NEW YORK RELEAF: HOW IT HAPPENED

A Brief History of Urban Forestry in the United States and the Creation of the New York State Program

Part 1 of 2

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By: Nancy A Wolf, Environmental Education Consultant, JLN WOLF, Inc.

Executive Director, Environmental Action Coalition, 1978-1994

NYS ReLeaf Volunteer Coordinator, 1992-1995

Executive Director, NYS Urban and Community Forestry Council, 1996-2004

INTRODUCTION

At the New York ReLeaf Conference at Mount Saint Mary College in the summer of 2019, various stories about the early days of urban forestry were being told and enjoyed. It was clear that young people who have joined the successful program over the years and who were not part of the early days of establishment were interested in hearing about the "old days." It was suggested that this might be a good time to write about the history of New York ReLeaf while almost everyone who has been a part of it is still alive to provide information.

Nancy Wolf volunteered to write a history in two parts to be published and featured on the New York State Urban Forestry Council (NYSUFC) website and blog and in *Taking Root*, the Council's monthly digital newsletter. The leaders of the Council and of the New York State Department of Environmental Conservation (NYSDEC) Urban and Community Forestry program were supportive of the idea.

This document will become part of the permanent archives of New York ReLeaf as part of New York State's Urban and Community Forestry Program in the NYSDEC.

1885-1895: NEW YORK STATE ESTABLISHES A STATE FORESTRY AGENCY, NOW THE OLDEST CONTINUOUS AGENCY IN THE NATION, AND CREATES THE FOREST PRESERVE AND PARKS

[Sources: Carl Wiedemann, a retired NYSDEC Forester and the first full-time Urban Forestry Coordinator in the history of the DEC forestry program, provided historical information from his collection of early forestry publications. Valuable information from *History of the Catskill Park and Forest Preserve* by Norm Van Valkenburgh can be found online through Catskill Mountainkeeper. Additional archival information was sourced by DEC Senior Forester Gregory Owens of Region 7.]

As early as the 1850's, a concerned focus centered on the Adirondack forests that were increasingly crucial for watershed protection, sustained timber supply and recreation. There was continued destruction of forests and soils that had depleted water supplies and hastened erosion and flooding. Unrestricted lumbering, tanning and paper industry production diminished hemlock, spruce and fir, and the charcoal industry devoured wood of all sizes. In 1857, S.H. Hammond wrote in *Wild Northern Scenes Or Sporting Adventures with the Rifle and the Rod*: "… I would mark out a circle of a hundred miles in diameter, and throw around the protecting aegis of the constitution. I would make it a forest forever ..."

Hammond's writings helped raise public concern about the future of the Adirondacks. During the 1865 census, Dr. Franklin B. Hough, later the first chief of the Federal Division of Forestry (forerunner of the U.S. Forest Service) traveled the backcountry of the Adirondacks and reported its deterioration. Subsequently, the state legislature appointed Verplanck Colvin to supervise a state survey of the region. He used his annual reports to the legislature to call for the creation of an Adirondack Forest Preserve.

In his 1874 report, Colvin warned that unless the region was preserved in its wilderness condition, burning and destruction would result in "vast areas of naked rock, and arid sand and gravel ..." Adding to the pressure were the outstanding photographs of Adirondack beauty taken by Glens Falls landscape photographer Seneca Ray Stoddard that helped to popularize the region. Supposedly, on one occasion as Stoddard was exhibiting his photographs at the Capitol building in Albany, legislators could smell smoke from Adirondack fires wafting through the open windows.

Prior to 1885, there were no national or state forests and no state forestry agency. Public lands were being privatized to spur economic development and there was little interest in ensuring sustainable timber production because the United States had abundant trees. So it was significant that in 1885 the state legislature set aside forest preserve lands in the Adirondacks, created a Forest Commission, hired a dozen "foresters" (there were no forestry colleges in the U.S. at that time) and subsequently established the New York State College of Forestry at Cornell in 1898, the first in North America to design a curriculum leading to a four-year Bachelor of Science degree in Forestry.

The large forests in the Catskills were not as prominently considered in the beginning, as they were heavily broken up into public and private parcels. They were considered not worthy of addition to the eleven (11) Adirondack counties; however, active citizens and representatives of that area pressed for inclusion of several additional counties. Due to this pressure, three (3) counties were added to the Forest Preserve and a fourth (4th) county was added later. The primary concerns for public conservation related to the numerous waterways that were both prime fishing streams and the headwaters and tributaries of the important Hudson and Delaware Rivers.

California, Colorado and Ohio also established state forestry agencies in 1885, but these did not survive. New York's Commission was eventually renamed as the Division of Lands and Forests within the Department of Environmental Conservation when it was created in 1970. Thus, it has the distinction of being the oldest state forestry agency in the United States.

By the end of the nineteenth century, the value of the forests in the Preserve was well known. The new State Constitution in 1895 contained a covenant with a phrase that has echoed throughout New York State history ever since: "Forever Wild."

1898: NEW YORK ESTABLISHES THE NATION'S FIRST COLLEGE OF FORESTRY AT CORNELL UNIVERSITY

William J. Fox, New York's new Superintendent of Forests from 1891 to 1909, championed the Cornell College of Forestry and evidently understood the importance of what became municipal or urban forestry when he wrote the extensive chapter on “Tree Planting on Streets and Highways” in the *1901 Report of the Forest, Fish & Game Commission of the State of New York* (the predecessor of today's Department of Environmental Conservation). In addition to planting, the essay describes species selection that touted the American elm, soon to be planted by the millions in towns and cities across the country.

