1999

Arboretum Annual Report, 1999

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The 1999 Annual Report of the Connecticut College Arboretum
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: William Mercer
FROM THE DIRECTOR

THE YEAR 1999 will be remembered in the history of this Arboretum as both the end of the millennium and the end of an era. For the past 47 years the scientific wisdom and humanitarian insight of Dr. William Albert Niering guided this institution. Although officially its director only from 1965 to 1988, Bill had an impact from the start when he pitched in with Arboretum Director Dr. Richard H. Goodwin that first summer in establishing the long-term vegetation studies in the newly designated Bolleswood Natural Area. He soon branched out into tidal marsh research on Mamacoke Island and beyond and into vegetation management, first with herbicides and later with prescribed burning. Through his entire career he kept his focus on vegetation studies based at least in part in the Arboretum. He wrote constantly, and continued producing Arboretum Bulletins in addition to hundreds of scientific and popular articles. One of his last publications was about the impact of the invasive vine, Oriental Bittersweet, on the development of vegetation in the Bolleswood.

Using our plant collections and natural areas as his outdoor teaching laboratory, his contagious enthusiasm and endless fascination with the natural world infected generations of students. Most of us were never the same again. By the early 1970's he was teaching a Human Ecology (later Environmental Studies) class that became very popular with non-majors and grew to include more than 80 students per session – huge by Conn standards. His systematic botany and ecology courses were always overflowing; he never turned students away.

Bill Niering served the College in many capacities, contributing to all the major and many smaller faculty committees, even standing in as acting President for one semester. However, he was primarily a teacher and researcher and made those two roles his priorities throughout his career.

I had the opportunity to be one of Bill's dozen or so graduate students and had the added privilege of working closely with him for an additional 17 years. He taught by example as well as by lecturing, living in a frugal, "low impact" way. His Depression-era upbringing of economic hardship blended with his environmental ethic to produce a personality that was antithetical to our modern American consumptive lifestyle. For example, he proudly displayed the shoes he wore for decades and the wool pants he found at the local dump. He was a notorious scavenger, and loved to show everyone the useful items he salvaged from dumpsters and roadsides. He used a non-motorized lawn mower at home and collected, restored and gave push mowers to others. In later years, he drove an old, well-maintained, orange, Volkswagen Beetle convertible, but only on warm, sunny days.

In contemplating his legacy, I believe his greatest contribution may well be the impact on the thousands of people who, thanks to him, now think about the ecological consequences of their actions. Like so many others, I am grateful to have known him.

Glenn D. Dreyer
EDUCATION AND OUTREACH

A TWO-DAY SYMPOSIUM for landscape architects and designers, "New Directions in the American Landscape," attracted 100 participants to the College in mid-January. The first day dealt with historic landscapes and the concepts of natural design in a cultural context and the second on creating naturalistic landscapes by blending horticulture, design, and ecology. The late Dr. William A. Niering spoke on the "Composition of our Native Plant Communities: A Model for Design." Co-sponsored by the Morris Arboretum of the University of Pennsylvania and by Larry Weaner's New Directions in the American Landscape, the symposium was offered in both Philadelphia and New London.

"Be a Landscape Detective," an interpretive geology walk on Mamacoke Island with Doug Thompson, Assistant Professor of Geophysics, was among the 13 varied public education programs offered in the spring. Lectures on "Gardening with Mosses" with Christine Cook, "Herbs in Bloom" with JoAnn Gardner, and "Year Round Garden Charm with Ornamental Grasses" by Sheila Wurtzberger '84 were offered during the colder days of the spring semester. In May, members and friends toured Garden in the Woods, Framingham, Massachusetts and dined at the nearby historic Wayside Inn.

"Recognizing Birds by their Song," a walk in the Native Plant Collection with Robert Askins, Professor of Zoology and Wendy Dreyer, Naturalist, got our summer offerings off to a good start. In June, participants in the Annual Members' and Friends' Night enjoyed a lively presentation by Nancy Wetzel entitled "Lives, Literature and Landscape of Plantswomen Celia Thaxter and Sarah Orne Jewett." Prides Corner Farms Nursery generously opened their doors to our members again this year, affording them the opportunity to purchase plants at wholesale prices. A bus trip to Long Island's Planting Fields Arboretum and Old Westbury Gardens, a walk and demonstration on Native American Ethnobotany by Assistant Professor of Botany Manuel Lizarralde, and a boat trip to explore Block Island led by geologist Stan Gaby filled out our summer agenda.

