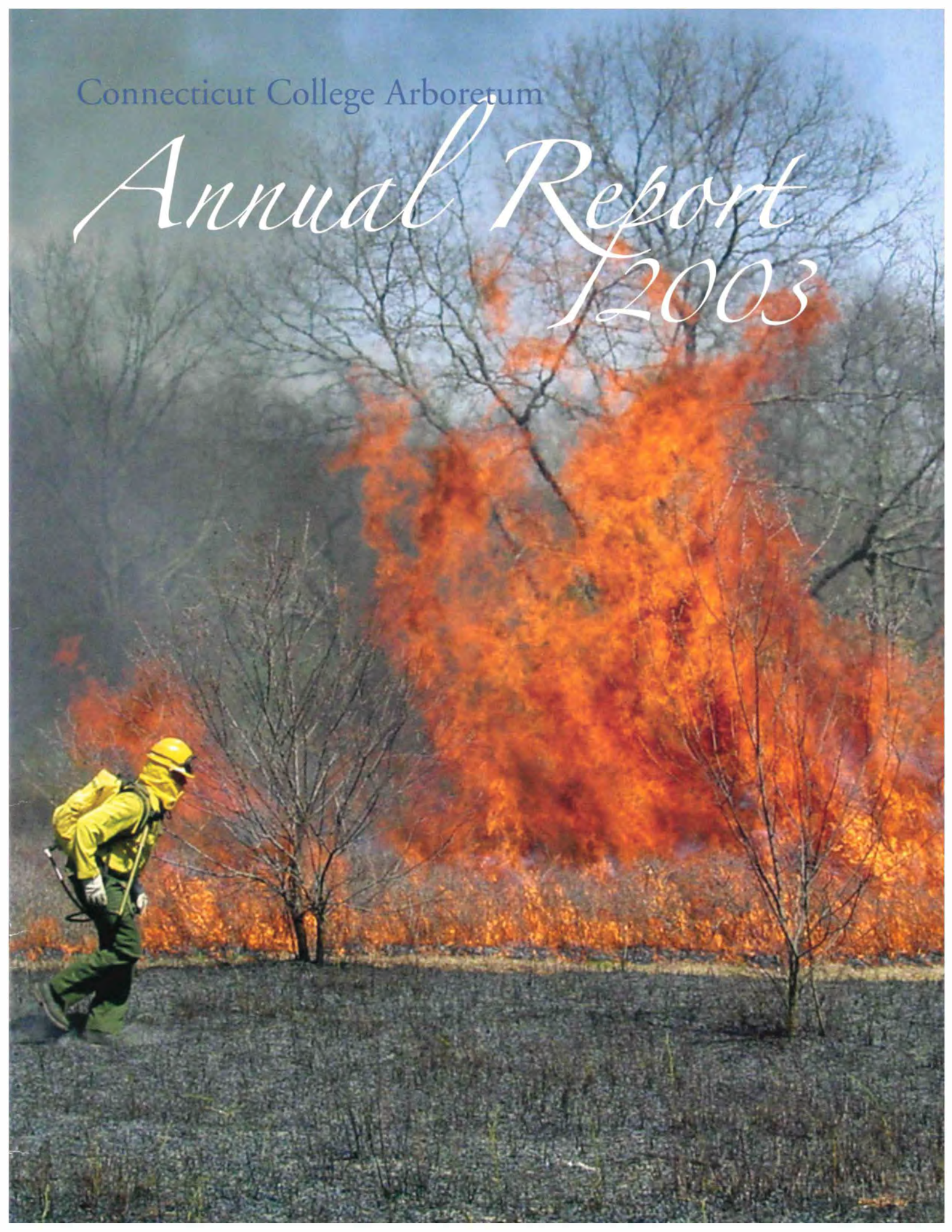
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The views expressed in this paper are solely those of the author.

Connecticut College Arboretum

*Annual Report
2003*



CONNECTICUT COLLEGE ARBORETUM MISSION STATEMENT

The Connecticut College Arboretum is owned by Connecticut College and operated for the benefit of the College and the community. The Arboretum functions in support of the College's mission by helping to prepare men and women for a lifetime of learning about and interacting with the natural world. The mission of the Connecticut College Arboretum is:

TEACHING

To provide an outdoor laboratory for use by faculty and students in Botany, Zoology, Biology, Environmental Studies and other departments. In both teaching and research the Arboretum is a unique and valuable academic resource and support facility.

RESEARCH

To support and conduct research in a broad range of subjects including ecology, field biology, conservation and natural history. Arboretum research emphasizes long-term studies.

CONSERVATION

To provide stewardship of College lands by protecting, sustaining and enhancing biological diversity of large tracts of open-space. The Arboretum also provides leadership statewide and beyond in conservation matters.

COLLECTIONS

To maintain, develop and interpret well-documented plant collections for teaching, research, public education and enjoyment.

RECREATION

To provide a place where people from the College and the community may enjoy passive recreation and where they may come to learn, reflect and renew themselves through contact with the natural world. The Arboretum enhances the quality of life both for the College and the citizens of southeastern Connecticut.

PUBLIC EDUCATION

To provide programs and publications about conservation, horticulture, gardening, botany and natural history which enhance people's understanding of the natural world and foster an understanding of the Arboretum's mission.

Cover Photo: A prescribed burn on an experimental plot in the Arboretum's Matthies Tract. Connecticut Department of Environmental Protection's Forestry Bureau collaborates with College faculty and staff to ensure the burns are controlled properly.

from the Director



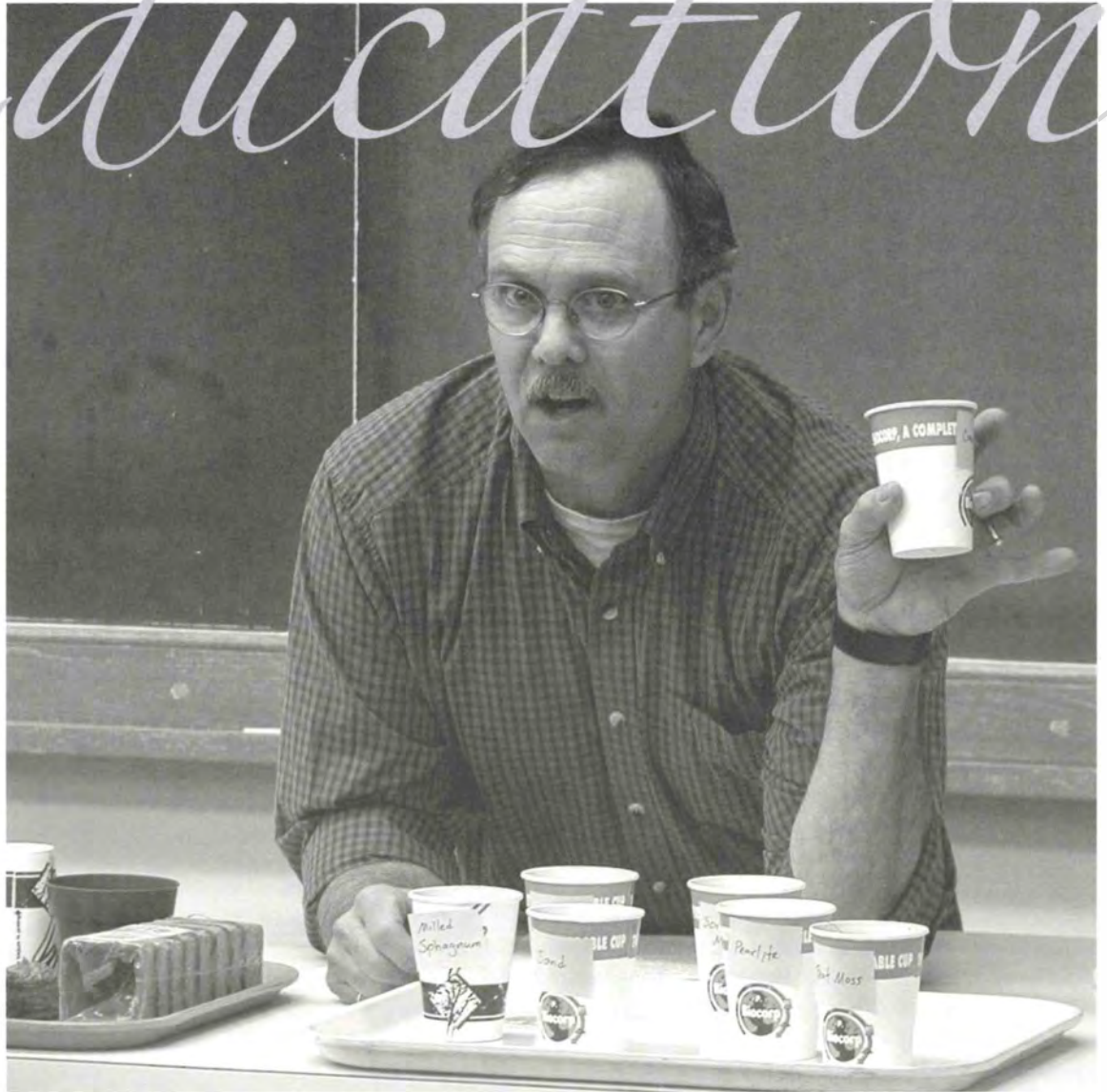
The dramatic cover photograph of a controlled burn on an experimental plot in the Arboretum's Matthies Tract might surprise people who are not familiar with the Arboretum's long history of vegetation management research. The use of floristic (the individual plants that grow in an area) and vegetation (the communities of plants across landscapes) knowledge to develop ecologically sound land management practices has been a signature aspect of the Arboretum's identity since the early 1950s. In those early years, former directors Dick Goodwin and Bill Niering followed plant ecologist Frank Egler's lead, and began using herbicides to "sculpt" naturalistic landscape designs from local old agricultural fields and thickets. They used the same technique to selectively eliminate only the tall growing trees under the power lines on an Arboretum utility right-of-way. This allowed the lower growing wild plants that were not a threat to the electrical lines to thrive, creating attractive and diverse natural landscapes that proved to be a national model for ecologically appropriate right-of-way management.

