

Horticulturist Neal Calvanese guards the health of 27,000 trees in New York's Central Park.

Gamma America's largest and most important stand of American elms thrives in the center of Manhattan, they sometimes look at me like I'm crazy," says horticulturist Neil Calvanese.

"But in Central Park, there are 2,500 elm trees, of which more than 1,800 are American elms-one of the last remaining perfect stands of American elms anywhere-and the second dominant species of trees in the park, the first being black cherries." For Calvanese, Director of Horticulture for New York City's Department of Parks and Recreation, elms are a passion.

"Whether American, English or Chinese—and we do have many varieties in the park—they are a magnificent tree," says Calvanese. "Their unique arching forms great cathedrallike spaces. They have a wonderful vase shape, pendulous limbs, full branches and their leaves provide beautiful color, not only in the fall, but all year long. They are truly a tree for all seasons."

Help from private sector

Efforts to keep the elms—as well as the parks 25,000 other large trees healthy and well puts heavy demands on Calvanese and his staff who care for Central Park's vulnerable collection of trees.

"During the New York City fiscal

crisis 10 years ago, there were only two gardeners maintaining the hundreds of acres that make up Central Park, one of the largest urban green spaces in the world," says Calvanese.

"Today, thanks to over 20,000 donors who contribute funds each year to the Central Park Conservancy, I have a staff of as many as 45 gardeners who fertilize, seed and mow the meadows, maintain ballfields, weed, mulch, prune, plant and care for our trees."

The effort to keep Central Park's elms healthy is also made more difficult by the scourge of Dutch elm disease. "While the disease has decimated the American elm population throughout the country," says Calvanese, "fortunately, due to close monitoring and careful maintenance, few of our Central Park elms have been lost."

"The disease is difficult to control because it is a fungus that develops inside the tree's xylem, the veins carrying water to the crown of the tree.

While there is little that can be done once Dutch elm disease has progressed into the main stem of a tree, Calvanese uses instant photography to record its effects. "By taking a series of instant photos and studying them over a period of time, we gain information on how tree diseases spread and how their effects may vary from one species of tree to another.

Keeping a record

"Also, when a tree needs to be removed due to disease or damage, we need to document the reason for its removal. New Yorkers are very protective of Central Park, and many of them have a favorite tree of trees. and we often hear from them when they discover a tree has been removed. With a Polaroid photo in our file, we can indicate the tree was a hazard due to disease, rot or storm damage. We don't like to have to take trees down, but when it becomes necessary, at least we can show a tree lover why his or her favorite had to go.'

The big advantage in using instant photos, says Calvanese, is that it makes an on-the-spot record. "There's no waiting to see if you got the picture you needed. You know instantly, and that's important when a tree is about to go down and you're not going to have a second chance to get that photo you need."

Calvanese is quick to add that park policy calls for replacing—if possible—removed trees with another tree of the same species and, hopefully, of the same size.

Instant photography also helps when buying replacement trees. "Much of my time is spent dealing with commercial nurseries, from whom we buy replacement stock for the park," says Calvanese. "We will visit a nursery, take a look at their inventory, and take instant photos of those trees we think may be suitable for purchase.

"The instant photos are brought back to my office, where they are reviewed by the Conservancy's land scape design office. Once the trees in the photos have been approved their shape, color and size are all taken into consideration by our designers prior to purchase and installation—we issue a purchase order."

28 million feet

Approximately 14 million people walk the park each year. The traffic makes for a severe soil compaction problem.

"We continually aerate the soil in

'By taking a series of photos over time, we gain information on how tree diseases spread, and how their effects vary from one tree to another.'

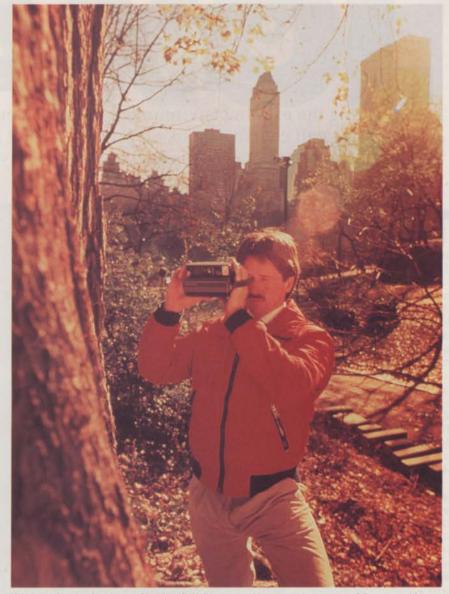
> —Neil Calvanese Central Park horticulturist

heavy-use areas with a machine that penetrates three to four inches into the dirt, breaking it up so that air and nutrients can get into the ground, allowing it and the plants it supports to breathe."

Calvanese says it is this constant attention that keeps Central Park looking as green and beautiful as it does. "In addition to aeration, the Conservancy maintains an ongoing program of fertilizing, overseeding, irrigation and pruning. You really have to keep at it all the time. If we were to discontinue our efforts for only one year, Central Park would, in many places, become a dust bowl, due primarily to its heavy use by the public."

However, both public events as well as special uses for which permits must be obtained—movie shoots, magazine photo sessions, construction projects—mean Calvanese again turns to his instant camera for help.

"Occasionally, we need to produce evidence that the condition of a section of the park was in good order prior to damage that may have resulted from a permitted activity. In the



With instant photography, Neil Calvanese documents tree problems on the spot. (Photo by Jake Wyman)

case of a disagreement, having instant photos showing 'before and after' conditions can be very helpful."

Calvanese says the birth of the Central Park Conservancy in 1980 has helped the park to flourish today. "The Conservancy is a non-profit organization which works in partnership with the New York City Department of Parks and Recreation. During the past 10 years, the Conservancy has raised \$64 million for the upkeep of the park and has, in addition, become a national model for such public and private partnerships."

Calvanese himself has been working at Central Park for nearly 10 years. "After graduation from The State University of New York at Farmingdale with a degree in arboriculture, I started my job search. One day, while unemployed, I visited Prospect Park in Brooklyn and saw a Camperdown, or 'weeping' elm. The tree was magnificent. It was at that moment I said to myself, 'this is it! I want to work with trees!' Not long after that, I started work as a treeclimber on the Central Park tree crew, going up into the trees to do whatever work was required."

Calvanese says that 10 years from now, "I'll probably be right here." Then he turns and looks out his small Central Park office window at a grove of majestic elms, their leaves fluttering in the slight breeze, their long limbs reaching to the sky.

"But I do see myself in the woods someday. Doing what? I don't know. Probably still helping to make sure trees grow up strong and healthy." LM