In August, just a few days before his death, Dr. William Niering led his final SALT home landscape tour. "Re-Visiting the Wild Landscape" included a trip to Jeanne Shelburne's home in Quaker Hill, followed by a visit to Dr. Niering's home in Gales Ferry. In his own inimitable way, Bill, carrying his barking dachshund in one arm and attempting to use a push mower with the other, inspired those present to take an ecologically sound, naturalistic approach to their home landscapes.

October 2 marked the Arboretum's 6th Annual Plant Sale. Twenty-five volunteers played a major role in this event, working with staff to make it a great success. This year we began a "Pumpkin Corner," with Craig Vine and Yvonne Rinehart painting faces on the pumpkins to the buyer's specifications. Also in the fall, Professor of Anthropology Harold Juli conducted an archaeological walk in the Arboretum; Director Glenn Dreyer led an autumn foliage walk; and Ron Rosza and Margaret Welch presented a lecture/workshop on home orchid culture. Sally Taylor, Professor Emeritus of Botany, taught a popular Botany of Conifers mini-course. Local garden writer Carol King's workshop of autumn harvest arrangements and Horticulturist Jeff Smith's workshop on creating holiday wreaths quickly filled up. In December, the Arboretum staff placed a Fraser Fir in the lounge of the Olin Science Center and invited the college community and the public to come and place a natural ornament on the tree to celebrate the holiday season. The fir was later planted in the conifer collection. A total of 776 participants enjoyed the educational opportunities offered by the Arboretum in 1999.
SALT (Smaller American Lawns Today) is a movement founded by Dr. William A. Niering at Connecticut College, that is aimed at reversing the "lawn mania" in America by restoring home and industrial grounds to more harmonious, ecologically beneficial, naturalistic landscapes. The SALT concept encourages citizens to begin to make the transition toward more ecologically sound home grounds and to become the "salt of the earth" by becoming part of the movement. The Arboretum plans to continue the legacy left by Dr. Niering, with Glenn Dreyer acting as advisor.

For the sixth consecutive year, otherwise quiet Arboretum evenings resounded with laughter and applause, thanks the Flock Theater. In programs known as "Shakespeare in the Arbo," the local theater production company presented "A Comedy of Errors" and "The Tempest" during July, August and September to enthusiastic audiences who totaled more than 2,000.

In conjunction with a local orienteering club, the Arboretum supported the creation and printing of a special map of college property between Rt. 32 and the Thames River. In April, a public event attracted 37 people, many new to this competitive sport. The College Athletic Department and the Science Center of Eastern Connecticut also use the course. The map is available in the Arboretum Office, and annual public orienteering events are anticipated.

The Arboretum web site (http://arboretum.conncoll.edu) is a new form of educational outreach to an international audience. Intern Keith Bowman '99 worked on the site all year and greatly enhanced its appearance and utility. Visitors to the site will find current educational programs, as well as an archival listing of past events.
From the top:

Erin Largay '99 measures a dying Hemlock Tree in the Bolleswood Natural Area.

Professor Niering inspects a tidal marsh research site.

Ben Stephens '01 in Professor Thompson's ES 410 course studies a drainage channel near the college athletic center.

RESEARCH AND TEACHING

Assistant Professor of Geophysics Douglas Thompson established three stream flow gauging stations in the Arboretum for long-term data collection and classroom work. Funding for the gauges was obtained through his NSF CAREER grant. They continuously monitor water elevation, which can then be related to flow rate in the campus channels. This network will serve his upper-level courses and student independent research. Professor Thompson uses the Arboretum for several field trips in his Hydrology class and used Mamacoke, the ravine and the campus green for major teaching labs in Introduction to Physical Geology. His River Hydraulics and Hydrology course used a drainage channel between Rt. 32 and the Athletic Center as the main project, and the class collaborated on a detailed evaluation and restoration report. Laura Carson '99 conducted an individual study of the college's storm drainage system.

Assistant Professor of Botany and Anthropology Manuel Lizarralde made intensive use of the Arboretum for his Ethnobotany of southern New England class. Students plotted and mapped a quarter hectare plot in the Richard Goodwin Natural Area north of Gallows Lane, along Bolles Road. They collected and prepared approximately 200 herbarium voucher specimens for the project. Glenn Dreyer taught Environmental Horticulture in the Botany Department during the fall semester. His students frequently used the campus and Caroline Black Garden plant collections for field study. In General Biology, 130 students used the Bolleswood and Niering Tracts for outdoor laboratories, as did about 40 students in General Botany.

