

# THE WALL STREET JOURNAL.

The Expansive Designs of Landscape Architect Thomas Woltz

*With his highest-profile project to date, the greening of New York City's \$15 billion Hudson Yards development, WSJ Magazine's Design Innovator of 2013 is tapping into the power of a well-designed urban landscape to reveal our shared history—and find a more harmonious future*

By  
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**BENCH MARK** | Landscape architect Thomas Woltz at the Hudson Yards site, where he is responsible for designing a 6.5-acre park atop a \$750 million deck, constructed over active train tracks *Photography by Adrian Gaut*

**'I AM ALWAYS LOOKING** for the story of a site," says landscape architect Thomas Woltz, while standing at the north end of Manhattan's High Line greenway on West 30th Street and looking out over the 26-acre urban anomaly called Hudson Yards, one of his latest projects.

Below him, men in hard hats are erecting scaffolding amid the cacophony raised by backhoes, dump trucks and jackhammers. In this agitated cluster of urban infrastructure, Woltz sees parkland that's just waiting to be nurtured into harmony. "City blocks are like stands of trees; the open areas like meadows; the drainage networks like creeks. These are all complex living systems," says the 46-year-old principal of Nelson Byrd Woltz Landscape Architects (NBW). "Every site, whether an asphalt parking lot in New York or a rain forest in New Zealand, has embedded energies that inform the design process."

Landscape architect Thomas Woltz is WSJ. Magazine's Design Innovator of the Year.

Hudson Yards is the brainchild of real-estate mogul [Stephen Ross](#), founder and chairman of Related Companies, and this, his latest mega-development, is being hailed as the largest real-estate project in American history. It consists of more than 13 million square feet of mixed-use real estate, 850,000 square feet of retail, 5,000 residential units, a school, cinema, restaurants, fresh markets, a hotel and as many as 12 "supertowers" by brand-name architects like David Childs, William Pedersen and Elizabeth Diller. With the first stage slated for completion in 2018, it is already garnering comparisons to Rockefeller Center. Woltz and his firm, who were selected over several more established firms competing for the commission, play no small part in the orchestration. He points to the middle of the site, where the Public Square, a 6.5-acre plaza of his design, will be built, describing it as "the city's living room" filled with lush gardens, formal *allées* and beds of blooming flowers, all laid out in sweeping geometric patterns with fountains, cafés and space for outdoor art exhibitions and events.

**WSJ Magazine 2013 Innovators**

# THE 2013 INNOVATOR AWARDS

Landscape architects often fall somewhere between architect, urban planner and "outdoor decorator," as Woltz puts it. "Most people think we select the plants and call it a day," he says. But he sees himself more as a storyteller, one who embraces the complexity of modern life while seeking meaning and narrative in both natural and man-made environments. He's grounded in horticulture—his great uncle, Dr. Carlton Curtis, was chair of botany at Columbia University—and Woltz is able to recite the proper botanical name of every plant he uses. Before embarking on a project, he typically delves into extensive biological research including cataloguing every living species on a site—which he calls a "bio blitz." And rather than imposing a trademark look on every commission, he strives to respond to the specific conditions—the climate, soil, indigenous flora and fauna—of each location. (Woltz frequently quotes environmental activist and poet Wendell Berry : "If you don't know where you are, you don't know who you are.") His work is very much about knowing the spirit—what the ancients called the *genius loci*—tailoring it for both humans and animals, and favoring the subtle over the showy. A high point is as likely to be the restoration of a native meadow as a brightly planted cutting garden. Before submitting plans for the bird- and pedestrian-friendly park he is planning for Hudson Yards, Woltz and his team examined everything from the site's premodern history to the complex engineering of a seven-foot-thick steel and concrete "platform" that is required to cover the train yards and support the park and buildings above. The gigantic \$750 million air-cooled deck—spanning six city blocks—will protect trees, flowers and pedestrians from the high temperatures generated by the active train yards. He also sought to balance the needs of the developer