The new Cornell College of Forestry was led by Dr. Bernhard Fernow, formerly the chief of the Division of Forestry in the U.S. Department of Agriculture. The College included a 30,000 acre demonstration forest in Franklin County, near Upper Saranac Lake. The idea was to demonstrate that scientific forestry could be both sustainable and profitable. Fernow planned to reforest a partially logged-out area with pine and spruce. To provide a suitable growing site for the new seedlings, the existing low-value hardwood trees were to be cleared and sold to a cooperage company.

However, the subsequent felling of trees and the activity of a locomotive and other industrial aspects of the program greatly angered nearby wealthy owners of "camps" and led to a politically powerful and negative response. The result was the de-funding of the College of Forestry in 1904; Dr. Fernow moved on to the University of Toronto. There, he continued valuable urban forestry education, including the publication of *Care of Trees in Lawn, Street and Park* in 1910.

Subsequently, Cornell was able to establish a Department of Forestry within its strong and well-known Agriculture School, which also included studies in wildlife conservation. The University slowly acquired land of its own that ultimately became Arnot Forest. Present-day academic work, including that of the Cornell Urban Horticulture Institute under the leadership of Dr. Nina Bassuk, has created a strong research base of assistance to those working in the urban forestry field. Dr. Bassuk became the first president of the NYS Urban and Community Forestry Council in the early 1990's.

1911: NEW YORK RE-ESTABLISHES THE COLLEGE OF FORESTRY AT SYRACUSE

The need for a "proper" college of forestry, as it was termed, eventually led to the funding necessary to re-create the College of Forestry, this time at Syracuse University. Louis Marshall, a framer of the "Forever Wild" clause, became a Syracuse University Trustee in 1910 and wanted a forestry school there. His efforts resulted in funding by the State Legislature in 1911. Marshall was elected president of the college's Board of Trustees and served 18 years until his death; Marshall Hall on the campus is named for him. He was a tireless promoter of studies that honored the conservation of natural resources that was at the heart of the establishment of the forest preserve.

The first Dean of the new College was William Bray, a Professor of Botany at Syracuse. He organized the Agriculture Division and recruited notable faculty with previous experience in teaching forestry. Bray Hall was built in 1917 and named in his honor; it was the largest building devoted to forestry at that time.

As the new forestry college became established, it became renowned for its research, as well as the training of foresters and other environmental professionals. Now known as the State College of Environmental Science and Forestry (ESF), the research studies at ESF, as at Cornell, have been important to the understanding of the urban forestry program as it has evolved. Led by Dr. Lee Herrington in the early 1970's, a group of scientists was developed who became the next generation of U.S. Forest Service researchers, including Dr. Rowan Rountree (originally a Geographer at ESF), Dr. George Moeller and Dr. Gordon Heisler as part of the Forest Service Research Station established there.

The work of ESF Professors Norman Richards and Phillip Craul provided momentum for urban forestry studies, including useful information and training for federal and state agencies and guiding a new generation of students who created research in energy conservation and air pollution mitigation that has been critical for the advancement of modern urban forestry work. Among the best known are Dr. Greg McPherson at the University of California at Davis (now retired) and Dr. David Nowak at ESF.

1960'S-1970'S: THE USDA FOREST SERVICE RECOGNIZES THE GROWING IMPORTANCE OF URBAN FORESTRY

[Sources: Information about the early days of urban forestry at the federal level was made available from archives of the USDA Forest Service with the help of Philip Rodbell, National Program Lead, Urban Sustainability Research. In addition to his own file data and recollections, he shared a crucial historical document from 2005: *A History of The Origins of Urban and Community Forestry in The USDA Forest Service*, written by Dr. Fred Deneke, National Program Coordinator, upon his retirement from the Forest Service.]

The U.S. Forest Service was officially established on February 1, 1905, but its activities date to 1881, with the creation of the Division of Forestry in the Department of Agriculture. Franklin Hough, from Lowville, New York, was appointed to head the new agency. In 1898 Gifford Pinchot began his work as the Chief of Forestry in the Division, which was renamed the U.S. Forest Service in 1905. Pinchot's focus on forest creation and management greatly affected a

growing number of elected officials and private citizens, including Theodore Roosevelt, who created the Forest Service during his second term as President and put Pinchot in charge.

The central mission of the Forest Service was to create, manage and sustain national forests all over the country—an enormous task, particularly in the protection of watersheds for potable water for a growing population. In addition, the Forest Service was engaged in timber harvesting, as well as preservation, making it a different agency from the Department of Interior, which created and managed national parks. Therefore, its work from the beginning was concentrated in rural areas, and little or no attention was paid to what was happening in cities and towns.

This inattention underwent a profound change when many municipalities were hard-hit by the introduction of Dutch Elm Disease (DED) that attacked non-resistant American elms. DED gradually decimated millions of American elms, one of the nation's best-loved trees.

As Fred Deneke writes, "The crisis that served as a catalyst for urban forestry was Dutch elm disease (DED)." The American elm was one of the best shade trees and trees were planted along streets and throughout parks across the country. Street after street was given over to trees that together created a cathedral-like aspect. But, given this monoculture, as Deneke points out, it was a "disaster just waiting to happen."

A trees that is infected by DED tries to fight back by creating a barrier in the xylem to stop the invasion. This results in less water and nutrients flowing to the canopy, eventually weakening the tree until it dies. Various methods of cure were initially tried, including spraying with DDT, which was later banned. Emphasis has always been on highly valued urban trees. Although the Forest Service researchers initially ignored the DED, they subsequently cooperated with many other scientists, including creating new fungicides and pioneering the process of breaking root grafts from adjacent trees to protect those not diseased.