Robert Askins, Professor of Zoology, taught Ornithology in the Spring semester, and all 14 students used the Arboretum for field projects. The students monitored seasonal changes in bird populations and each focused on the behavior of a particular species. Two class field trips also took place in the Arboretum. In fall six of the students in his Animal Ecology course used the Arboretum for intensive, semester-long field research projects. Dr. Askins also continued the long-term breeding bird census in the Arboretum with the help of Mary Dowdell and Wendy Dreyer.

Botany Professors Warren and Niering supervised research students in the Arboretum for an ongoing tidal marsh study focusing on micro-topographic relief and sea level rise changes over time. Professor Niering spent the Spring 1999 semester on sabbatical leave working on and writing up a series of research projects including controlled burning in the Arboretum, tidal marsh ecology and an evaluation of vegetation on wetlands created as mitigation for highway construction projects. He also revisited desert and mountain study sites in Arizona where he and Dr. Robert Whittaker had worked in the 1960's and 70's.

Erin Largay '99 studied the effect of the Hemlock Wooly Adelgid on Hemlock trees in the Bolleswood Natural Area. In addition to winter fieldwork, Erin analyzed data collected by Arboretum undergraduate researchers beginning in 1988. Her results indicate up to a 43% decrease in living Hemlock basal area and up to 65% mortality over the ten-year period.

Keith Bowman '99 completed his Honors Thesis in the Botany Department with a study of tree seedling germination on different substrates on the forest floor. Arboretum study sites included the Bolleswood, the R.H. Goodwin Natural Area and the Avery Tract. The project was supervised by Glenn Dreyer and stimulated by Dr. Niering's observation that moss mats tend to have more seedlings than other locations.
David Abrams '99 developed an individual study project that combined learning close-up wildflower photography with web site design. Working with Director Dreyer, he practiced in the College Greenhouse, then moved to the Edgerton and Stengel Wildflower Garden as soon as the first wildflowers emerged. His written descriptions and photos may be viewed by selecting Wildflower Gardens from the menu on the Arboretum home page (http://arboretum.conncoll.edu).

William Joyce '00 began a two-semester project to analyze and create a new design for the landscape surrounding the College's North Dormitory Complex. “The Plex” is the largest student residential facility and is undergoing a multiyear renovation. William analyzed the original landscape and building designs in relation to landscape function and then used the new building design and Campus Master Plan to develop concepts for a new landscape design.

PUBLICATIONS, PAPERS AND PRESENTATIONS

The Arboretum was the location for some or all of the work contained in the following publications, papers and presentations


Dreyer, G. 1999. The Campus as Arboretum. Invited lecture, Frank A. Waugh Arboretum and Department of Landscape Architecture, Univ. of Mass, April 30, Amherst.


PLANT COLLECTIONS

THE YEAR 1999 was one in which drought again played an important role. The general pattern here in New London has brought serious droughts every other year for most of the 1990's. This year, the dry spell began in mid-Spring and ended in mid-August. Since the decade also set records for having many of the warmest years in the century, our plant collections have been under long-term stress. Our college-wide procedure is to carefully choose plants appropriate to the site, and to water only for the first year or two. The only exception to this rule is some areas of turf maintained for athletic purposes, and the wildflower garden, which will probably require supplemental watering during droughts to maintain its diversity. Considering the challenges of the warm, dry weather, the Plant Collections and Natural Areas are doing quite well.

Burgeoning populations of deer are causing increasing damage to both planted and wild vegetation. The natural areas and native plant collection are the hardest hit thus far. Fencing is one of the most effective means of keeping these browsers away from important specimens, and the wildflower and azalea collections received semi-permanent enclosures in 1999. Temporary measures such as netting and repellants were also used.

A group of Arboretum volunteers officially known as the Hort Helpers donated a wide variety of services in all the Arboretum Collections. Tasks included planting, weeding and mulching in the Wildflower Gardens, weeding, pruning and mulching the perennial beds around the Greenhouse and beds in the Caroline Black Garden. Shrub pruning and invasive exotic removal in the Native Woody Plant Collection, plus nursery maintenance chores, were also accomplished with great vigor and enthusiasm.

