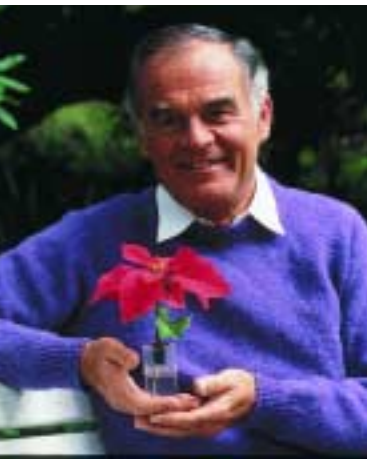
the colorful career of "Dr. Purple"

H. Marc Cathey

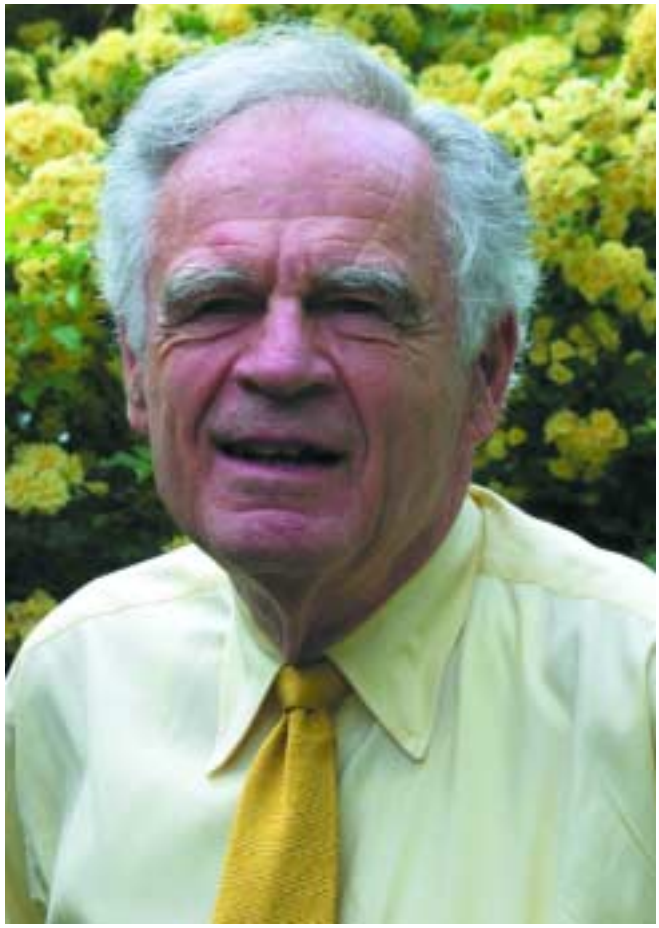


Culminating a career that has spanned over half a century, AHS President Emeritus Dr. H. Marc Cathey, distinguished scientist, accomplished author, promoter of horticultural technology par excellence, and consummate family man, is retiring to his native North Carolina with wife Mary, where he will continue to engage in a variety of horticultural activities, artistic endeavors, and family fun.

BY RITA PELCZAR

As a horticulture graduate student at the University of Maryland circa 1978, the thought of a late-in-the-day seminar on the effects of varying light schedules on flowering crops seemed less than scintillating; but then, I'd never met Dr. Cathey before. Fortunately I did attend the seminar, because the tall, dapper plant physiologist from the USDA's Agricultural Research Service put on quite a show. With his smooth southern drawl, multiple slide projectors, cutting-edge research, and more than a dollop of humor, he wasn't just brilliant, he dazzled! Who knew that poinsettias could be so entertaining?

Over the next quarter century, I have come to know Dr. Cathey as a modern Renaissance man, with wide-ranging interests and talents. I recently caught up with him the day after he returned from Italy, where he led a 10-day garden tour. He regaled me as usual, with great stories, from the construction of violins to Count Parma and his cheese. Then he explained, as he had to his tour companions, the concept of "trinity colors" and how they make a garden "simply vibrate."



Dr. H. Marc Cathey, AHS president emeritus, retired on June 23, 2005, after an illustrious career spanning over 50 years. Top: Dr. Cathey in the 1980s with a poinsettia, a plant that was at the heart of his research.

"I have traveled around like a troubadour, spreading stories," says Dr. Cathey of his long career. In his writings, talks, television appearances, and a long-running syndicated radio show, he has promoted the things he is passionate about, from plant-light interactions to environmental stewardship, color theory, and phytoremediation, with the flourish of a magician and a style all his own.

Known to many of his friends as "Dr. Purple" for his love of color, he has at times coordinated his outfit with the room in which he was to give a presentation. Reflecting on Dr. Cathey's style, Marvin Miller, marketing research manager at Ball Horticultural Company, observes, "It is classic showmanship, something Marc always includes in any presentation, and in a way, any conversation he has with you. You leave feeling entertained and at the same time, educated."