A decade later, Niering and Goodwin recognized that a very important ecological factor, FIRE, had been nearly completely eliminated from wild landscapes. It seems Smokey the Bear had been too effective in preventing wild fires, and vegetation which evolved over millions of years with occasional burning, was becoming, in some ways, unnatural. They began a series of long-term experiments by burning a number of field and forest plots, comparing the results to nearby unburned control areas, and asking questions about how the flora and vegetation changed over time with and without fire. The fire of April 2003 shown on the front cover is a continuation of that work.

The tradition of applying ecological understanding to vegetation management continues at the Arboretum in other ways, particularly with the problems of invasive exotic plants. Oriental bittersweet, Japanese honeysuckles, Japanese barberry, and burning bush, to name but a few, have escaped from cultivation and are overpopulating wild and semi wild landscapes everywhere. Combinations of techniques like mowing, the selective use of herbicides, and controlled burning are important tools that help control these overly aggressive species. Knowing how and when to use these tools most effectively is based on long-term experiments and an understanding of the local flora and vegetation, all hallmarks of the Connecticut College Arboretum.

— Glenn Dreyer
Charles and Sarah P. Becker '27 Director of the Arboretum

Education



Horticulturist Jeffrey Smith teaches plant propagation by seed.

EDUCATION

“Vegetation and Innovation: Meadows, Woods and Water” was the topic for the 13th Annual Landscape Symposium in January this year, with such outstanding speakers as Dr. Dennis Whigham, an ecologist with the Smithsonian Environmental Research Center; Richard Pais, a certified wildlife biologist and president of Ecoscientific Solutions; and William Cullina, propagator and nursery manager for the New England Wildflower Society. One hundred and twenty people attended the two-day symposium, which is co-sponsored by the Morris Arboretum of the University of Pennsylvania and by Larry Weaner’s New Directions in the American Landscape. The series is a continuing education course for landscape architects and professional landscape designers who want to learn more about ecological landscaping.

The Arboretum public education season began in February with a Winter Tree ID workshop conducted by Jim Luce, supervisor of grounds, and a “Festival of Herbs” presented by staff from Meadowbrook Gardens. As a follow-up to the latter program some participants enjoyed an herb-themed demonstration dinner at Noah’s Restaurant in Stonington, hosted by Chef de Cuisine Ben Young. In March, there were presentations and workshops by Arboretum staff on historic trees, pruning, seed propagation for home gardeners and conifers for landscaping. Wood craftsman Frank Hamm led a “Let’s Build a Table” workshop, and Ruth Parnall MA ’98, a landscape architect and environmental educator, presented a SALT (Smaller American Lawns Today) landscape design workshop for homeowners. In May, Assistant Professor of Botany Christine Small led the traditional Wildflower Walk in the Edgerton and Stengel Wildflower Gardens and Caroline Driscoll, coordinator of horticultural volunteers, toured the Caroline Black Garden.



A culinary herb demonstration at Noah’s Restaurant.



Greenhouse tour during propagation workshop.



Frank Hamm and the Let’s Build a Table participants at Buck Lodge.

The Annual Members' and Friends' Night on June 6 featured Connecticut College plant ecologist Christine Small who spoke on "Floral Attractions: Plants and Their Pollinators." Director Glenn Dreyer recalled the highlights of the past year, and Kathy Dame recognized volunteers and presented awards for "Capturing the Beauty of Nature – 2003," the amateur photography contest. Other summer programs included a morning at Prides Corner nursery during which Arboretum members enjoyed purchasing plants at wholesale prices; naturalist Wendy Dreyer's bird identification walk through the Bolleswood Natural Area; photographer Jerry Poirier's "Beginners' Digital Nature Photography" workshop; a bus trip to Stonecrop Gardens in Cold Springs, N.Y.; garden writer Carol King's floral arranging workshop; and geologist Stan Gaby's walk on Fishers Island.

In September, the Arboretum co-sponsored the Connecticut Botanical Society's birthday with an all-day symposium "Celebrating a Century of Connecticut Flora." Dr. Michael J. Donoghue, director of the Yale Peabody Museum, gave the keynote address titled "What Makes Botany Interesting Today?" The remainder of the symposium featured 18 presentations on a wide variety of topics, plus a large number of vendors and exhibits. There were approximately 175 participants.

In November, we hosted "In Harmony with Nature," the second all-day SALT seminar for homeowners. Speakers included Mike Nadeau of Landscapes, Inc., landscape architect Ruth Parnall, Temple University Arboretum Director Stephanie Cohen, landscape designer Sheila Wertheimer, and Professor Emeritus of Botany Sally Taylor. SALT is a movement developed by the late Dr. William Niering and his wife, Catherine, who believed that homeowners should become the "salt of the earth" by becoming part of the transition toward more ecologically sound home grounds.

Other fall offerings included an annual Fall Foliage walk with Glenn Dreyer, a tree ID walk with Jim Luce, and an archaeology walk with Professor of Anthropology Harold Juli. Winter holiday events included trimming a naturalistic tree, wreath making and a "Botanical Boutique," a fundraiser organized and operated by Arboretum staff and volunteers featuring unique, quality gifts from and about nature for holiday giving.

Approximately 700 people participated in Arboretum Educational Programs during 2003, in addition to those attending the Fall Plant Sale, Botanical Boutique, and the Flock Theatre presentations in the Outdoor Theater.

Clockwise from top:

Connecticut Botanical Society Members Lauren Brown, Penni Sharp, Martha Tunucci and Paul Stetson dress "retro" during the Society's 100th birthday conference.

Wendy Dreyer conducts a bird ID walk.

Assistant Professor of Botany Christine Small at Members' and Friends' Night.