According to Cornell's Plant Pathology Section in the College of Agriculture and Life Sciences, "The disease is referred to as 'Dutch' Elm Disease because it was first described [by scientists] in Holland in 1921, although the pathogen originated in the orient. The disease began its destructive reign in the United States in 1930."

Once discovered in New York City on a shipment of logs, DED was basically contained within 150 miles of New York City by quarantine and sanitation until the methods diminished during World War II. DED then gradually became an epidemic, reaching Detroit in 1950, Chicago by the 1960's and Minneapolis by the 1970's. Those cities, fiercely dedicated to their elms, began to fight back.

Many municipalities implored researchers from the Forest Service to help local parks employees as they struggled to take control of the situation. Thus, for the first time, experts from the federal level began to work directly with managers in urban areas. The *1968 Annual Report of the Citizens Advisory Committee to the President on Recreation and Natural Beauty* stated that city trees constituted a resource that was not being adequately cared for in the U.S. The Committee recommended "an urban and community forestry program be created in the United States Forest Service."

As a result, in 1970 the first pilot urban forestry research programs were started in eight (8) states, including two in the Northeast: New Hampshire and Massachusetts. Under the

Cooperative Forestry Management Act of 1950 (which linked forestry work between federal and state agencies) the Forest Service began technical support in communities affected by DED.

The 1970's brought significant recognition of what was now being termed urban forestry. In 1972, an amendment to the Cooperative Forestry Management Act authorized the use of federal funds for technical assistance. This was replaced in 1978 by the passage of the Cooperative Forestry Assistance Act, which formally established the U.S. Forest Service Urban and Community Forestry Program.

1970's-1980s: "BARE MINIMUM FUNDING," EARTH DAY 1970 AND EMERGENCE OF NON-PROFIT PARTNERS

[Sources: Information about this period came from files and recollections of Phillip Rodbell, online research, and personal recollections from Nancy Wolf, Martin Mulllarkey, Peter Pasnik and Robert (Bob) Sympson.]

Although there was a growing collaboration between Forest Service and local professionals, the Forest Service was still not completely committed to urban forestry. Its original mission and mandates were supreme and other aspects of their work seemed "add-ons," though a few began to understand the importance of what was happening. The budget as prepared at headquarters did not include substantial lines for urban forestry work.

Some limited funds that supported the fledgling efforts came from Congressional budget items widely known as "earmarks," which are difficult to sustain. It was no accident that most of the first funding came from two Congressmen who understood the importance of the assistance in the Midwest: Sidney Yates of Illinois and Ralph Regula of Ohio. These men were members of the all-important Interior and Related Agencies (now known as Interior, Environment, and Related Agencies) sub-committee of the House Appropriations Committee and saw to it that, each year, a small amount of funding was provided.

As is the practice in "marking up" the federal budget, each of the Appropriation Committee members received specific funds for a few pet items. Luckily for urban forestry, Yates and Regula were stalwarts and stayed the course. Yates even successfully battled President Ronald Reagan, who attempted to eliminate the urban forestry program entirely; he later provided critical funds for some of the first research on the connection between city trees and mitigation of air pollution. NYS Congressman James Walsh of Syracuse and California Congressman Vincent Fazio were also important supporters. The early funds, parceled out through the states, were not enough to establish a robust program anywhere. But they kept urban forestry alive and created some small success.

Unexpected assistance, powered by Earth Day 1970, arrived to support the emerging program from another source. Earth Day was a block-buster event, to the amazement of the entire nation, including those who planned and executed the one in New York City. The idea for a nationwide celebration of the Earth was created by Senator Gaylord Nelson of Wisconsin, inspired by the increasing public understanding of environmental pollution that began with the publication of *Silent Spring* by Rachel Carson in 1962. Nelson asked his aide, Denis Hayes, to create a network

of volunteers to organize events on a selected date: April 22, 1970. In the days of telephone and little else, the information still spread widely.

As a result of the publicity, countless Earth Day events and small projects were done around the state. In Albany, Governor Nelson Rockefeller rode a bicycle in honor of the day. In Rochester, an Environmental "Teach-In," one of many across the state, was sponsored by Rochester State Junior College, focusing on packaging that was not recyclable (presumably plastic). Syracuse celebrated with the "Sludge Trudge" as 500 people marched through downtown led by the Syracuse Area Committee on Environmental Quality. Mayor Lee Alexander proclaimed that cars were ruining the city with air pollution, parking problems and traffic. Students for a Livable Environment from Syracuse University led boat tours around Onondaga Lake, pointing out pollution.

Elsewhere, schools sponsored clean-up and fix-up projects, including Highlands Junior High in White Plains painting the shabby railroad station and John Dewey High School in Brooklyn cleaning up Plumb Beach. Science Teacher Bob Sympson and his students at Valley Stream South High School in Long Island celebrated Earth Day as part of their horticultural program. In Lackawanna, 8th grader Peter Pasnik (now a forester with the NYS Department of Transportation and a member of the NYS Urban Forestry Council) led the effort to plant a community tree. Robert Alvey on Long Island celebrated and later established a protected area in Garden City.

In New York City, a group of young men and women organized the Environmental Action Coalition (EAC) and gathered in donated space on East 49th Street to make plans. They received approval from Mayor John Lindsay to close Fifth Avenue from Central Park to 14th Street and organize a rally in Union Square Park. Thousands turned out. The event and its "hippie" vibe amazed Martin Mullarkey, later a NYS Urban Forestry Council founder, who was then a rather conservative engineer for Con Edison, as he surveyed the scene on 14th Street near the Park.