Another wonderful donation came in the form of flowering bulbs from the world-famous White Flower Farm, Litchfield, Connecticut. Approximately 3000 donated bulbs of all kinds were planted around campus and in the Caroline Black Garden, while still more were distributed to Arboretum volunteers.

In addition to the outdoor collections listed below, our staff also cares for the college Greenhouse. In 1999, preparations were made for computerized labeling system for tropical specimens. Renovations began to the in-ground plantings in the east ("tropical") room of the greenhouse.

CAROLINE BLACK GARDEN

In its third full growing season the Parthenia Johnson Memorial Holly Collection really began to fill in and proved a favorite attraction for visitors and students. Groundcover plants started to connect, and the fruiting of hollies and flowering of companion plants met all expectations.

As the State DOT's renovation of Mohegan Avenue (Route 32) finally drew to a close, Arboretum Horticulturist Jeff Smith designed and supervised the installation of a new section of entry planting to the Caroline Black Garden. College carpenters built a wooden stairway from the new sidewalk down slope to the level of the original Harrison Memorial entry planting. Flanking the stairway are Siberian juniper, 'Royal Bonica' Rose, and 'Heavy Metal' Switch Grass. There is now a convenient walking path from the Arboretum Offices in the Olin Building, along the College main entrance driveway, across route 32 and directly into the Caroline Black Garden.

Thanks to the Garden History and Design Committee of the New London Garden
Dr. William A. Niering passed away on August 31, 1999. Bill began teaching botany at Connecticut College in 1952 and was Arboretum Director from 1965 to 1988. His career and accomplishments were very much interwoven with the land and programs of the Connecticut College Arboretum.

Those interested in memorial recollections of Dr. Niering by his colleagues and associates should visit the pages titled A Tribute to William A. Neiring located on the Arboretum website (http://arboretum.conncoll.edu). A copy of his curriculum vitae is also included at the site.

In addition to the funeral and burial service near his home in Gales Ferry, there were two College memorial services. The first, a gathering of remembrance, was held in the Arboretum Outdoor Theater on September 24. On a warm, sunny, very windy day approximately 400 people paid respect and remembered this unique individual. Speakers included President Gaudiani, Professor Emeritus Richard H. Goodwin, Professor R. Scott Warren and former students Keith Bowman '99 and Natalie Hilde '97. Bill’s wife Catherine gave an eloquent and moving address that might have been titled “Where Did a Man Like This Come From?” The local Flock Theater offered a beautiful and unusual performance called “Grasslands Chant,” complete with very large bird puppets and long stalks of Phragmites. Members of the music department provided soothing musical selections and the College’s a cappella group, The Shwiffi, sang “Lighthouse” by James Taylor. College Chaplain Father Larry Lapointe officiated and Rabbi Aron Rosenberg led a responsive reading of Psalm 104. Floral arrangements from plants gathered on campus were organized by Jeff Smith and created by Arboretum volunteers. The function ended with a smorgasbord of tasty deserts, in honor of Bill’s well-known sweet tooth.

The second event was tailored for alumni and took place on Homecoming Weekend, October 23. Titled “A Celebration of the Life of Bill Niering,” Dr. Marjorie Holland '69, University of Mississippi Biology Department spoke about him as a teacher and a conservationist. Other former students, including Dr. Gregg Hartvigsen ’84, Dr. Zell Steever ’72, and Glenn Dreyer ’83 shared memories with the group and spoke about the inspirational nature of their relationship with Bill.

This College and the outside world will officially remember William Niering in a number of different ways. Some of the memorials are:

A parcel of College land south of the Native Tree and Shrub Collection was named the William A. Niering Tract in 1983.

The College’s Center for Conservation Biology and Environmental Studies was endowed thanks to the generosity of Drew and Helen Mathieson ’52 and other friends and alumni. The Mathiesons chose to name it the Goodwin-Niering Center, and Bill was present at the naming ceremony in May. He thought it was to be named for Dr. Goodwin only and was quite surprised and rather embarrassed by this honor.

The William A. Niering Memorial Forest, a 37-acre plantation of about 10,000 trees, has been planted in Costa Rica. The forest is cal-
culated to be the proper size to absorb and sequester an amount of carbon (as airborne carbon dioxide) equal to the amount emitted from the generation of energy used in the annual operation of the College’s Crozier Williams College Center. One of Bill’s final adventures was a trip to Costa Rica to sign a contract with the farmer growing the trees. (For more information see the Goodwin-Niering Center web site at http://ccbes.conncoll.edu.)