EARLY CULTIVATION

Dr. Cathey's horticultural education began as a boy in North Carolina, gardening alongside his paternal grandmother, Nancy McAuley Cathey, better known as "Miss Nannie." The practical lessons she taught him have had a lasting influence. The SMARTGARDEN™ initiative, which Dr. Cathey conceived in 1999, embraces the same holistic principles he learned as a child, enhanced of course, with the latest scientific knowledge.

Dr. Cathey studied at North Carolina State University, receiving his bachelor of science degree in floriculture in 1950. After working a couple of years as a florist, he went on to earn his doctorate at Cornell University, where he met the eminent

TOP: COURTESY OF PAUL ECKE RANCH; CENTER: MARY YEE

Young Marc Cathey learned early gardening lessons at the side of his paternal grandmother, Nancy McAuley Cathey—"Miss Nannie."

horticulturist Liberty Hyde Bailey. Dr. Cathey received his PhD in 1955 and spent the following year in the Netherlands pursuing post-doctorate studies on a Fulbright scholarship.

In 1956, he accepted a position with the Agricultural Research Service (ARS) of the U.S. Department of Agriculture in Beltsville, Maryland. He worked with plant physiologist Harry Borthwick, who had been conducting pioneering studies on the effects of light on plants. It was Dr. Cathey's mission to apply the research in practical ways to improve the production of florist and nursery crops.

LABOR'S REWARDS

Dr. Cathey considers his work at ARS experimenting with light and plant growth regulating chemicals the most horticulturally significant of his many accomplishments. He insists, however, that it was a team effort. "None of us creates anything alone," he says. "If you needed an expert [at ARS], they were usually right down the hall."

The first chemical growth regulator the team investigated was a germicide called Amo-16-18 that was developed by German scientists during World War II. When applied to poinsettias, it reduced the internodal length—the distance between leaf nodes—producing more compact plants. As more effective chemicals were developed, their applications for the horticulture and floriculture industries expanded. Dr. Cathey explains that these growth retardants "made plants greener and more compact by closing the stomates and increasing the density of the chlorophyll."

As a horticulturist with the USDA Agricultural Research Service, Dr. Cathey, shown here in 1972, developed a roadmap for poinsettia growers, detailing specific requirements for light and temperature.

H. MARC CATHEY COLLECTION (2)

THE CATHEY INFLUENCE

Dr. Marc Cathey has inspired and assisted an astounding number of horticulturists throughout his long career. "Marc has been genuinely interested in helping folks coming up through the ranks and in doing everything possible to see that they succeed," says Marvin Miller of Ball Horticultural Company.

Geneticist Robert Griesbach worked with Dr. Cathey at the Floral and Nursery Plants Research Unit of the U.S. Department of Agriculture, where they conducted "mission oriented" research. "Dr. Cathey helped teach me the meaning of this type of research," says Griesbach. "His research involved all aspects of a problem from basic to applied."

"He has certainly been a big part of my success," says landscape designer James van Sweden, who met Dr. Cathey just after he had become director of the National Arboretum. "There's no hanging back with Marc," says van Sweden, who followed Dr. Cathey's advice to take on larger speaking engagements and to publish a book. "He became my coach for lecturing. He is so charismatic, and he's incredibly honest, always pushing you to do the best you can."

As curator of the National Herb Garden, Holly Shimizu, who is now director of the U.S. Botanic Garden, recalls being somewhat reluctant to speak in front of large crowds until Dr. Cathey, who recognized her potential, encouraged her. "He recommended me as a speaker and gave me pointers. He was able to make the whole communication thing fun."

Mark Miller, currently pursuing his doctorate at Ohio State University, has worked with Dr. Cathey at AHS both as a horticulturist and as deputy director of national programs. "I first met Dr. Cathey when he was the first Kiplinger Chair professor at Ohio State in the early '80s," recalls Miller. "He took me under his wing and taught me more about how to really live my dreams than anyone ever had." —R.P.

Dr. Cathey set out to unravel the specifics of light-induced flowering, and to quantify the exact light schedules necessary to have a crop bloom at the desired time. He also researched the effects of light quality and temperature, ultimately providing growers with a roadmap for growing the crop. "It's all about timing and tailoring," says Dr. Cathey. "Plants already know the answer, we just have to figure out what they're trying to say."

Dr. Cathey, it seems, knew just what to say to people in the horticultural industry to get them to use the products and techniques coming out of the lab. With his grasp of industry needs and skill as a promoter, he was able to convince growers of the merits of the new technologies. According to fellow researcher Robert Griesbach, "Dr. Cathey was the ultimate salesman."