With New York City the nation's media capital, television coverage at Union Square was substantial and the "environmental movement" was truly born that day. Many lives were changed forever. New York State, clearly understanding the importance of what was happening, coordinated programmatic departments and created the Department of Environmental Conservation (DEC), bringing together a number of relevant agencies. Mayor John Lindsay, not to be outdone, created his own Council on the Environment of New York City, still doing programs today as GrowNYC.

The Earth Day organizers in New York City were amazed and invigorated by the outcome. Some decided they could not go back to humdrum jobs but rather must form a group to sustain the excitement and begin to promote urban environmental work. Others, who did resume "normal" jobs, became the first EAC Board of Directors and incorporated EAC as a not-for-profit organization. One of those early founders was Alexander "Pete" Grannis, later a long-time NYS Assemblyman and Commissioner of the Department of Environmental Conservation. Among other projects, EAC established one of the nation's first urban environmental education programs and created "Caring for Trees on City Streets" as a hands-on curriculum packet. Building on this, EAC gradually became part of the emerging activity known as urban forestry.

Others across the nation gradually created organizations that were able to sustain what might have been a one-day event. In Nebraska, recent college graduate John Rosenow joined the demonstrations and in the fall of 1971, he became the Director of the new Tourism Division and helped to organize the centennial celebration of Arbor Day, reviving what had become a little-recognized event. Rosenow then developed and built upon that success to create the non-profit National Arbor Day Foundation (now known as simply Arbor Day Foundation), with its Arbor Day celebrations and its Tree City USA program. As DEC began to expand its own urban forestry efforts, Tree City efforts with annual Arbor Day celebrations, tree plantings and posters was an easy way to build partnerships around the State and create opportunities for foresters to work professionally with local communities.

Looking back to early work on elms in Chicago, it was clear that Openlands, a non-profit organization founded in 1963 which was involved in the project, had known the value all along. Many of the organizations that were created over the next 10-20 years did analyses of their urban environments and they saw what EAC and others saw: block after block with few and neglected street trees, vacant lots that could be gardens, and local parks departments that were woefully under-staffed and suffering under miniscule budgets.

Initially unknown to each other, organizations in New York City, Philadelphia, San Francisco, Sacramento, Atlanta and other cities began to become "tree groups" with their own staffs and volunteers, including teachers and students in local schools. Funding came from memberships, corporate donations and foundation grants. These non-profits gradually saw themselves as essential to the development of urban forestry.

1970-1978: DEC AND NON-PROFIT PARTNERS BEGIN TO CREATE NEW YORK STATE URBAN FORESTRY

[Sources: Information about the early establishment of the Forest Service's initiatives and DEC's early Urban Forestry Program was made available from personal recollections of Carl Wiedemann, James (Jim) Beil and Nancy Wolf. Important archival information was sourced by Gregory Owens.]

As the post-Earth Day environmental organizations expanded, they began both to work closely with staff of local parks and state conservation departments and to advocate for increased funding for them to rescue and restore the disturbed urban environment. They became proficient at publicity, and these professional efforts were greatly increased and supplemented by a growing cadre of community volunteers, who said "I just love trees" when asked why they were becoming involved. Volunteers were eager to engage in active projects and to learn more specific scientific and environmental information. It became clear that the grassroots sector was an important part of the emerging work.

At roughly the same time, state agencies began to receive slightly increased federal support from the earmarks and were charged with creating new programs of their own. DEC, under the Division of Lands and Forests, began including urban forestry as part of the work across the state, from Region 1 in Long Island to Region 9 in far western New York, with the exception of Region 2 in New York City, where it was assumed the NYC Department of Parks & Recreation

(NYC Parks) would handle the job. Proof of the State's early commitment comes from the *Proceedings of the Urban Forestry Conference* held March 12-15, 1973 at SUNY-ESF. It was a joint endeavor of the ESF, the DEC Division of Lands and Forests and the NYS Department of Civil Service (Experimental Training).

The Table of Contents of the conference includes the panels on state and federal programs and legislation, the role of urban forestry in the identification of problems in New York and technical problems in urban forestry. These topics would sound familiar to those attending such events today. Those planning the conference were clearly well-informed about what was being developed in this new branch of forestry.

The list of speakers contains some names that became familiar to those working to advance urban forestry in the succeeding years: ESF professors Dr. Norman Richards speaking on "Forestry in an Urbanizing Society"; Dr. Phillip Craul on "Soils"; "Urban and Community Forestry in Missouri" by John E. Wylie; and "Urban Forestry in Ohio" by Mark Ryan. The speakers from the Midwest indicated that New York State already recognized the pioneering work done in those states and later, connections were continued.

The topics covered at the conference clearly forecast many of the crucial issues in helping urban forestry succeed: Plant Diseases, Maintenance and Protection, Urban Forestry in Transportation Corridors, Noise Control by Vegetation, and Planning an Urban Tree Planting Program. All of these and more are still being studied and presented in workshops and conferences today.

Foresters from many of the DEC Regions attended the conference, although no one from Region 1 on Long Island nor Region 2 in New York City was present. Representing Region 8 in the Finger Lakes at the conference was Carl Wiedemann, who subsequently was chosen as DEC's first full-time, statewide Urban Forestry Coordinator. However, at the time, he was a neophyte, as were many of the others. They were feeling their way into a new world.

1978: AMERICAN FORESTS AND THE FOREST SERVICE TAKE THE LEAD IN A NATIONAL PROGRAM

[Sources: Gregory Owens and DEC librarians were able to secure the proceedings and participant list of the 1978 conference. Other details are from personal recollections of Nancy Wolf.]