A special session at the 1999 International Estuarine Research Federation Conference in New Orleans was dedicated to Dr. Niering. Titled “Dike/Levee Breach Restoration of Coastal Marshes,” the session’s published proceedings will also be dedicated to him.

The Connecticut Department of Environmental Protection is dedicating a marsh viewing structure to Dr. Niering at nearby Harkness Memorial State Park.

The William A. Niering Arboretum Student Research Endowment was established to support student field research. The idea was Bill’s, and he started making generous contributions to it a few years ago. During 1999, many alumni and friends contributed to this endowment in his memory:

Helen K. Aimer ’46 Prof. Rachel A. Ankeny Eleanor C. Babbitt ’80 Mr. & Mrs. Peter W. Biddle P’99 Mr. & Mrs. Charles L. Bloomer Patricia Bolles June A. Bradlaw ’58 Lisa H. Brownell Candlewood Lake Authority Connecticut Chapter ASLA Ms. Grace L. Denison Mr. Orello Desideraco P’79 &’81 Mr. & Mrs. Donald Ferlow Mr. & Mrs. Ronald Florence Gertrude (Prosser) Fuller ’45 Carol (Bayfield) Garbutt ’59 & P’91 &’93 Martha E. Gifford ’73 Mrs. Reynolds Girdler Mr. & Mrs. Emerly Giuck Mr. & Mrs. Richard H. Goodwin Jonathan Graham ’78 Sandra (Ruisi) Greenwood ’70 Shirley Gregson Mr. & Mrs. Alan Habbe Mr. & Mrs. James Haskell Helen (Crispe) Hesselgrave ’72 Diane A. Hitchcock ’75 Carden Holland Marjorie M. Holland ’69 Mr. & Mrs. Robert Holman Penelope (Howell) Howell-Heller ’75 Mr. R. Francis Johnson P’76 &’82 Barbara (Rice) Kashanski ’44 Judith C. Keenan Jessie (Shayevitz) Kellman ’82 Alexis M. Kerner 98 David M. Leavitt ’92 Ms. Karen T. Lee Dr. & Mrs. Hugh F. Lena David & Nancy Lewis P’95 Amanda (Atwood) Lindberg ’75 Ms. Irene Long Mr. & Mrs. Charles Luce, Sr. P’79 &‘81 Lucia (Henderson) Marion ’71 & P’02 Mr. & Mrs. Joseph T. Martin McGraw-Hill, Incorporated Mr. & Mrs. George M. Milne Hasty H. Moore ’95 Sarah (Bauerenschmidt) Murray ’45 Mystic Garden Club Mrs. Anne H. Nalwalk The Nature Conservancy Mrs. William A. Niering Lesley (Swanson) Orlowski ’73 Panoram Foundation, Inc. Sharon Peetachka Alice S. Powers Sarah W. Richards Prof. & Mrs. E.C. Schlesinger Mr. & Mrs. Matthew Shafner Jean (Rincicotti) Shelburn ’50 & P’74 Jeanne L. Shelburn ’74 Margaret B. Shepard ’73 Margaret B. Shepard ’73 Marian R. Shilstone ’80 Elizabeth (Brenton) Smith ’69 Mr. & Mrs. Frederick Stratton P’91 &’96 Mary-Beth Sullivan Lois R. Telfer Doug Thompson & Rebecca Nash Three R’s Company Mr. William Urban Mr. & Mrs. Gilbert C. Wagner P’81 Wendy (Stark) Wasterlund ’83 Cynthia C. Willauer ’72 & P’89 Prof. George J. Willauer P’89 Mrs. Alfred G. Williams III Woodridge Association Alison P. Woods

Clockwise from far left:
Bill Niering with a Saguaro Cactus at the NY Botanical Garden, 1985
Natalie Hildt ’97 speaking at college memorial service
Arboretum volunteers prepare flower arrangements at Buck Lodge for the memorial service
Flock Theater performing “Grasslands Chant”
Lunch break during wetlands field work with Hatsy H. Moore ’95 and Mary Dowdell, 1998
Bill Niering with one of his mentors, Dr. Frank E. Egler, 1981
Leading an annual Arboretum Wildflower Walk, 1996
Lecturing on the Ad Astra Terrace, 1998
Ceremony celebrating the inclusion of the Caroline Black Garden in the Smithsonian Institution Archives of American Gardens. Working with Director Dreyer, the committee submitted 10 photographic slides and other information. The Archive is available to designers, historians and researchers and includes over 60,000 photographic images and records documenting historic and contemporary American Gardens. The Garden Club of America sponsors the project and encourages its members to submit important gardens for this permanent historic record.