with those of the city. As with most of NBW's projects, special consultants were brought in to inform the design team. Steven Handel, a Rutgers University biologist, explained urban ecologies and the importance of native plants to attract birds and other pollinating fauna. (Accordingly, Woltz selected a range of native New York species—sweet gum trees, hornbeam, bald cypress—that can tolerate extreme urban and climatic conditions.) Bry Sarte, an expert in sustainable storm-water management, was consulted about ways to capture condensation from the glass-clad skyscrapers and recycle it for irrigation, while the historian Jill Jonnes taught the team about the history of tunnels and rail lines. "These are all voices of the site," said Woltz, whose plans include a proposed eight-story observation tower—a kind of grand garden folly with a double-helix stairway—as a central feature. It would mark the spot where, in 1904, Alexander Cassatt, president of the Pennsylvania Railroad, began excavation of the first tunnel to cross the Hudson River from Manhattan to New Jersey.

"Thomas has been quietly integrating environmental sustainability into his advocacy and design for years," says Leslie Greene Bowman, president and CEO of the Thomas Jefferson Foundation, with whom Woltz has developed a landscape stewardship master study for Jefferson's 2,500-acre plantation at Monticello, in Virginia. "He invites dialogue with voices of ancestral use, archaeology, environmental stewardship, historical narratives and social benefit, and his genius results from listening to those voices and creating a chorus to propel innovative thinking."



LOOK OUT | Woltz's plans for the Hudson Yards site include eco-friendly choices, such as systems that recycle rainwater and the planting of native tree species. *Photography by Adrian Gaut*

**THE YOUNGEST OF FIVE**, Woltz grew up on a 500-acre working farm in Mount Airy, at the foot of the Blue Ridge Mountains in northern North Carolina. The experience gave Woltz a visceral appreciation of agriculture: Not only did the farm boast herds of cattle and tobacco fields, but his parents grew all their own vegetables. When he was 7,

part of the family farm was transformed into a golf course, which he now looks back on as a defining moment. The giant earth-moving machines that were shaping the fairways and bunkers simultaneously intrigued and horrified him. "I realized at an early age that land could be manipulated in both good and bad ways," he says. "But I had no sense that my professional work would one day be spent addressing these same issues."

His formal interest in landscape design developed years later, when he moved to Venice to work for Italian architect Giorgio Bellavitis after graduating from the University of Virginia with degrees in architecture, architectural history and fine art. "Venice taught me that it doesn't necessarily take plants to make a landscape," says Woltz. "Through pavement, public plazas, water, walls, streets, sunlight and variations in shadow, all kinds of modulations could be achieved. I'd always considered landscape to be forests, fields, parks and gardens. Only after living in a city that offered none of these did I realize that everything was landscape."

This view became fused with a larger interest in the environment when he returned to UVA to pursue graduate studies in both landscape architecture and architecture. There, his mentor, Warren Byrd, taught Woltz "that plants needed to be understood in the context of a larger ecology."

After graduation, Woltz began to work for his former professor and subsequently became a full partner in the firm that had been founded by Byrd and his wife, Susan Nelson, in 1985. "My definition of landscape expanded to a spatial language of abstraction, place-making and memory," says Woltz, who today is the sole owner of the company that now has 36 employees, with offices in New York, Charlottesville and San Francisco.

"We're always seeking to ground our projects so they're not merely decoration," Woltz says, explaining how he begins every project by making numerous site visits, taking note of existing plants and geology, the amount of rainfall and the path of the sun across the sky. He feels the dirt and smells it for clues. "When we're in doubt, we always go back to

the site." Elements that are often hidden or overlooked by other designers are given a central role in Woltz's work. At the Medlock Ames Winery, for instance, which he designed on the site of a former general store and gas station in Healdsburg, California, rainwater was redirected through a network of swales and rain gardens planted with native grasses, not shunted into a corner behind chain-link fencing. Woltz also pays especially close attention to the well-being of small animals. "Amphibians and birds are a visible harbinger of site health," he says. "If we make it safe and habitable for them, then it's good for everyone." (At one rural project, consulting biologists noticed the absence of native leopard frogs. Woltz lessened the slope of the banks around a pond according to their recommendations, and the frogs returned.)