At the same time that activity was increasing at the local and state levels, the Forest Service was beginning to understand that the agency needed to respond to what was happening and to play an important role. Pressure was coming toward the agency from Members of Congress. Many emphasized that, with the nation's population becoming more urban, the demands for Forest Service participation would grow ever more intense. It was decided that a national conference should be held, and the Forest Service enlisted the partnership of the American Forestry Association (now American Forests), a national non-profit organization founded in 1875 that was also beginning to realize the power of urban forestry advocacy.

The published proceedings of the nation's first urban forestry conference, held in

Washington, D. C. November 13-16, 1978, are a valuable resource in understanding just how far urban forestry had come since 1970. The topics covered were comprehensive. Attendees from NYSDEC included Bureau Chief Daniel (Dan) Weller, Forester James (Jim) Beil, who was managing the fledgling DEC urban forestry program, and the new DEC Urban Forestry Coordinator, Carl Wiedemann.

Numerous forestry and arboricultural professionals were there, as well as SUNY-ESF faculty. Individual "tree people" were in attendance, as well as representatives of environmental non-profit tree groups such as Nancy Wolf of EAC, Tessa Huxley of the newly formed Green Guerillas, Elizabeth (Liz) Christy from the Mayor's Council on the Environment and Joan Edwards of Magnolia Tree Earth Center in Bedford-Stuyvesant, Brooklyn. Many of the latter group had registered after being alerted to the conference by Isabel Wade of Friends of the Urban Forest in San Francisco.

Session I of the conference explored “Social, Economic and Physical Benefits from Urban Forests,” which included presentations on the benefits of public open space, and "A Multiple Approach to Urban Forestry: The Oakland Experience" by Wade, who was a doctoral student at the University of California, Berkeley. Her presentation provided one of the first understandings of the connection of local volunteers and enthusiasts to the forestry professionals in attendance.

Wade's description of the changes in Oakland's approach to planting trees had a profound effect. In 1972 in one district of the city, 2,000 trees were planted; one month later, almost all of them were dead. Although no details were provided in the presentation, she notes the belief of those in the later project that the disaster was "directly attributable to the failure to involve the community in the planning and planting of trees." The new approach in late 1977 emphasized the following: foster local initiative and work from the grassroots up; focus on education; respond to local needs, such as jobs; develop creative funding potentials; and reduce costs of tax-supported programs." These ideas became the hallmarks of many successful local projects in the Bay Area and across the country in subsequent years.

Session II focused on “Culture and Protection Activities of Urban Forests” and included presentations such as "Public Tree Care Programs" by Dr. James Kielbaso, who became a champion of the new effort and Dr. Fred Deneke of the Forest Service, who presented "Technical Assistance, Education and Research Programs in Urban Forestry." Session III included a topic of special interest to the New Yorkers: Dr. Norman Richards spoke on "Streetside Space and Street Trees in Relation to the Geography of Syracuse, New York." There were many other helpful technical papers.

Despite the relevant presentations, in his plenary address, "The Urban Agenda," Dr. M. Rupert Cutler of the Office of the Secretary of the US Department of Agriculture, set everyone straight: there was to be no expansive and secure funding coming to the states, as the "federal role in urban forestry will remain one of support." He challenged those who attended to advocate for funding at the state and local levels and reported that research would be a primary focus for the Forest Service.

In addition to the formal schedule, EAC was asked to show its new film, "Something for the Trees, Something for the City," which Wade had shown to her local activists in Oakland. The film featured an agriculture teacher at NYC's John Bowne High School, a neighborhood

volunteer, and elementary and high school students. The professional foresters got a great laugh when hearing Maria the volunteer say that it was "really easy" to learn to care for city street trees! As naive as some aspects of the film certainly were, it showcased the enthusiasm and excitement of what was happening on the ground.

Another important addition to the program was an informal meeting convened by Isabel Wade, who posted a note on the bulletin board, inviting anyone who wanted to discuss urban forestry to come to a selected room at 9 p.m. The room was packed with those who understood that this new branch of forestry could be larger and more important than it seemed. Attendees included Nancy Wolf and Carl Wiedemann, who met a number of his counterparts from other states. The networking that began at that meeting continued from then on, as states and non-profits began to develop their collaborating programs. Nancy Wolf calls this meeting "The Woodstock of Urban Forestry."

1982: THE SECOND CONFERENCE IN CINCINNATI ADVANCES NATIONAL AND LOCAL URBAN FORESTRY

[Source note: Certain specific information about the 1982 second national urban forestry conference was published in *Urban Forests* by Jill Jonnes, Penguin Press, 2016. Other information comes from the website of American Forests and from personal recollections of Nancy Wolf.]

By the time of the second national urban forestry conference, sponsored by American Forests and the Forest Service in Cincinnati in 1982, urban forestry had powerfully advanced. Hundreds attended the event and celebrated the 100th anniversary of the President's Grove, where a tree honoring each president had been planted. A London plane was planted in honor of President Ronald Reagan, despite the fact that he had tried and failed to end the urban forestry program of the Forest Service.

In addition to more concentrated leadership from the Forest Service and American Forests in the conference planning, many forestry and arboricultural professionals who were there had begun work in the states and cities and were collaborating to share challenges and expertise. American Forests had begun publishing a newsletter, *National Urban and Community Forestry Forum*, and had initiated a new and exciting national program to encourage the planting of more trees along city streets and in parks. This program, eventually called Global ReLeaf, was the type of public recognition long needed by tree-related governmental agencies at all levels. The non-profit tree groups who attended the conference had begun to join this campaign and initiate efforts of their own that allied with it.