Ruth Parnall speaks on alternative lawns at SALT workshop.



Community Outreach



Tom Lee gives a bonsai demonstration at the fall plant sale.

COMMUNITY OUTREACH

PHOTO CONTEST

“Capturing the Beauty of Nature – 2003,” our annual amateur photography contest and exhibition, included separate children’s awards as well as the first “Promising Young Photographer” award. The contest is open to the college community and the public, and is designed to encourage people to explore and enjoy the natural beauty of our surroundings. Participants may shoot pictures anywhere on the 750 acres of the College Arboretum property. Volunteer judges this year were Patricia Carey, vice president for college relations and secretary of the college; Christine Small, assistant professor of botany; and multi-award winner of past contests, Frank Kaczmarek.

PLANT SALE

Witchhazel, laurel, azalea, and hydrangea were among the offerings at the 10th Annual Fall Plant Sale this year, held on October 18, during Connecticut College Family Weekend. Although it was the latest date that the plant sale has ever been held, sales were equivalent to past years. Once again, Sally Taylor donated a variety of bulbs; there was a “bargain” table consisting of members’ donations; and the Pumpkin Corner added a note of festivity to the event.

PUBLIC TOURS

Two thousand and three marked the eighth year of the Arboretum’s free public tour program, which is conducted almost entirely by volunteers. Every Sunday afternoon from May through the end of October, Arboretum docents lead free tours of the Caroline Black Garden, the Campus, or the Native Plant Collection. The tours are intended to foster an appreciation for the natural world and people’s role in it, and to educate visitors about the Arboretum and the College. This year the tours were lead by nine experienced docents and nine new apprentice docents who accompanied them on the tours.



The Arboretum’s Holiday Boutique.

ARBO PROJECT

The Arbo Project is a student-run program that provides environmental education tours of the Arboretum for local school children. Sponsored by the Arboretum and the Office of Volunteers for Community Service, they conducted a total of 13 tours during 2003. Betsy Ginn ’05 supervised the program with the following student tour guides: Jessica Bethoney ’07, Alison Bevilacqua ’97, Colin Block ’05, Kerri Casey ’07, Rachel Chase ’05, Amanda Cook ’05, Maria Dewees ’07, Tina Dietrich ’07, Jennifer Dziubeck ’05, Ali Filippelli ’07, Caitlin Greenleigh ’05, Lydia Littwin ’05, John Margolis ’04, Katie McLinn ’06, Lauren Richter ’07, and Jessica Zhao ’07. The tours included groups from the Bennie Dover Jackson Middle School, Winthrop Elementary School, Harbor Elementary School, Bates Woods Community Center and Covenant Shelter, all of New London; Lebanon Middle School, Ledyard Center School, and Girl Scout and Boy Scout troops.

OTHER OUTREACH ACTIVITIES

The summer theatrical productions by the Flock Theater were Shakespeare’s “Taming of the Shrew” and Aristophanes’ “The Birds.” The plays, co-sponsored by the Arboretum and presented in the Outdoor Theater, were performed in July and August. Approximately 3,000 people attended. In April, Assistant Director Kathy Dame spoke to a group of about 50 master gardeners on the Arboretum programs and volunteer opportunities. In May, volunteer Jerry Poirier and Kathy Dame brought a display to the Connecticut Home School Network Home Education Fair. In June, Staff Assistant Anne Davis and volunteer Linda Barbero manned a table at “BioBlitz – 2003” at Bates Woods in New London to provide Arboretum information. In September, Anne Davis and volunteer Jean Baker staffed an exhibit at the Connecticut Forest and Parks Association field day. Director Glenn Dreyer gave a number of lectures around the state about Connecticut’s notable trees and also about invasive plant identification and management.

ARBORETUM PHOTO CONTEST WINNERS

COLOR

1. Ardie Harrison, "Mushroom"
 2. Jeff Sims, "Morning Glory I"
 3. Mark Braunstein, "Yearling"
- Honorable Mention: Syma Ebbin and Mark Braunstein

BLACK AND WHITE

1. Ardie Harrison, "Sprouting Twin Leaf,"
 2. Susan Parish, "Rocks & Vine,"
 3. Denise Davies, "Bark"
- Honorable Mention: Maryelle Braunstein and Susan Parish

CHILDREN'S PHOTOGRAPHY

1. DeAngelo Duke, "Ducks Sailing on the Water"
 2. George Correa, "Rippling Water,"
 3. Luis Catagena, "Memory of Puerto Rico"
- Honorable Mention: Jared Hastings, Na Iym Johnson, and Darius Beasley

PROMISING YOUNG PHOTOGRAPHER AWARD

James Thorstenson



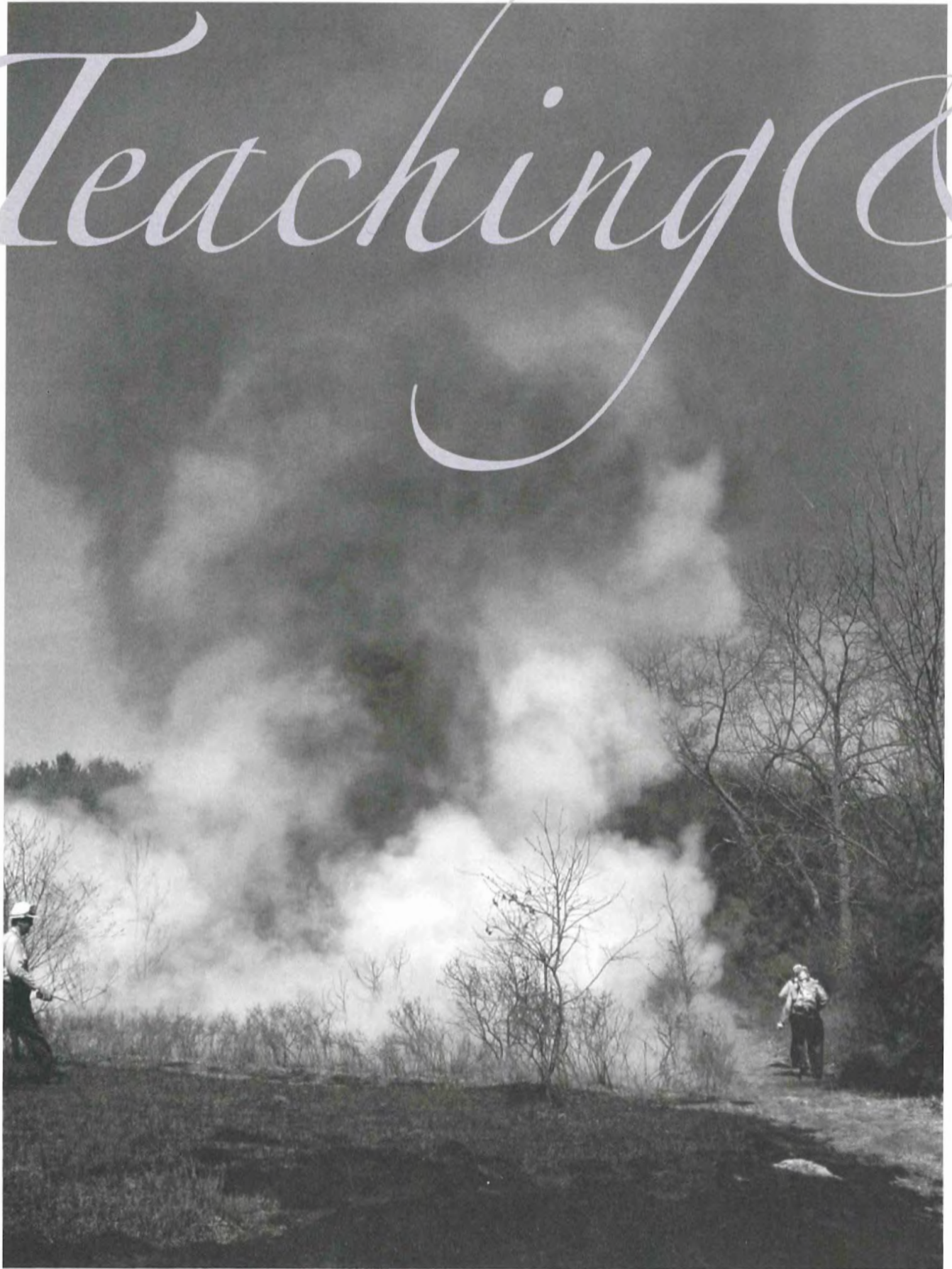
Clockwise from top:

Visitors view the photo contest exhibition at Members and Friends Night.

