

<http://www.miamiherald.com/living/home-garden/article33275376.html>
September 4, 2015

Growing toward the sun: vertical gardens



A colorful variety of plants grow in hanging gardens outside the Perez Art Museum Miami, serving as living sculptural elements. MARSHA HALPER MIAMI HERALD STAFF



If you've visited the Pérez Art Museum Miami, you've probably marveled at the gardens suspended over the terrace. Or perhaps you've been in a restaurant or other business where you discovered a green wall "painted" with plants.

These vertical and hanging gardens are trendy and often very elaborate, requiring a trained horticulturist to create and maintain them. But for the home gardener, a vertical garden doesn't have to be difficult.



Persimmon-hued plants, left, are among the plants in the hanging gardens outside the Perez Art Museum Miami (PAMM). MARSHA HALPER MIAMI HERALD STAFF

"When you talk about a vertical garden, you really are talking about a container used in a different way," says Eric Darden, horticulture manager for the Epcot International Flower and Garden Festival. Instead of setting pots on the ground, you might stack them on a staircase or hang them from a beam. "It can be that simple," he says.

As the force behind the annual Epcot festival, which runs each spring, Darden created gardening displays that provided ideas for people to take home and try.

"I'd say there's a trend to vertical gardening. We are seeing it much more now than when the garden festival began 23 years ago," he says.

Of course this type of gardening is nothing new. Think of the hanging gardens of Babylon, which are listed as one of the seven wonders of the ancient world.

But if you want to credit someone with its modern incarnation, you might select Patrick Blanc, a French botanist and scientist. He's the man who created the living wall at Juvia restaurant in South Beach, as well as the gardens at the Pérez Art Museum — which opened in 2013.

He got his ideas studying what is arguably the most ancient vertical garden on earth: the rainforest. He found plants in the forest growing upwards in search of sunlight. And he learned how each layer of the forest, from canopy to groundcover, is home to different species with different needs. He also found that many of these plants are nourished only by the air and the rain.

He domesticated these ideas in 1991 by building a vertical wall garden at his home in Creteil, France. Since then he's created vertical and hanging gardens worldwide.

The hanging gardens are not only pretty to look at, they purify and cool the air around them by 10 to 12 degrees — and they attract wildlife, said Leann Standish, the museum's interim director. Standish can see birds and butterflies alight on the plants just outside her office window.

When they see gardens like these, people often want to try vertical gardening themselves. And there are other good reasons to grow toward the sun.

One of the main ones is to make the plants easier to reach. That's why many baby boomers are jumping on the trend. "Not everyone has the ability to get on their hands and knees to tend the plants," says Darden. "Planting vertically brings the garden to your level."

Putting pots on shelves or attaching them to a wall also can increase your growing space or even create new spaces. Those plants on a wall also can help soften a large bit of hardscape. And covering a wire fence or trellis with a plant can create privacy.

One of the most popular and easy ways to create a vertical herb, berry, lettuce or flower garden is to use a "strawberry pyramid." These can be purchased readymade, or build one yourself.

The one Darden displayed at the Disney World festival was 4- by 4-by 5 feet. You plant on four sides in stepped troughs filled with soil. To get an equal number of plants on flat ground you'd probably need a 4-by-10-foot area, says Darden. "So it saves a lot of space," he says.

He also likes half pots made of wire. These are lined with sphagnum moss or coco fiber and filled with soil. "We use them quite a bit throughout the park where we hang them on bare ugly walls," he says.

Debra Yates, a partner in the interior decorating/landscape design firm Burle Yates Design, is also going vertical. But she doesn't turn to someone like Blanc to create a living wall. "I like things that are a bit more maintenance free," she says.

Instead she might begin by painting the wall she wants to cover a dark color such as charcoal gray. Then she attaches a stainless steel cable and turnbuckle system called a "stainless steel vine trellis" that is made up of cables secured in a grid pattern to the wall. She likes a grid of one-foot squares.

To cover the cables she plants Confederate Jasmine at the bottom of the wall. Unlike most vines that get woody underneath and require trimming, the jasmine does not, she said.

For a quick start to your project, she recommends using a large plant, not a seedling. Then the vine grows along the cables to create an attractive grid pattern on the wall.

To make things easy, she has used trellises to cover walls and spaces. At Home Depot, she found inexpensive square wooden ones that had been primed white to give them a country French appearance. She hung five of them in a row on a wall, grew jasmine below them and tucked a few tillandsias in among the vines as they attached to the trellises.

Because tillandsias need only the air and some rainwater to grow, they have a number of vertical applications. You can tuck different types into the holes of a decorative cement block wall. Or use monofilament to attach them to trees or other vertical surfaces.

For Yates' balcony in Midtown Miami, her son and partner Benjamin Burle bought floor-length mirrors at IKEA that he hung on the back wall. He glued long strips of peat moss from an orchid supply store to the mirror frame. Then he used monofilament fishing line to secure the tillandsia to the moss. A few potted plants in front of the mirror rounded out the vertical tableau.

All that's needed for maintenance is to mist the air plants with a hose. "I love that idea," Yates says.

Although bromeliads can be used in similar ways, Yates avoids them because they hold water, attract mosquitoes and "are kind of yucky." Many people also attach orchids to tree limbs or hang them in wood-slat pots.

One bromeliad lover in Hollywood took the lower limbs off a *euphorbia drupifera*, a tree-like succulent that grows near his patio. To showcase these epiphytes that can grow without soil, he stripped the lower leaves and limbs. Then he attached the bromeliads with black plastic pull ties until they put out roots and attached themselves to the trunk.

Today the tree is home to about 70 bromeliads and about a dozen low-voltage spotlights that make the tree look sculptural after dark.

At Yates' 1930s Key West home, the lights are on the five green thatch palms she has planted on the roof. "We light them at night and it makes quite an impact," she says. Because the trees are not attached to the house, she didn't need approval from the city's preservation committee to do the work.

"People just need to be more creative with their thinking. You just have to have fun with it," she says.

By Deborah S. Hartz-Seeley

Special to the Miami Herald