Staff of tree groups including EAC, Sacramento Tree Foundation, TreePeople in Los Angeles and Trees Atlanta, were delighted to meet and get to know each other in person. TreePeople had a prominent spot on the program. Learning from foresters and arborists as they developed projects and their own public relations expertise, the local non-profits were beginning a long period of advocacy that eventually helped to change the lack of support that was still in effect. The idea was that "trees are beautiful, but..." was very much the standard. Budgets for parks and street trees were always at the bottom of the list. As one New York City budget expert explained

to local advocates, the clean water, sewer improvements and clean air aspects of the City's work were driven by mandates from the federal government. Trees and parks had no such mandate, so the money for those lines "balances the budget," they were told.

One of the premier presentations at the Cincinnati conference was by Dr. Rowan Rountree, a graduate of the University of California, Berkeley, who had taught at Berkeley and also at ESF in Syracuse. (As he had remarked, he was pleased to be at ESF as it was a "truly ecological college that was practical.") In 1978, he and others had established "urban forestry work units," funded by the Forest Service, where research ultimately played a crucial role in gaining respect for urban forestry among the various states and localities. Eventually, the Northeast Forest Experiment Station was established at ESF in 1978.

At the 1982 conference, Rountree reported on the Dayton Climate Control Study, where in 1978 he and Dayton's city manager, Fred Bartenstein, explored for the first time in the United States the idea that trees and greenways could actually help clean up pollution. The US EPA had ordered Dayton to clean up dirty air and stop dumping trash into the Miami River or face "constraints on ... expansion," as Jonnes reports in *Urban Forests*. Following a successful model from Germany, Rountree and his graduate students explored the quantitative value of city trees as they related to air quality, energy use, diversion of rain water in storms and other issues. They were trying to prove that the value of city trees went far beyond the fact that they were "beautiful."

The work in Dayton laid the foundation of important future studies that focused on mitigation of the "urban heat island," a new term that was just beginning to be understood. Sadly, after the successful Dayton Project, it was "back to normal" in terms of real sustainable funding for urban forestry over the next ten years.

1978-1988: DEC AND PARTNERS ESTABLISH THE STATEWIDE URBAN FORESTRY PROGRAM

[Sources: Information about the NYC urban forestry program in the 1980's comes from personal recollections of James (Jim) Beil, Susan Prindle Cooper, Wayne Cooper, Virginia (Ginny) Hancock, Robert (Bob) Herberger, Peter Innes, Laurel Remus, Robert (Bob) Sympson, Carl Wiedemann, Nancy Wolf and Tom Wolfe. Specific information regarding the 1980's Tree Cities in New York State can be found on DEC's website. Information about urban forestry conferences and other national meetings was supplied by Phillip Rodbell.]

Despite continued limited funding, DEC began urban forestry work across the state in the mid-1970's, when Jim Beil was the part-time coordinator. In 1978 with more expansive funds from the Forest Service, Dan Weller, the Bureau Chief of Lands and Forests, hired Carl Wiedemann as the first full-time Urban Forestry Coordinator. Carl served in this position until 1987; Peter Innes took over the position from 1988 through 1993. Carl remembers that many of his fellow foresters were reluctant to apply for the urban forestry positions, thinking that the federal money was not sustainable. Carl, who had grown up near Albany, was happy to move back to that city and was interested to see how this new branch of forestry would develop.

Carl established more intensive statewide work in urban forestry by hiring four additional urban foresters: Susan Prindle (later Susan Prindle Cooper) in Region 1 (Long Island), Tom Wolfe and then Laurel Remus in Region 2 (New York City), and Robert (Bob) Herberger in Region 3 (Hudson Valley). The projects that tied much of the work together came from the National Arbor Day Foundation's (NADF) Tree City program that had been established by John Rosenow in Nebraska.

NADF 's rules were clear. Each community that desired to become a recognized Tree City had to achieve the following:

* Establish an authorized Tree Commission or Tree Board to guide the process;

* Write a Tree Ordinance for planning;

* Show that the budget reflected the spending of $1 per capita funding for trees (now, in 2020, $2 per capita.)

* Plan and execute an Arbor Day proclamation, tree planting, and ceremony.

Posters and other information were supplied by the State Arbor Day Committee. In addition to DEC, other members of the Committee were NYS Department of Agriculture and Markets, NYS Nursery and Landscape Association, NYS Arborists Association (NYS Chapter of the International Society of Arboriculture) and Empire State Forests Products Association.

With the encouragement and involvement of DEC's foresters around the regions, many municipalities began to be recognized as Tree City USA communities over the next few years:

1979: Poughkeepsie in Region 3 (Hudson Valley).

1981: Huntington in Region 1 (Long Island); Larchmont in Region 3 (Hudson Valley); Ellicottville and Jamestown in Region 9 (Western New York).

1982: Tarrytown in Region 3 (Hudson Valley); New Hartford in Region 6 (Mohawk Valley).

1983: Scarsdale in Region 3 (Hudson Valley).

1984: Hastings-on-Hudson, Warwick and White Plains in Region 3 (Hudson Valley); Franklinville in Region 9 (Western New York).

1985: Lindenhurst and Lynbrook in Region 1 (Long Island).

1986: Baldwinsville in Region 7 (Central New York); Bath in Region 8 (Finger Lakes); Olean in Region 9 (Western New York).

The demands of Tree City recognition gave DEC foresters excellent opportunities to focus on working with local communities and eager volunteers, which was the heart of the urban forestry focus. Each community had to fulfill the same requirements that were achieved first by Poughkeepsie and each celebrated on what became the official NYS Arbor Day, the fourth Friday in April. The activities of Arbor Day became the first "building block" of better urban forestry and encouraged these communities to become active in DEC's New York ReLeaf when it was created in the early 1990's.