Volunteer Jerry Poirier with Arboretum information at the Home School Network Fair.

Shoppers at the Fall plant sale.

Teaching &



TEACHING & RESEARCH

Research on the effect of prescribed burning on field and forest habitats began in the Arboretum in 1967, when Professors William Niering and Richard Goodwin received a grant from the National Science Foundation to study vegetation dynamics. The experimental plots established at that time were periodically burned during the rest of Dr. Niering's career, with the final treatments done in 1997. This year the program resumed, with all experimental plots on both the Matthies and Avery Tracts burned by Connecticut Department of Environmental Protection (DEP) Forestry staff. The DEP has provided this assistance since the study was initiated 36 years ago. Botany Professor Christine Small, who has been conducting research on the effects of controlled burning by the DEP in Pitch Pine stands, will oversee the Arboretum burning research as well.

Another long-term study initiated by Professors Niering and Goodwin bore fruit in an honors thesis by Melanie "Daisy" Small '03. Daisy worked with other students under Professor Christine Small's direction last summer on the detailed survey of vegetation in the Bolleswood Natural Area (see the 2002 Arboretum Report). During the past academic year she used data collected in surveys beginning in 1952 to examine the effect of hemlock mortality (caused by the Hemlock Woolly Adelgid) on hemlock-dominated forests. The trees experienced a 70 percent decline between 1982 and 2002. The forest composition is trending toward black and red oak dominance. Professor Small and Arboretum Director Dreyer supervised her honor's thesis in the Botany Department.

Professor of Anthropology Harold Juli has established a Comparative Faunal Collection Project for the purpose of developing a reference collection of animal bones that can be used to identify remains excavated during archeological research. He is using an arboretum site to bury dead animals from which bones will eventually be collected, identified, labeled and stored. Professor Juli's Archeological Analysis course visited various Arboretum sites several time during the year.

Associate Professor of Geology Douglas Thompson supervised three student individual study projects during the year. John Haberland '03 did a project in which he investigated two small water channels in the Arboretum to discover controls on the formation of undulations in compact sediments. Peter Kolodner '03 studied the geomorphic history of a small alluvial fan near the Athletic Complex area, and Erik Brzozowski '04 did some bedrock geological mapping on Mamacoke Island and examined the formation of a kettle pond on the south side of the island.

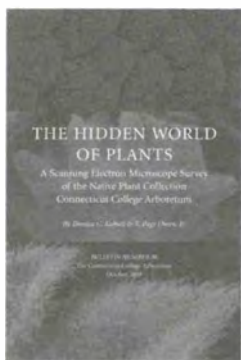
Top: Connecticut DEP Forestry personnel set prescribed fire in research plot.

Bottom: Students gathered to watch the burns.



Visiting Assistant Professor of Chemistry Kathleen Halligan took a creative approach to a class exercise in her organic chemistry course during spring of 2003. Each pair of students selected a plant species that grows in the Arboretum. They were asked to find a range of chemistry related information including medicinal/ethnobotanical uses, poisonous properties, and a to create a classification of chemical compounds isolated from their species. The students then had to devise approaches to synthesizing compounds from their plant. For the final step in the exercise, the students posted themselves in the Native Plant Collection at the site of their chosen species, and discussed their projects with Arboretum visitors.

Participants in Professor of Biology Robert Askins' ornithology and animal ecology classes were required to complete a semester-long field research project. Those in the ornithology class monitored seasonal changes in bird populations on a study area in the Connecticut College Arboretum and completed a study of the ecology and behavior of one particular species. Students in the ecology course were required to write a research proposal, gather data in the field, analyze the data, and write a final paper in scientific style. The goal was to conclusively test a hypothesis; many of the studies were conducted in the Arboretum.



Professor Christine Small's Systematic Botany and the Local Flora course used Arboretum natural areas, the wildflower garden and ornamental plant collections repeatedly for class field trips and outdoor lectures and independent semester-long plant collection projects. Students also used the Arboretum to collect plant materials for indoor labs. In Professor Small's Ecology of Terrestrial and Wetland Plant Communities class, the Arboretum was the site of field trips (labs on dendrochronology, wetland delineation, soils, spatial patterning in plant populations, spring ephemerals, and the greenhouse for a competition experiment). Students explored local plant communities and site types relative to physical environmental conditions, biotic interactions, native and non-native plant species, and natural and anthropogenic disturbance.

Associate Professor of Biology Phillip Barnes' student, Meridith Greene '03, studied the migration and dispersal of the white-footed mouse, *Peromyscus leucopus*, on Mamacoke Island and across the Mamacoke salt marsh to the adjacent mainland. Her study builds upon previous data collected in 1988 and 2000. The primary goal of the long-term study is to establish the extent to which Mamacoke salt marsh serves as a barrier to movement of woodland mice between the island and the mainland. This year Greene used the new marking technology of passive integrated transponder (PIT) tags. These small, electronic tags are implanted beneath the skin; each emits a unique alphanumeric code when stimulated magnetically by a hand-held reader. No migration across the salt marsh was observed, nor was there movement of marked individuals between different trap sites on the island. These findings may have interesting evolutionary implications, since over time isolated populations tend to diverge genetically.



Top: The Hidden World of Plants, the latest Arboretum Bulletin.

Left: Dying hemlock litter the forest floor in the Bolleswood Natural Area.

Right: Gintas Krisciunas '03 (l) and Patty Zerra '03 with bloodroot plants for an organic chemistry project.

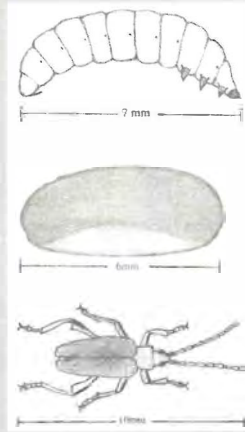
INVERTEBRATES OF THE ARBORETUM POND

During the fall semester, 16 students in Jean C. Tempel '65 Professor of Biology Steven Loomis' invertebrate biology class completed a project using the Arboretum Pond. The students had two goals: to develop information for an Arboretum bulletin on the invertebrates of the pond, and to obtain quantitative data on density of invertebrates in anticipation of the next dredging project. Four groups of students were each assigned to a different pond environment, including pond bottom, water column, water lilies and the pond edge. Each group was required to find the best method for quantitative sampling in their particular environment. A grid was mapped over the pond and sampling points chosen randomly. Each group then spent the next few weeks collecting samples. All invertebrates were preserved in ethanol. The groups spent the rest of the semester identifying, counting and drawing the invertebrates in each sample. At the end of the semester, students presented their results both orally and as written reports. In 2004, one of the students from the class will complete an individual study project consolidating the reports into the text for an Arboretum Bulletin. Future classes will continue the quantitative sampling to follow changes in invertebrate populations over time.

PARTICIPATING STUDENTS

Elyssa Bristol '04
Ashley Booth '06
Christine Culver '04
Erin Shields '04
Maggie Gentz '04
Erik Brzozowski '04
Henry Maxwell '06
Sewit Haile '05

Steven Oven '05
Benjamin Polansky '06
Danielle Brix-Raybuck '05
Lauren Schulz '06
Corey Mcaulliffe '05
Christopher Grossman '05
Jennifer DeAngelis '06
Craig Carreau '04



Student drawing of larvae (top), pupa (middle) and adult (bottom) form of aquatic leaf beetle (*Chrysomelidae*)



Invertebrate Zoology students collected specimens for pond inventory.