PULLING OUT THE STOPS

When Dr. Cathey took the helm as director of the U.S. National Arboretum in 1981, the arboretum had a wonderful collection of plants, but few ventured there to appreciate them. That was about to change—Dr. Cathey set out to put it on the map of national attractions.

"Marc realized that if people were ever going to appreciate the arboretum, you had to first entice them to visit. So up went the flags, the signs, the Capitol Columns, and way up went the attendance figures!" recalls Ball Horticultural's Marvin Miller.

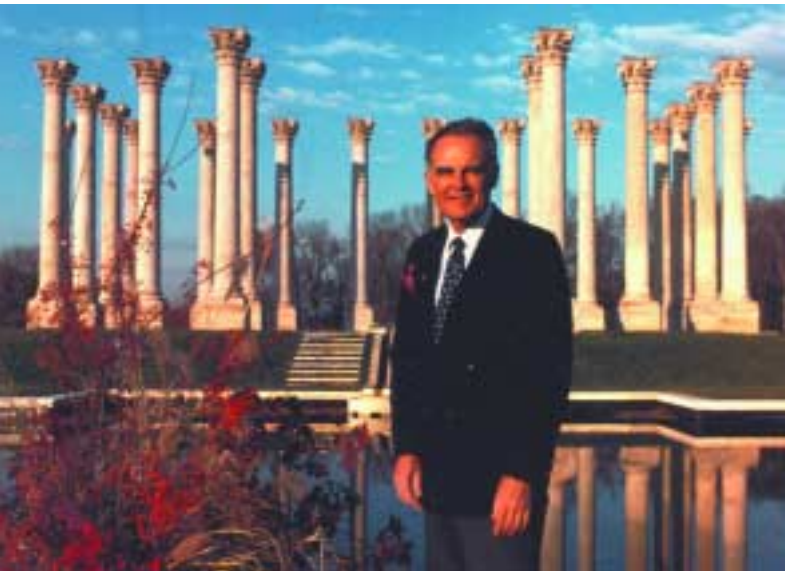
Jacqueline Heriteau, who authored *The National Arboretum Book of Outstanding Garden Plants* with Dr. Cathey's assistance, says, "Marc is the scientist who, building on the achievements of those who preceded him as director…had the vision and willingness to take risks that brought this national treasure to public attention."

Holly Shimizu was curator of the arboretum's National Herb Garden during Dr. Cathey's tenure as director. She recalls that sometimes she would forget to remove her arboretum badge before leaving at the end of the day, and on her way home people would say, "Oh! You work with Marc Cathey!" Now director of the U.S. Botanic Garden, she has kind words for her former mentor. "He is so good at connecting gardens and people," she says. "During his tenure he did that for the arboretum, more so than any previous director."

Dr. Cathey was able to solicit contributions and volunteers to develop many projects while at the arboretum. Among these was the installation of the Capitol Columns—22 thirty-foot columns that were once part of the east portico of the U.S. Capitol building. The volunteer group Friends of the National Arboretum funded the columns' rescue from what Dr. Cathey called "a weed patch" on the banks of the Anacostia River. They were placed at the arboretum on a stone platform in a meadow above a reflecting pool.

Upon Dr. Cathey's request, Wolfgang Oehme and James van Sweden designed their "New American Garden" outside the arboretum's Visitor Center, featuring grasses, long-blooming perennials, and bulbs. It demonstrates a favorite Cathey theme: "tough plants for tough times."

While at the arboretum, Dr. Cathey also obtained funding to update and produce the USDA Hardiness Zone Map in 1990 using new weather data. Since then, thousands of gardening books, magazines, and catalogs have included a copy of this important gardening reference.



As director of the National Arboretum, Cathey oversaw the refurbishing and installation of the Capitol Columns at the arboretum's reflecting pool.

AHS HEAT ZONE MAP. One of Dr. Cathey's many horticultural legacies is the AHS Plant Heat Zone map, which helps gardeners select appropriate plants for their region based on heat tolerance. Here he explains the map concept during a seminar at Furman University in Greenville, South Carolina, in 2002.

A GUIDING LIGHT AT AHS

As president and CEO of the American Horticultural Society from 1974 to 1978 and again from 1993 to 1997, and as president emeritus since 1998, Dr. Cathey continued his mission to provide people with technological tools they need to be better gardeners.

He coordinated and developed the AHS Plant Heat Zone Map, first published in 1997. It is a 12-zone map based on the number of "heat days"—days where temperatures exceed 86 degrees Fahrenheit—to help gardeners select plants that will thrive through their summer's heat. He also obtained funding for yet another update of the USDA Hardiness Zone Map to reflect data gathered over the last 30 years. Its release is expected later this year.