MEADOWLANDS | Woltz's designs include a terraced garden at Iron

Mountain House, a home in Connecticut. © *Eric Piasecki/Otto*



Orongo Station, a sheep farm in New Zealand © *Marion Brenner*



The garden of a Manhattan townhouse © *Eric Piasecki/Otto*





Orongo Station's Endeavor Garden, showcasing plants gathered by explorer Captain James Cook's team in 1769 © *Marion Brenner*



Beds of herbs at the Medlock Ames Winery in Napa Valley © *Marion Brenner*

"Thomas has a great curiosity about all forms of wildlife," notes Dr. James Gibbs, a professor at SUNY's College of Environmental Science and Forestry. Gibbs has collaborated with Woltz on the conservation of a '30s-era apple orchard in Yailyu, Siberia, and a farm outside of Charlottesville, where he suggested introducing boards to provide protection for salamanders, slugs and snakes. Woltz responded with a checkerboard of wooden planks laid out in the forest like an environmental art installation that also provided a natural habitat. Meanwhile, for a family's private home on Manhattan's Upper East Side, Woltz created a "sky meadow" planted with wildflowers, native grasses and river birches to offer a habitat for migratory songbirds. He also transformed a small sixth-floor terrace with a living wall featuring thyme, rosemary and strawberries. "The whole project became about

nesting and nurture," he says, "for both the client's family and the birds."

Woltz's most innovative project to date is the epic master plan he designed for Orongo Station, a 3,000-acre sheep farm in Poverty Bay, New Zealand—begun in 2001 and completed in 2012—that includes formal gardens, waterworks, ecological and cultural reclamation programs, and an integrated farming system that has become a model for sustainable land management in that part of the world. Gardens were inspired by indigenous tribal culture and the vernacular traditions of sheep farming, and Woltz collaborated with Maori elders on a restoration and expansion of their traditional burial grounds. He preserved ancient earthworks and planted more than 500,000 trees to help regenerate the formerly unregulated, overgrazed lands. Seventy-five acres of fresh- and saltwater wetlands were rerouted through a waterway that curves through the property and spills into a lagoon. At the suggestion of a biologist, he also had predator-proof fencing and solar-powered speakers installed to play the songs of endangered migratory birds. "Now there's a massive population of sooty petrels, fluttering shearwaters and gannets who fly in to lay their eggs without fear of being attacked," he says.

The current popularity of Woltz's holistic approach to landscape design, as well as the high-profile Hudson Yards commission, has catapulted him into orbit with a handful of top competitors in his field: firms like West 8, James Corner Field Operations and Michael Van Valkenburgh Associates. He and his team are at work on an array of projects, from an interpretive farm center for Cornwall Park in Auckland, New Zealand, to a 120-acre expansion of the Coastal Maine Botanical Garden in Boothbay, Maine, that will showcase native coastal ecologies. Simultaneously, the firm has begun work on a woodland amphitheater and the restoration of a historic spring at Centennial Park in Nashville, Tennessee, and is creating a six-acre park at the center of a mixed-income community in New Orleans.

Despite traveling constantly from site to site, Woltz tries to make time wherever he goes to slow down. On his last visit to Florida, he went

snorkeling in the Ocala National Forest, and on a recent trip to Vancouver he rented a bike and rode through Stanley Park, noticing how the lodge-pole pines shone in the afternoon light and how the Fannin Range appeared to dive into Vancouver Harbor. "We underestimate the power of the designed landscape to move us emotionally and to tell us stories about where we have been as a culture," says Woltz. "One of the reasons I get up every morning with so much energy is the urge to make this profession, and the landscape itself, visible to the public," he says, before he walks away, heading east on 18th Street.