PUBLICATIONS

In October the Arboretum published *Bulletin Number 38, The Hidden World of Plants: A Scanning Electron Microscope Survey of the Native Plant Collection*. The 40-page booklet resulted from an individual study project by Danica C. Kubick '00 that was supervised by Associate Professor of Botany T. Page Owen. The highlight of the publication is a series of super close-up images of plants from the Arboretum's living collections that show surface structures difficult or impossible to see with the unaided human eye. The two also wrote essays on electron microscopy and on plant structures to inform the reader about how the images were made and what features they reveal.

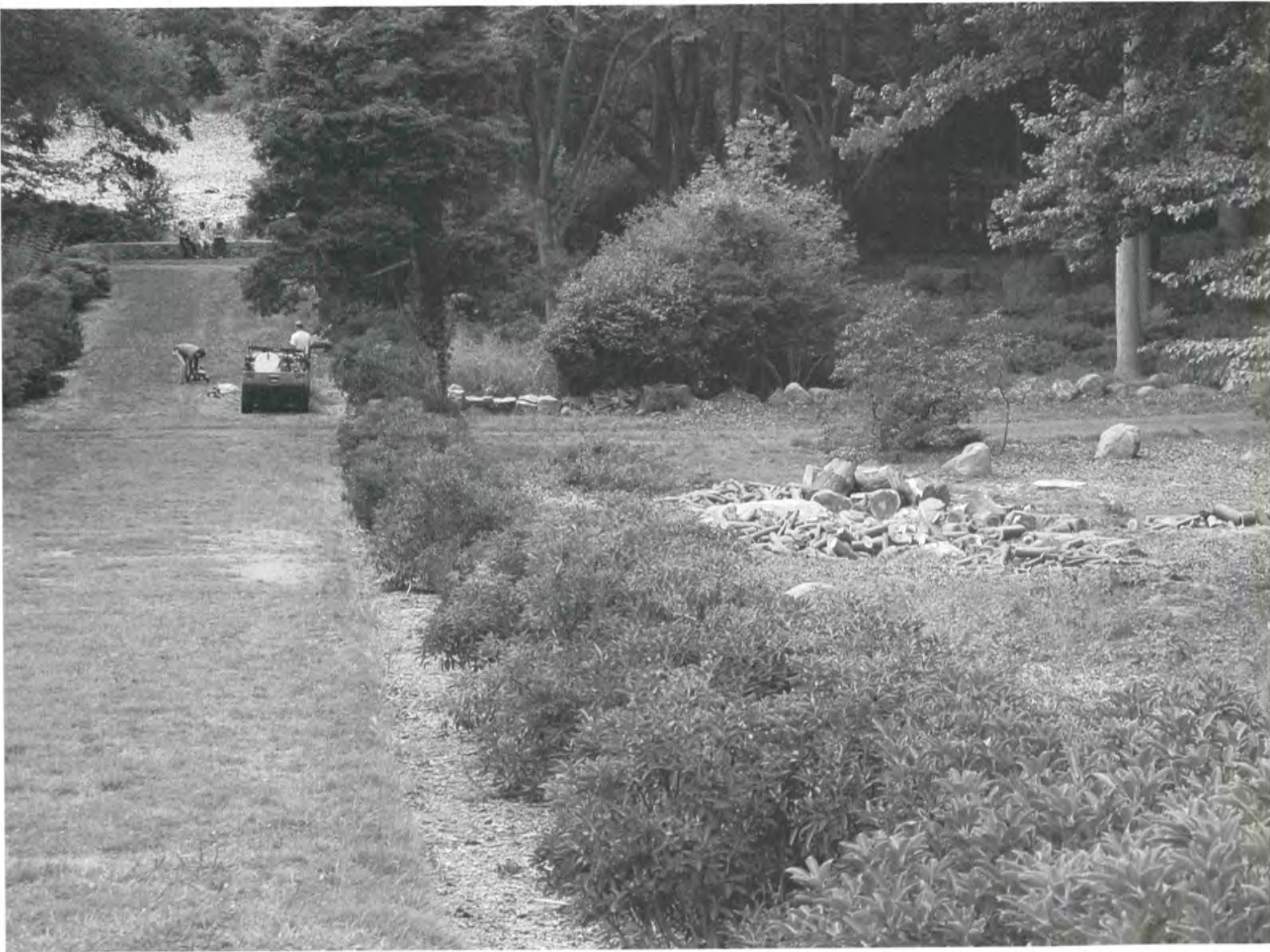
Askins, Robert A. 2003. *Do Birds Have a Future? Learning Conservation from Landscape Ecology*. Bun-ichi Sogo Shuppan, Tokyo Japan. 407 pp. This is a Japanese translation of the second edition of "Restoring North America's Birds. Lessons from Landscape Ecology," published by Professor Askins in 2002.

Goodwin, Richard H. 2002. *A Botanist's Window on the Twentieth Century*. Harvard Forest. This autobiography by Professor Emeritus of Botany and Former Arboretum Director Dick Goodwin starts with his early years as the son of an M.I.T. professor, and recounts a life of privilege and service that makes fascinating reading. Although the College and Arboretum are part of the story, his contributions to the field of environmental conservation via The Nature Conservancy and by other means are truly inspiring.

Greene, Meridith. 2003. "Migration and dispersal of the white-footed mouse, *Peromyscus leucopus*, across Mamacoke salt marsh and on Mamacoke Island in the Connecticut College Arboretum." Honors Thesis, Dept. of Zoology.

Small, Melanie J. 2003. "Forest community changes following hemlock woolly Adelgid infestation in southern New England." Honors Thesis, Dept. of Botany.

Plant Collec



*Above: Remains of an American Beech tree next to the Laurel Walk.
Opposite: Artist painting in the Native Plant Collection.*

ntions

PLANT COLLECTIONS

NATIVE PLANTS. Removal of American beech (*Fagus sylvatica*) trees along the Laurel Walk continued in 2003, with a total 15 cut down over the past two years. Experts have not yet determined what caused the rapid decline and death of this planting, which was the first thing most visitors saw as they entered the Arboretum from Williams Street. Plans were developed to replace the beech with a planting of paper birch (*Betula papyrifera*) in 2004.

Another challenge has been a dramatic increase in plant damage in the Native Plant Collection and Bolleswood Natural Area caused by the browsing and antler rubbing of white tailed deer. It is now clear that deer can move in and out of this area, which is surrounded by chain link fencing six feet high. Our staff has managed to close off areas where the deer crawled under the fence, but the deer are able to jump over it in a number of locations. They also walk in through gates that are left open. Visitors will have noticed increasing amounts of interior fencing around the Edgerton and Stengel Wildflower Garden, the Fine Native Azalea Garden and around a number of individual specimens. Given the rapidly increasing local deer population, the problem is likely to get worse, causing irreversible damage to our 70-year-old plant collections. Planning started this year to find a way to extend the height of the fence, among other options. Until the deer browse situation eases, there will be few new plantings in this collection.

The 2003 growing season was wetter than recent years, a welcome change in terms of plant growth. Any extra time our horticultural staff had after mowing and pruning was spent removing rocks and stumps in the collection areas in an effort to ease maintenance and travel.





Alumna and Trustee Emeritus Susan Lynch '62 made a gift to design, plant and endow maintenance for a memorial garden located at the entrance to Harris Refectory in the North Dormitory Complex (the "Plex"). This location had been left barren since the late 1990's building renovations. Arboretum Horticulturist Jeff Smith designed the garden and the site was prepared this year. It will be planted in 2004.