CAMPUS LANDSCAPE

An instant winter landscaping treatment was required for the dedication of the Tansill Theater, located in the space originally used as the College's first gymnasium in Hillyer Hall. Luckily, the Arboretum had a small stock of shrubs, small trees and evergreens available for use on the site. Horticulturist Jeff Smith and Grounds Supervisor Jim Luce collaborated on the design.

A new planting designed by Grounds Supervisor Jim Luce enhanced the east entrance of Katherine Blunt House. Japanese Holly and Rhododendrons provide an evergreen structure and various daylilies, hosta and iris add summer interest. Funding was received from Diane Williams ’59 and Joanne R. Hiscox ’59 in honor of their 40th class reunion.

Small scale landscape projects included a planting to screen the air conditioning chillers installed to the west of the North Dormitory Complex and additions to the planting flanking the main entrance driveway from Mohegan Avenue.

The Route 32 widening project included landscaping the disturbed roadsides adjacent to the College. Of particular interest was the planting at the Athletic Center, with Sargent Cherries (Prunus sargentii), Aristocrat Pear (Pyrus calleryana ‘Aristocrat’) and Oakleaf Hydrangea (Hydrangea quercifolia)

CAMPUS MEMORIAL PLANTINGS, 1999

Ulmus campestris, in honor of the class of 1949
Cercidiphyllum japonicum ‘Pendula’, in memory of Joan Jensen Johnson ’47
Prunus sargentii, in memory of Classmates, 1954
Quercus frianetto, in memory of Classmate, 1974
Tilia americana ‘Redmond’, Gift of Meskwaka Tree Project, Class of 1999

ADDITIONAL TREES AND SHRUBS PLANTED ON CAMPUS

Amelanchier canadensis
Buxus ‘Green Velvet’
Buxus sempervirens
Calocedrus decurrens
Cedrus libani ‘Stenocoma’
X Cupressocyparis
Ilex ‘Blue Girl’
Ilex ‘Blue Maid’
Ilex ‘Blue Princess’
Ilex ‘Blue Prince’
Ilex crenata ‘Convexa’
Ilex crenata ‘Helleri’
Ilex glabra “Compacta”
Juniperus chinensis ‘Ketelerri’
Juniperus Chinensis ‘Robusta Green’
Juniperus chinensis ‘Sea Green’
Juniperus horizontalis
Juniperus scopulorum ‘Wichita Blue’
Juniperus virginiana
Librocedrus decurrens
Prunus angustifolia
Prunus angustifolia ‘Chickisaw Plum’
Rhododendron ‘Olga Mezitt’
Rhododendron ‘PJM’
Vaccinium angustifolia
Vinca minor
NATIVE PLANT COLLECTION AND NATURAL AREAS

Arboretum Intern Keith Bowman spent much of the summer and fall in the Native Woody Plant Collection collecting data on over 2500 individual trees, shrubs and woody vines in over 250 taxa. During the fall semester, volunteer botany major Tracey Tisdale '00 assisted him. In addition to updated maps, and thorough specimen labeling, a final product from this project will be an update of the Native Woody Plant Collection Checklist last circulated as Arboretum Bulletin No. 35 in 1996.

The board walk between the Gries Conifer Collection and the Edgerton and Stengel Wildflower Garden was rebuilt. Originally installed in about 1989, the Atlantic White Cedar (*Chamaecyparis thyoides*) decking was starting to rot. The deck was replaced using the very dense, sustainably harvested, tropical hardwood known as Pao Lope. The original builders, Three R's Company of Mystic, did an excellent job of the renovation. The ongoing trail improvement program continued when Jack Deering supervised the upgrading of the trail from the bottom of the Laurel Walk south around the pond to the side of the Gries Conifer Collection.