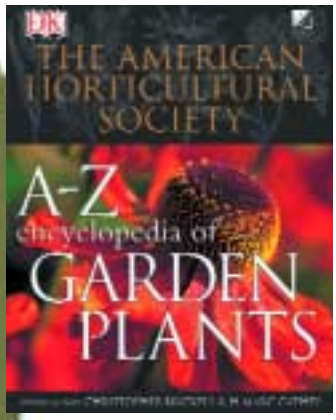
Another Dr. Cathey initiative while at AHS, which he dubbed the SMARTGARDEN™, combines the latest technology with environmental responsibility to address the real issues gardeners face. It is a pragmatic, science-based approach that promotes effective management and stewardship of natural resources.

Coordinating the coding of plants—not only with respect to heat and hardiness zones, but for other aspects of culture such as light and water requirements—has been an ongoing project, one that Dr. Cathey will continue in retirement. Dr. Cathey recently completed revisions to the comprehensive reference, *The American Horticultural Society A–Z Encyclopedia of Garden Plants* (DK Publishing, 2004), which he co-edited.

In addition to writing and lecturing, Dr. Cathey has led AHS

BOTTOM: H. MARC CATHEY COLLECTION; TOP: CHARLIE REGISTER / COURTESY OF FURMAN UNIVERSITY

A Lasting Legacy for AHS



AUTHORITATIVE REFERENCE BOOKS. **Among his many publications, Dr. Cathey co-edited the comprehensive *AHS A–Z Encyclopedia of Garden Plants* (DK Publishing, 2004).**

PATRIOT™ PILLAR™ 'MARC CATHEY' LANTANA. **This tall and stylish lantana from American Daylily & Perennials was released in 2002 to honor a "pillar of the green industry."**

PHOTO OF PATRIOT™ PILLAR™ 'MARC CATHEY' LANTANA COURTESY OF AMERICAN DAYLILY & PERENNIALS; BOTTOM: KK OTTESEN

garden tours all over the world, usually accompanied by his wife, Mary, and conducted with typical Cathey flair.

"Dr. Cathey has been the guiding force of the AHS for decades," says current AHS President Katy Moss Warner, who served on the AHS Board of Directors during Dr. Cathey's second term as president. "As both accomplished artist and research scientist, as both effective communicator and educator, Dr. Cathey has brought vision and direction to this important national organization which represents the broad scope of horticulture in America—from research scientists to the green industry, garden professionals, garden writers, and backyard gardeners. He is brilliant in every sense of the word, incredibly smart, a bright shining light, and a man of remarkable pizzazz!"

Any conversation you have with Dr. Cathey will likely include a mention of the four granddaughters of whom he is so proud. Their nicknames reflect his love of color, left to right: "Miss Emerald" (Elizabeth), "Miss Pink" (Emily), "Miss Ruby" (Sarah), and "Miss Peach" (Ellen).

REFLECTIONS OF A GRANDDAUGHTER

One of Dr. Cathey's granddaughters, Emily Ewell, aka "Miss Pink," is currently studying chemical engineering at the University of Virginia. She offers the following thoughts about the influence her grandfather—whom she calls BeauBeau—has had on her life and goals:

BeauBeau has played such an important role in my life. When I was very young he would take me aside and express to me his love for academia and his passion for learning. I specifically remember him saying "you are going to LOVE math and science...and you're going to be so good at it!" I do, and I am.

When I think of BeauBeau, I am amazed that there are so many sides to him. BeauBeau the scientist, the florist, the author, the artist, the entertainer, the counselor, and the all-around amazing person.

Behind all of his accomplishments, he has the most virtuous and genuine heart. BeauBeau truly loves people—and he knows a lot of them! And, I'd dare to say, he loves them even more than flowers.

"He is brilliant in every sense of the word, incredibly smart, a bright shining light, and a man of remarkable pizzazz!"

—Katy Moss Warner, AHS President

SWEET HOME CAROLINA

Dr. Cathey's immediate plans for retirement include returning to his home town of Davidson, North Carolina, where, among other things, he will rekindle his life-long passion for art—creating miniature sketches of plants and birds.

On the horticultural front, the monumental task of coding plants will continue. And his work with phytoremediation is far from done. "We've got to ratchet up our efforts," Dr. Cathey says about reclaiming the polluted soils of our cities, parks, and farmlands. As a board member of Edenspace Systems Corporation, based in Dulles, Virginia, he will continue to support and explore this technology that uses plants to extract soil contaminants like arsenic and lead.

Another project already in the works is a book about color. "The reason we sell plants for the landscape," says Dr. Cathey, "is 3-D color. And I have perfect color vision!"

As the Catheys prepare for their move to North Carolina, Katy Moss Warner says, "We will greatly miss Marc's everyday presence at River Farm, but we hope he will continue to guide us from his new home."

Rita Pelczar is a contributing editor for The American Gardener.