CAMPUS LANDSCAPE The College's memorial garden for the victims of the September 11, 2001 attacks was completed this year, after having been designed and planted in 2002. It was installed just north of Bill Hall, facing the main green and chapel. Cut stone that once formed the steps down the Laurel Walk were used to edge a field stone patio and form stone benches, and a bronze plaque was also installed. A gift of the classes of 1997 and 2003, the garden was the idea of Melanie J. "Daisy" Small '03 and designed and installed by students and staff. P & H Construction built the patio and donated a significant portion of the cost of the job. On the day before the 2003 commencement the college community gathered for a brief dedication ceremony that remembered the victims, their families and those who helped create the memorial.

NEW CAMPUS PLANTINGS

- Aesculus parviflora*, bottlebrush buckeye
- Albizia julibrissin* 'Rosea,' silk-tree
- Aronia arbutiflora*, 'Brilliantissima,' brilliant red chokeberry
- Betula platyphylla japonica* 'Whitespire,' Asian white birch
- Cephalotaxus harringtonia* 'Prostrata,' prostrate Japanese plum-yew
- Cupressocyparis leylandi*, Leyland cypress
- Halesia monticola*, mountain silverbell
- Magnolia* 'Yellow Bird' yellow bird magnolia
- Prunus maritima*, beach plum
- Rhus aromatica*, fragrant sumac
- Chamaecyparis nookatensis* 'Glauca,' nootka falsecypress
- Cedrus deodara*, deodar cedar
- Heptacodium miconioides*, seven-son flower



Clockwise from top:

A "browse line" visible on laurels from deer feeding behind Outdoor Theater.

Leslie Rice (l) and Melanie "Daisy" Small at Sept. 11 Garden dedication.

Damage to young maple tree from deer antler rubbing.

Peg and Toby Hermes benches in the Caroline Black Garden.



CAROLINE BLACK GARDEN. A pair of teak benches were placed on a small field stone patio, under the mature sourwood tree facing the Johnson Holly Collection. The Flanagan and Hermes families established this memorial to remember Peg and Toby Hermes. Peg worked at the college for 42 years beginning in 1945. She finished her career as administrative assistant to the secretary of the college and truly loved the campus and Arboretum.

STAFF AND ASSOCIATES

The Arboretum staff for 2003 included Glenn Dreyer, director; Katherine Dame, assistant director for public programs; Jeffrey Smith, horticulturist; Craig Vine, assistant horticulturist; Chip MacIlwaine, grounds person; Anne Davis, staff assistant. Long-time volunteer and former Arboretum Intern Caroline Driscoll worked on a contract basis one day per week supervising Hort Helper volunteers and updating plant collection records.

In 2003 Craig Vine celebrated his 35th consecutive year on the Arboretum staff, making him one of the College's longest serving employees. Craig's dedication and reliability was feted by Director Dreyer at a college employees Long Service Reception in May.

A generous gift from the estate of A. Clayton Scribner has led to the establishment of an endowment fund for Arboretum Information Systems. Mr. Scribner and his wife had a life-long interest in botany. He also left the Arboretum his collection of wildflower books and pamphlets. The endowment will be used to help support a new Arboretum curator position. The curator will be in charge of the Arboretum plant collection database and other collection related information including books and images. A part-time curator will be hired in 2004.

The Connecticut Department of Environmental Protection honored Former Arboretum Director William A. Niering by naming a State Natural Area for him at Harkness Memorial State Park in 2000. This year they placed a large boulder at the park overlooking Goshen Cove that is engraved with a message about his life and work.



STUDENT WORKERS

The Arboretum would be a very different place without the assistance of student workers. Every year we welcome a group of hard working young people, most of whom work with us as part of their financial aid package. These "work-study" employees labor beside our staff in all aspects of landscape and greenhouse maintenance. This year we thank the following individuals for their efforts in the Arboretum:

Spring 2003

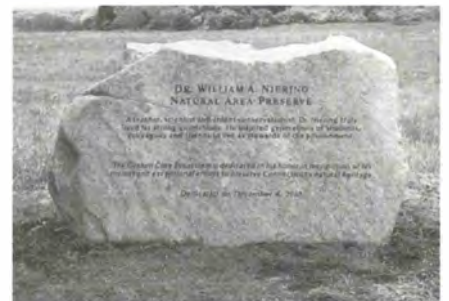
- Amy Angell '05
- Rory Jose '05
- Susan Laszewski '05
- Ross Morin '05
- Eli Trowbridge '05
- David Lloyd '04
- Chris Berotti '03

Summer 2003

- Joel Scata '06
- Linas Krisciunas '05
- Aaron Schuman '04

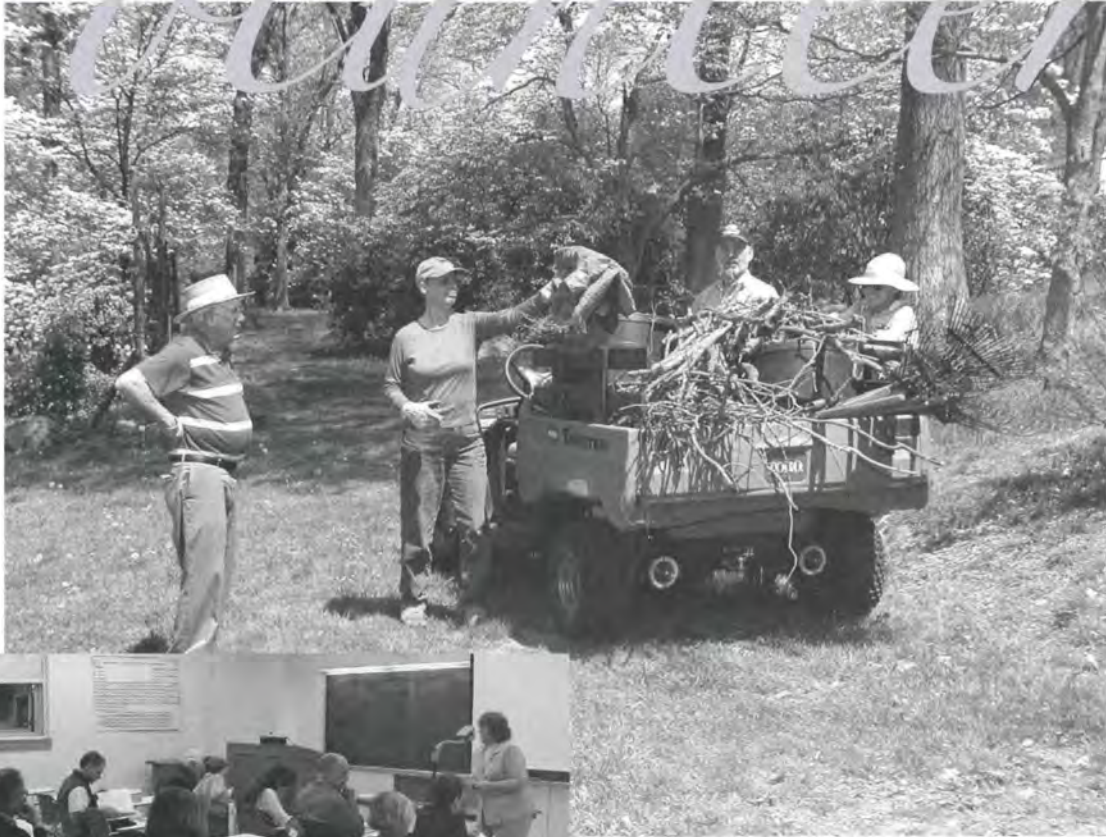
Fall 2003

- Seth Stulen '07
- Alex Tenenbaum '07
- Liam Cohen '07
- Joe Griffin '07
- Josh Hamilton '06 Greenhouse Volunteer
- Ross Morin '05
- David Lloyd '04
- Eliot Stulen '04



Clockwise from top: Craig Vine on a vacation in Ireland; Kathy Dame and Jeff Smith; Dr. Niering's memorial boulder at Harkness Memorial State Park; summer workers Joel Scata (l) and Aaron Schuman; student workers clean up the beds near New London Hall greenhouse.