Region 3 (Hudson Valley)

It was no accident that Poughkeepsie led the way and that the largest number of tree cities occurred in DEC Region 3. Robert (Bob) Herberger was (and still is) a forester who had long embraced the "philosophy" (as he puts it) that trees are important to people. He believes that one tree on a street can impact many people on any given day. After previous positions as a Forest Fire Observer, Forestry Technician and Utility and Marketing Forester, he was chosen for Region 3 Forester. He reports he was one of the few foresters who was interested in specializing in urban forestry and he already lived in Region 3, so he was eager to start the job. He "loved it from the beginning," he says. "Traditional forestry was okay, but urban forestry allowed me the opportunity to positively impact the lives of many people."

At the 1978 Garden Show at the Poughkeepsie Convention Center, he found his ideal collaborator: Virginia (Ginny) Hancock, who Bob calls a "spark plug." Ginny and her husband had moved from California to Poughkeepsie, where she marveled at the lush green environment. When she met Bob at his booth, they discussed their mutual love of trees. He suggested that Poughkeepsie prepare to become a Tree City by creating a tree commission.

Ginny set about learning more and discovered that the nearby Carey Arboretum had done an inventory and master plan with recommendations they could follow. Her informal committee began to study ordinances from other places and understood that the rules of a Tree City had to be legal and needed wide support from elected officials. With the cooperation of the mayor and the parks commissioner and the positive vote by the Poughkeepsie City Council, Ginny's informal committee became the Tree Commission, of which she is still the chair. By Arbor Day of 1979, they celebrated with school students and community members as the State's first official Tree City USA.

Bob went on to work with many other municipalities in Region 3. In the northern area of the Region, which was still primarily rural, he was able to combine traditional forestry, such as timber management and sales, with the new urban forestry practices. A local school made enough money from a managed timber harvest to establish hiking and par-course trails. At the time, Bob was also working with second-home owners from the New York City metropolitan area, educating newcomers about the benefits of proper timber management. (It was okay to cut at least *some* trees.)

Another successful program that Bob initiated and fostered was Project Learning Tree, which DEC Educators and others were developing. He considers Tree City and Project Learning Tree as the two most important organizing tools for modern urban forestry.

In addition to his regular work, Bob published helpful articles about urban forestry. The August 1984 issue of *Arboricultural Journal* included "Urban Forestry in Southeastern New York State, USA," and "Timber Cutting and the Law" was published in *American Forests* in March, 1986.

Region 1 (Long Island)

The state urban forestry program had a difficult time becoming established on Long Island, though private arboriculture and horticulture were highly successful. Susan Prindle, the third DEC forester to undertake the job, was just beginning her career when she was recruited in early 1980 to continue DEC's new work there. Although she was only in Long Island until September

of 1981, she accomplished a great deal. First of all, she initiated a survey to gather forestry issues for Region 1, which is an excellent way to plan an overall program.

In addition to assisting the Town of Huntington to become a Tree City, she was involved with many communities in various ways:

* Village of Seacliff did a planting plan;

* Freeport established a Save the Trees Committee;

* Great Neck's beautification committee adopted islands to help with traffic patterns;

* Bluepoint Elementary School planted trees for a screen at the edge of the campus;

* Old Bethpage Elementary School did a courtyard planting.

Susan left Long Island to work upstate and has long been the City Forester for Olean in Region 9, where she has worked with her husband, the now-retired Regional Forester Wayne Cooper and with Consulting Forester Bruce Robinson, who as a DEC forester helped establish a number of Tree City communities in Region 9.

Urban forestry in Long Island continued to expand slowly and Lynbrook and Lindenhurst achieved Tree City status in 1985. Science teacher Robert (Bob) Sympson became an important leader during those years and was a founder of New York ReLeaf as it was created in the 1990's.

Region 2: (New York City)

Even without a DEC forester, New York had been a "hotbed" of community and school-related tree work since Earth Day. The under-funded and under-staffed Parks Department had little professional forestry leadership at that time. With no official street tree planting plan and regular care from Parks, environmental organizations and citizen volunteers took up the challenge.

This growing network began teaching about tree planting and tree care, as well as doing informal inventories of open space primarily owned by the City that were, they insisted, available for establishment of community gardens. Pressure from these activists began to show its effects in more professional forestry work in the NYC Parks Department. The pressure eventually reached DEC when some of the groups were asked to sponsor an Arbor Day as was being done in other regions. Their answer was that New York City doesn't have a DEC Forester, so we have no one to work with and we can't do Arbor Day. "Give us a forester!" The message was finally heard and plans were set for Carl Wiedemann to choose a forester for Region 2.

Carl reports that most DEC foresters wanted to have nothing to do with "downstate," meaning New York City and Long Island, so it was difficult to recruit the forester that had been promised. The forester who eventually arrived was Tom Wolfe, who began his service in 1978. Tom reports that he was just beginning his career and "really needed the job" and was willing to be posted to the City, which he knew nothing about. Despite his doubts, he was open to the work and prepared to be successful.

Tom reports that he found the work with the network of groups and committed citizens to be "vibrant" and his tasks became "community-based" as he was widely accepted. He remembers

working well with the first professional foresters leading the work of the NYC Parks Department: Dennis Ryan and William (Bill) Lough. He learned about the neighborhoods and he grew as a person and as a professional, he says. Nancy Wolf remembers Tom using upstate techniques to teach urban students about forestry, including tapping Norway maples as an example of the sugar harvesting that is a staple of the upstate sugaring and maple syrup industry. Clearly, DEC had a forestry success in Region 2 at last.