One Arboretum management goal is to preserve landscape diversity by maintaining areas in field and thicket vegetation, in contrast to the now dominant forest cover. During the winter months the Arboretum crew selectively removed unwanted woody growth from the Arboretum Field, located near Mamacoke on the corner of Benham Avenue and the railroad tracks. The "vegetation clock" was pushed back to create a field dominated by Little Bluestem (*Schizachyrium scoparium*), other wild perennials, and Redcedar (*Juniperus virginiana*). Overgrown fields north of Gallows Lane, near the site of the Samuel Bolles homestead, also received the attention of student volunteers, organized by Earth House, and our staff. Although only the house and fireplace foundations remain of the dwelling, a fairly intricate system of stone walls, out building foundations and even the old well, were freed of their oriental bittersweet (*Celastrus orbiculatus*) covering. We hope to keep this historic site in a more open and visible condition in the future.

The marking system for Arboretum trails emanating from the Science Center of Eastern Connecticut, on Gallows Lane, was greatly improved. Three different length trails are clearly marked, with colored dots on trees to lead visitors through approximately 200 acres on three different length walks.
From the top:

Katherine Garvin, Assistant Director for Public Programs.

Charles McIlwain III, Groundsperson

Anne Davis, Department Assistant

STAFF AND ASSOCIATES

Katherine Garvin '90 was promoted to Assistant Director for Public Programs in late 1999. Kathy started in a secretarial position shared with the Botany Department six years ago and most recently served as Arboretum Program Coordinator. The promotion is in recognition of the excellent job she has been doing organizing and promoting educational and volunteer programs. Kathy also oversees the administration of the Arboretum office and membership database.

Beginning in January, Charles McIlwain III joined our staff as Arboretum Groundsperson. "Chip" has an excellent background in grounds and tree care, and transferred to our staff from the College's Physical Plant Grounds Crew. In 1999 Chip was honored by the college for ten years of dedicated service.

Anne Davis joined our staff as a half time Department Assistant in September. Anne's duties include reception, bulletin sales, bookkeeping, secretarial and clerical duties. A resident of Niantic, she has previous experience with the US Coast Guard's Child Development Center and with Coastal Savings Bank.

In addition to the permanent staff, the Arboretum depends on student workers to accomplish many of our clerical and horticultural tasks. During 1999 our student helpers were:

Spring- Toby Aherns '99
Keith Bowman '99
Sarah Cooper '00
David Greenblatt '99
Julie Groce '01
Matt Hughes '99
Kent Ng '99
Yvonne Rinehart '99

Summer-Julie Groce '01
Daniel Steinberg '01
Emily Westwood '01

Fall- Stefan Aps '03
Lindsay Barnard '03
Bess Bayne '00
Emily Brownelle '02
Lisa Ekman '03 (Volunteer)
Alison Fiser '00
Sam Fox '03
Graham Grilli '03
Eric Kling '03 (Volunteer)
Lissette Partelow '03
Melanie 'Daisy' Small '03 (Volunteer)
Chris Topp '03

CAMPUS LAND PLANNING

A two-year planning process was completed in October when the College Board of Trustees voted to accept the Connecticut College Comprehensive Master Plan. Kiernan, Timberlake and Harris, architects and planners, and Rolland/Towers, LLC, site planners and landscape architects facilitated the process. The final documents contain an insightful analysis of how the College community perceives and uses our buildings and grounds, and provides a framework for future development of the Campus over the next fifteen years. The plan is comprised of five major components: 1. Academic and Athletic Program Needs; 2. Creating a Pedestrian Campus; 3. Vehicular Circulation and Parking; 4. Campus Landscape; 5. Campus Environment. The master plan packages the various initiatives into four implementation groups, and provides preliminary cost estimates. A Facilities and Landscape Management Committee will be formed as part of the implementation process.
VOLUNTEERS

DOCENTS. Bruce Dasinger, Carol Kimball, Barbara Pokorny, Lynn Rinek, and Charlotte Robe participated in the Volunteer Training Program this year and joined the ranks of the experienced docents, bringing our corps to twenty-three. The new docents were required to attend six evening classes and six instructional walks. Many of the seasoned volunteers used the classes and walks as a refresher course. Bob Askins, Glenn Dreyer, Wendy Dreyer, Kathy Garvin, Dick Goodwin, Jim Luce, Bill Nierig, Jeff Smith, and Sally Taylor conducted the training sessions. The docents led tours every Saturday and Sunday from May through October, donating a total of 124 hours.