Volunteers

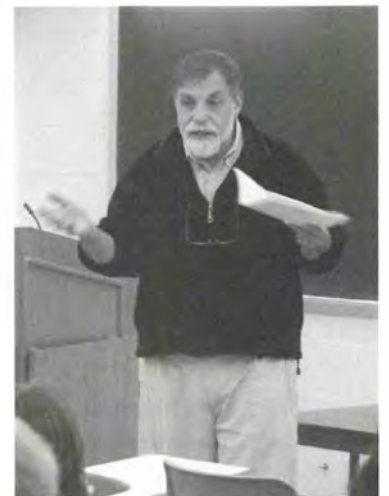
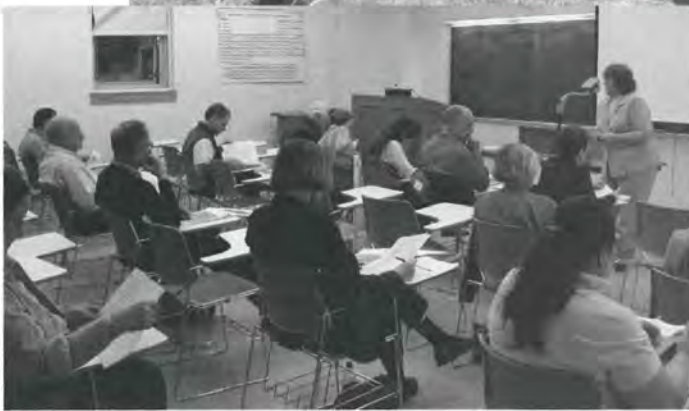


Above: Caroline Driscoll (center) and Hort Helpers.

Center: Kathy Dame addresses docent training class.

Bottom left: Sally Taylor and Marlene Oko have lunch during volunteer trip.

Bottom right: Professor Juli explains Arboretum archeology to docents.



VOLUNTEERS

Volunteers have become another vital ingredient in the success of the Connecticut College Arboretum by helping both to maintain and interpret our plant collections. Hort Helpers assist in the maintenance of plant collections providing a vital supplement to our dedicated staff and work-study students. Docents conduct nearly all of our free public tours of the three major plant collections. Additionally, volunteers assist with our education programs, the plant sale, the boutique, and in many areas of our outreach programs.

In 2003, we were happy to welcome nine new docents: William Cuddy, Denise Garofalo, Kenneth Graham, Debbie Hesketh, Marlene Oko, Lydia Pan, Judy Samokar, Katherine Williams and Michael Wuenscher. A six week training course, which was available to all volunteers but targeted the new recruits, was conducted in early spring. Staff members Glenn Dreyer, Jeff Smith and Kathy Dame were joined by professors Christine Small (Botany) Robert Askins (Biology), Harold Juli (Anthropology) and Volunteer Coordinator Caroline Driscoll in explaining the functioning of the Arboretum as a plant collection, a natural area and a college teaching and research facility. The course ended with a marathon of tours through the three plant collections. For this year's tours, each new docent was paired with an experienced person for three tours during the season. We are very pleased to welcome these new members of our volunteer staff. The volunteer season officially started with a spring barbecue at Buck Lodge. Later in May the staff and volunteers enjoyed a trip to the botanic gardens at Smith College in Northampton, Mass.



The Arboretum gratefully acknowledges the following volunteers who served during 2003. Additional student names are mentioned in the Arbo Project section of this report's Community Outreach page. A total of 800 volunteer hours were recorded this year.

VOLUNTEER PROGRAM

Paul Angelini
David Arnold
Platt Arnold '64
Robert Askins
Jean Baker
Linda Barbero
Nancy Burrows '97
Ginny Butler
Patricia Carey
Maureen Cleaver
Richard Conway
Jean Coyne
William Cuddy
Vita Dodson MA '83
Wendy Dreyer
Caroline Driscoll '84
Joan Flynn
Denise Garofalo
Allen Gauthier
Kenneth Graham
Kari Hammen
Ashley Hanson '82
Debbie Hesketh

Art Ives
Harold Juli
Frank Kaczmarek
Peg LaPorte
Anne-Marie Lizarralde '91
Manuel Lizarralde
Jim Luce
Janice McCue
Edmee' McIntosh
Sandra Morse
Lois Nadel
Becky Nortz
Marlene Oko
April Owen
Kathleen Page
Nancy Patenaude
Lydia Pan
Betty Pinson
Jerry Poirier
Barbara Pokorny
Judy Procaccini
Marilyn Rinek
Pomeroy Robinson
Robert Sherman
Judy Samokar
Arlene Scott
Christine Small
Elizabeth Smith
Ed Suter
Mari Suter
Sally Taylor
Sheila Wertheimer '84
Kathryn Williams
Michael Wuenscher

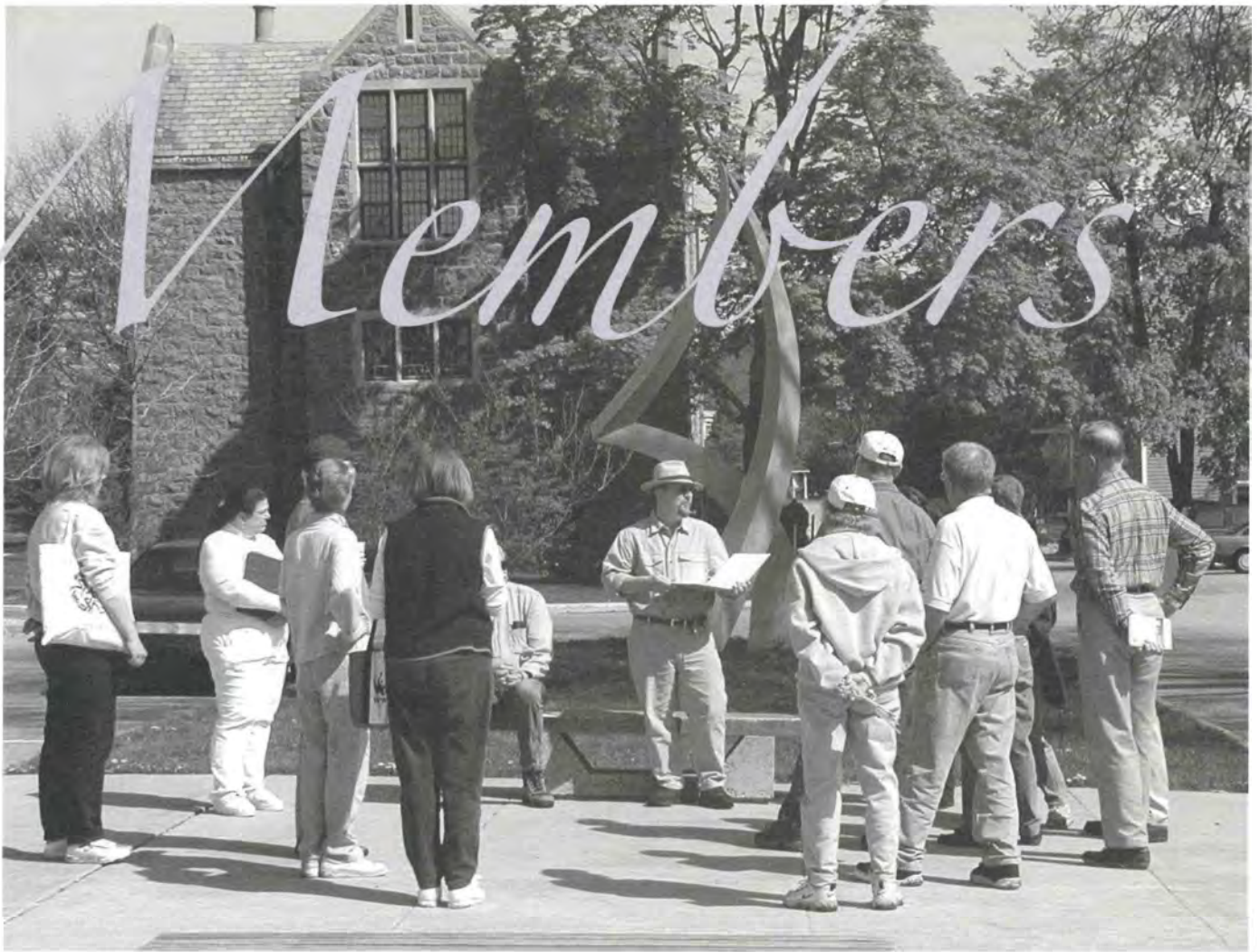
OTHER VOLUNTEERS. In celebration of Earth Day 2003, the Williams School seventh grade, under the direction of Carolyn Kraemer, helped prepare the Caroline Black Garden with the Arboretum staff. The student volunteers were:

Steven Chen
Jon Brodie
Julian Dellporta
Sam Dole
Whitney Douglas
Beth Green
Rachel Harris
Devon Legasse
Mike Polito
Clara Potter
Olivia Singer
Sean Sullivan
Alex Thomas
Antonia Williams



Above: Jeff Smith led a training tour for docents.

Left: Mari and Ed Suter on Smith College volunteer trip



Guided plant collection tour starts at the sculpture, "Synergy."

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We gratefully acknowledge the financial contributions made by the following individuals and organizations during 2002. We strive to accurately maintain all of our records and appreciate receiving any corrections.

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Conniff, Karen

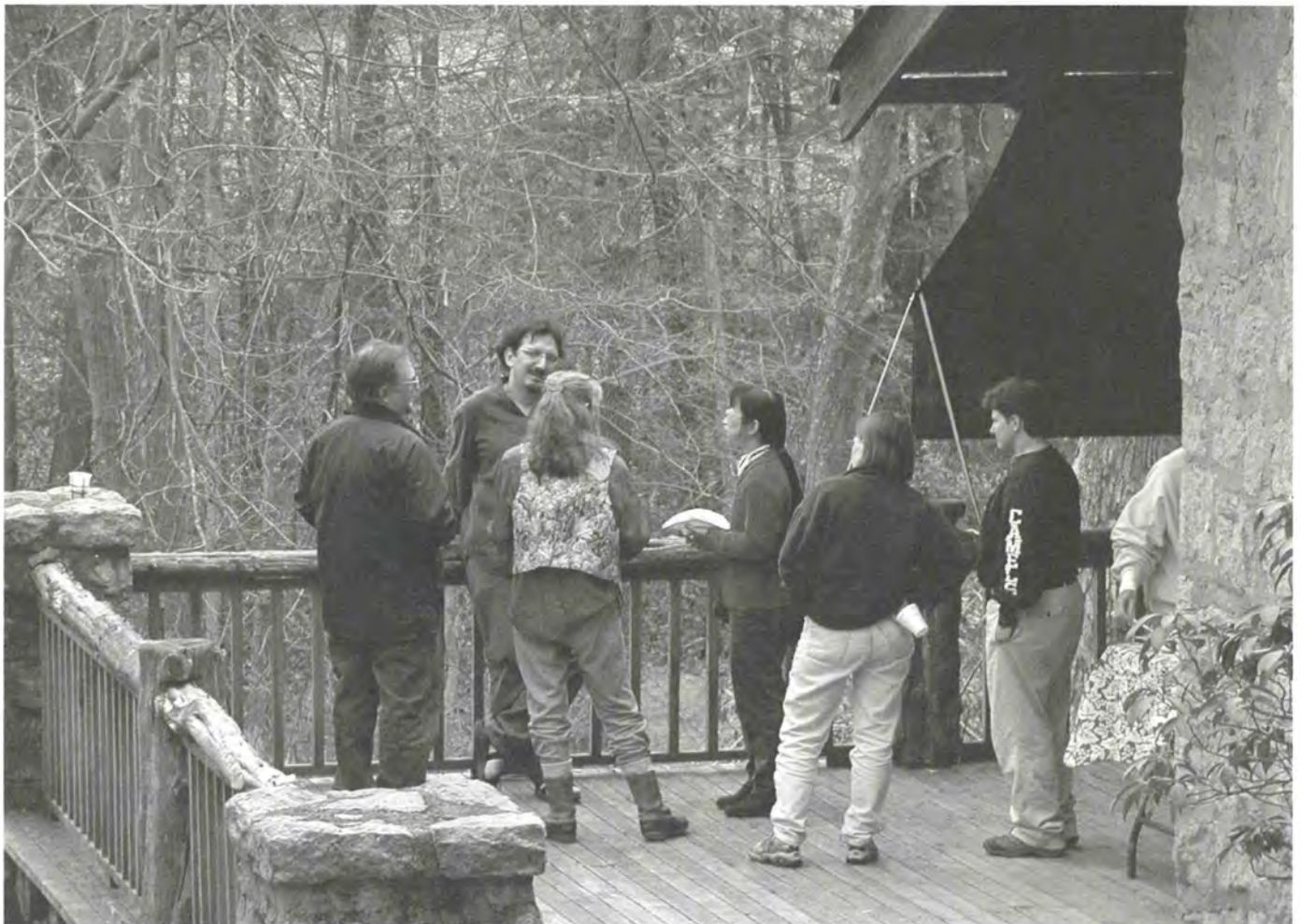
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 Goldsmith, Timothy Mr. & Mrs.
 Goodman, Robert C. Mrs.
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 Green, Pam & Brian

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Volunteer picnic, Buck Lodge.



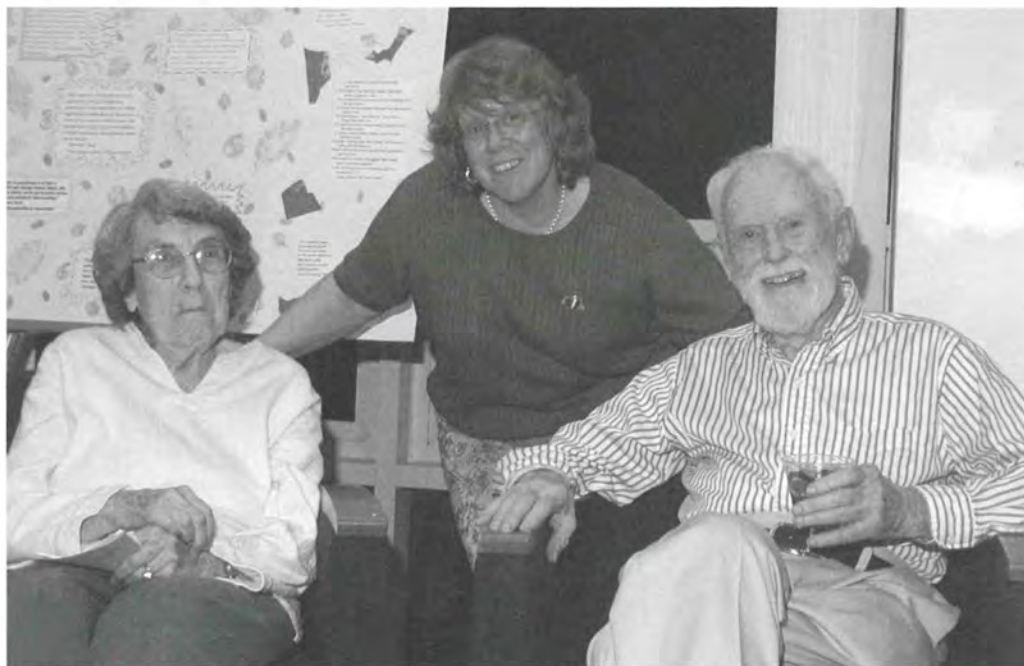
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Kathy Dame flanked by Esther and Dick Goodwin on Member's Night.



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