Following Tom was another successful forester, Laurel Remus, who had previously worked as a traditional forester in Region 8. She served in Region 2 from 1983 to 1993 and was widely accepted and admired. Laurel became closely involved in work with community groups, schools and the various environmental organizations. As a woman forester, she was a role model for young girls, especially, and Nancy Wolf encouraged her to wear her DEC uniform, which was impressive to the students and teachers. Laurel's remembrances of her time in New York City are highly meaningful as we study the success of early urban forestry programs in New York State and elsewhere.

> I had already discovered I was a little different than most foresters. Most I knew liked to work alone and in the woods by themselves ... I liked to work with people. I wanted to manage forests for people, not manage forests for trees. It seemed like a good fit.
>
> How did I connect with all of you? That's easy! When I got to NYC, I very quickly found what for me was a professional paradise. This was this great, close, wonderful and supportive network in place ... there was lots of work to be done and no one was really in competition. Everyone just worked to do it. It seemed natural right from the start. Everyone I worked with had a passion for what they did. Everyone had their own strengths and areas of special interest but there was a collaborative team that supported getting the job done.
>
> Every day you had contact with people that you felt you were able to help in some way. The kids were so wonderful and so cute. Being on the front lines and working directly with the people of NYC was a pleasure. I felt I had more positive impact then than ever.

Many of the projects Laurel worked on in New York City with local government, communities and tree groups were in schools. Urban Woodlands, a joint teaching project in Bedford-Stuyvesant with Environmental Action Coalition, the Parks Department, local teachers and Magnolia Tree Earth Center, helped students explore their own neighborhood street trees and vacant lots and culminated with planting dozens of trees and wildlife plants in the Hattie Carthan Community Garden. This type of project was typical of many such educational events across the city.

In addition to various projects across the State usually focused on Arbor Day, staff of non-profit tree groups and DEC personnel continued to actively participate in and learn from information prepared and disseminated by American Forests in its publication, *National Urban and Community Forestry Forum*, and the Forest Service continued its important research. Nancy Wolf, Laurel Remus and Robert Herberger attended the third national conference in Orlando, Florida in 1986 and Nancy Wolf and NYC Chief Forester Bill Lough attended the national conference in St. Louis in 1989. The flow of information from these meetings continued to strengthen the work in New York State, especially in Regions 1 and 2.

In New York City, meanwhile, environmental educators at EAC, the Mayor's Council on the Environment and Trees New York began to work closely with Parks and the newly formed Department of Environmental Protection (DEP). With DEP's cooperation, EAC began research on a curriculum packet to be called “Woods and Water" that would introduce students and teachers to the City's watershed reservoirs and forests upstate. Special funding for this project came from a "member item" sponsored by State Senator Martin Connor, and the project's funding became part of DEC's budget for that year.

As Carl Wiedemann and Nancy Wolf collaborated on Woods and Water, it became clear that EAC and DEC could help each other in creating an accurate and useful informational tool for teachers in both the City and the watershed area. The partnership between Environmental Action Coalition and DEC was established and was continued later as New York ReLeaf was created in the 1990's.

1992: AMERICA THE BEAUTIFUL: FINALLY, "REAL" MONEY FOR URBAN FORESTRY

Sustainable funding for the Forest Service's urban forestry effort finally appeared in the Fiscal 1992 Budget as part of the Farm Bill. After many, many years of limited regular budget funds and earmarks for various pet projects, the program exploded, as so often happens, due to personal connections and a special visit.

Founded in 1982, Dallas Parks Foundation (now known as Texas Trees Foundation) had become part of the national network of tree groups, and its work was seen as important to the mix of projects being done across the country. But this non-profit, as opposed to the others, had a "secret weapon": the Chair of its Board was Trammell Crow, a wealthy Texas businessman and a close friend of President George H. W. Bush. President Bush, who was inaugurated in January, 1989, had already expressed interest in a "greener" nation and Mr. Crow, who loved trees, had encouraged him to create a program that would celebrate his vision.

As staff of the Parks Foundation related it to the tree groups at the time, Trammell Crow invited President Bush and First Lady Barbara Bush to meet with them to discuss details of what was happening locally and nationally and to press forward with support for his vision of planting more trees.

The Bushes heard the story—both local and national—and were impressed. They decided they would sponsor a program to be called America the Beautiful that would help transform and green the thousands of cities, towns and villages across the country. This became a game-changer as the Forest Service would soon learn. In a one-year jump, their paltry ~$2 million budget for urban forestry became $19.2 million in Fiscal Year 1992.

"Real" money had come at last; the NYS Department of Environmental Conservation received $500,000 from the new budget. DEC's urban forestry program became New York ReLeaf.

Thank You to the Following Contributors to NEW YORK RELEAF: HOW IT HAPPENED Part 1:

Susan Prindle Cooper, City Forester, City of Olean

Liana Gooding, Executive Secretary, NYS Urban Forestry Council

Virginia Hancock, Chair, Poughkeepsie Tree Commission

Robert Herberger, Retired NYS Department of Environmental Conservation Forester

Peter Innes, NYSDEC Assistant Director of Lands & Forests

Martin Mullarkey, Retired Engineer and Co-Founder of NYS Urban and Community Forestry Council

Gregory Owens, NYS Department of Environmental Conservation Senior Forester

John Parry, Urban and Community Forestry Coordinator-Northeast States, USDA Forest Service

Peter Pasnik, NYS Department of Transportation Forester

Laurel Remus, NYS Department of Environmental Conservation

Robert Sympson, Retired Science Teacher and Co-Founder of NYS Urban and Community Forestry Council

Phillip Rodbell, National Program Lead, Urban Sustainability Research, USDA Forest Service

Carl Wiedemann, Retired NYS Department of Environmental Conservation Forester

Tom Wolfe, Retired NYS Department of Environmental Conservation Forester

End of Part 1