Jan Hine
Carol Kimball
Ken Kraus
Linda Lillie '95
Anne Lott '91
Barbara Pokorny
Lynn Rinek
Charlotte Robe
Sally Taylor
Becky Williams

HORT HELPERS. Jean Baker, Florence Hanft, and Robert Regan became Hort Helpers (our name for horticultural volunteers) in 1999, bringing the total in that program to 18. They performed a wide variety of tasks this year including planting, weeding and mulching of the Wild Flower Garden, weeding and mulching around the greenhouse and in the Caroline Black Garden. Pruning shrubs in the collections, planting in the nursery and the systematic eradication of invasive woody plants in the Arboretum were also handled with great efficiency and enthusiasm.

Sandy Adams
Jean Baker
Elaine Berman '57
Richard Berman
Pat Bolles
Virginia Butler
Caroline Driscoll '84
Emily Fisher
Joan Flynn
Mike Anastasia '01
Vanessa Boland '02
Andy Clark '00
Jordan Gustafson '01
Kate Keene '02
Eunice Kua '02
Sarah Lathrop '03
Heather Mitchell '02
Peter Nash '02
Kathleen Pane '99
Darin Ramsay '02

OTHER VOLUNTEERS. September 18 was the United Way's "Day Of Caring," and volunteers from the New London Rotary Club worked for most of a day removing invasive and otherwise unwanted plants from the Native Tree and Shrub Collection. The volunteers were:

John Bysko
Peg Curtin
John Davis
Tashon Davis
Ruby Davis
Rick Gipstein
Sophie Gipstein
Joan Hunter

Diana Ketner
Henry Savin
Phil Turner
Mark Turner
Don Mitchell
Sarah Rogovin
Kathy Higley
(Norwich City Hall)

Some 25 students and faculty from the Williams School provided volunteer help in the Caroline Black Garden for Earth Day. Earth House, a cooperative dormitory on campus, recruited 15 student volunteers to help remove the overgrowth around a colonial house foundation near Bolles Road. Altogether for the year, a total of about 580 hours of volunteer time contributed to our maintenance effort, undoubtedly a record for the Arboretum.

Each year during the annual Members' and Friends' Night, volunteers are thanked for their contributions to the Arboretum program. This year, special recognition was given to Bob Sherman, Jan Hine, and Edmee McIntosh for their outstanding and continuing commitment to the Arboretum.

ARBO PROJECT

The Arbo Project is an environmental education program for school children created and operated by Connecticut College undergraduates. College students are trained to use the Arboretum to teach environmental lessons to young people in grades K - 12. This year, 192 youngsters in 13 different groups participated in the program. Hope Dalton '01 supervised the following volunteer teacher/guides:

Gerry Fuller '95
Kari Hammen
Florence Hanft
Barbara Kashanski '54
Lee Klade
Edmee McIntosh
Sandy Morse
Nancy Patenaude
Robert Regan

Mike Anastasia '01
Vanessa Boland '02
Andy Clark '00
Jordan Gustafson '01
Kate Keene '02
Eunice Kua '02
Sarah Lathrop '03
Heather Mitchell '02
Peter Nash '02
Kathleen Pane '99
Darin Ramsay '02

Needa Russel '99
Jessica Schneider '03
Davinder Singh '03
Alina Skoneczny '02
Dan Steinberg '01
Leigh Tillman '03
Kate Tompkins '01
Denise Whittemore '00

THANKS TO ALL OUR VOLUNTEERS!
ARBORETUM ASSOCIATION MEMBERS 1999

We gratefully acknowledge the financial contributions made by the following individuals and organizations, who are considered members in good standing. We strive to accurately maintain our records and appreciate receiving any corrections.

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Wilkins, Marilyn

Clockwise from top left:
Student volunteers clearing a stone wall near the Samuel Bolles home site.
Volunteers of the Year (l-r) Bob Sherman, Edmee' McIntosh and Jan Hine.
Photo of Dance majors posing near the Arboretum Pond used to advertise the 1999 Senior Dance Recital.
Volunteer Docents and Hort Helpers at the Spring potluck dinner.
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Williams, Alfred G. Mrs.
Williams, Barbara P.
Williams, Carolyn Pierce
Williams, David
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Jeffrey D. Smith, Horticulturist
Craig O. Vine, Horticultural Assistant

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Paul E. Fell, Research Associate
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Pamela G. Hine MA '84, Research Associate
Richard Orson MA '83, Research Associate
Sally L. Taylor, Education Coordinator
R. Scott Warren, Research Associate

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