

FARM.ONE SPRINGS UP ON BERGEN STREET

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By Hayley Gorenberg

After an overwhelming sensation of saltiness, my mouth buzzes like it's filled with Pop Rocks candy. I'm chewing a nubby, bright yellow bud of the *Acmella oleracea* flower, which is popularly called the toothache plant—and sometimes dubbed the “electric daisy.”

I crunch on the flower courtesy of a botanical tasting tour of the local urban hydroponic gardens that constitute Farm.One, located within walking distance of Barclays Center. The vibrant tour also featured a superhot mustard green that made my eyes water, as well as other tamer but ultra-flavorful—and frankly gorgeous—edible petals and microgreens.

FARM.ONE RECIRCULATES 700 GALLONS OF FILTERED CITY TAP WATER TO CULTIVATE ABOUT 150 VARIETIES OF HERBS, LEAFY GREENS AND EDIBLE FLOWERS AT A TIME.

Several times each week, the Prospect Heights facility welcomes groups of visitors to don blue shoe coverings and hairnets for a look at—and a taste of—myriad plants grown year-round indoors, using a water-based nutrient solution rather than soil.

The tours give participants a close-up of the hydroponics facility, which bristles with full-spectrum LEDs above 3,000 feet of growing space. Farm.One uses inert “grow media” and recirculates 700 gallons of filtered city tap water to cultivate about 150 varieties of herbs, leafy greens and edible flowers at a time.

After beginning as a membership-driven, subscription-based system, Farm.One converted to a direct retail approach. Neighbors can buy boxes of greens, herbs, flowers and other products online or at the farm, either as single purchases or on a recurring schedule. Farm.One is open 3–8 p.m. most days, and customers can purchase and sip on botanical beverages in the front room, alongside rows of growing plants.



Inside Farm.One's hydroponic gardens. Photo by Caroline Mardok.

Farm.One boasts hard-to-beat freshness, tempting individual customers to purchase just-harvested greens and flowers in sturdy, reusable containers, barcoded and requiring a deposit to incentivize return. Bri Fronczak, an experience guide at Farm.One, tied freshness to maximizing health benefits, remarking that harvested plants lose nutritional value over time. "Once you cut a plant, it wants to decompose," Fronczak said. Farm.One buyers are practically grazing when they visit. "If you look and say, 'I want that plant!' we will go and cut it for you," she said.

In addition to working with seed outfits to select hundreds of different plants at a time, Farm.One also maintains relationships with bug dealers. The facility purchases ladybugs and assassin bugs to release within the building, naturally combating pests like aphids. Even with a biosecure space, pests get in—especially when relatively warm winters don't kill them off. Staff clean the space regularly and preventively, and they wear designated clothing and shoes that don't leave the building.

A bicycle delivery service ferries orders from Farm.One—located at 625 Bergen Street, only a few minutes' walk from the Coop—to restaurants and bars within a four-mile radius. Farm.One advertises that they have “supplied the best restaurants in New York with edible flowers, rare herbs, micro and salad greens,” since 2016, and offers a “sample drop,” visit or discussion about products to any restaurateur looking to connect.

For business accounts, “everything is grown to order,” which means “there’s very little waste,” according to Farm.One’s Front of House Manager, Francesca Santos-Vargas. Local establishments order perhaps three or four weeks in advance, in “continuous conversation” with Farm.One, she said. “We’re thoughtfully growing—not just growing random stuff that’s going to get tossed.”



A worker holds an edible flower. Photo by Caroline Mardok.

Renato Poliafito, owner of the café Ciao, Gloria, at 550 Vanderbilt Avenue, delights customers by spreading toasts with avocado, hummus and ricotta, then topping them

off with Farm.One microgreens. “They’re very peppery, bright, citrusy,” he said. “Not only do they taste interesting, with a dynamic flavor profile, they’re also really beautiful and colorful. When presenting the toasts and dishes, you’ll get a lot of ‘oohs’ and ‘ahs.’”

Poliafito, who also caters some events at Farm.One, feels the two ventures share similar philosophies. Farm.One advertises that the farm was built “to be sustainable to the highest standard, equitable in employment, beneficial to the community, and, most importantly, *delightful*.” Poliafito echoed these sentiments when describing Ciao, Gloria. “We’re a daytime café, we’re trying to use fresh, local when possible, and I can’t imagine it getting any more local than around the corner,” he said. “It’s a great match for us. We have the same outlook on business, trying to support community and be well-received.”

WORKING THE FARM

In the course of maintaining an indoor, vertical farming facility that grows food with “zero pesticides,” Farm.One professes an ethos of hiring for “long-term careers, not ‘gigs’... with health insurance, dental, vision, life insurance and other benefits” and advertises “a unique experience for people looking to start a career in urban indoor agriculture.”

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The farm’s employees have often previously worked on outdoor farms, and share a keen interest in sustainability. Farm.One’s Kate Ginna grew up in New York and “had no relationship to where [her] food was coming from.” Her background now includes having worked on a saffron farm in France.

Fronczak, who has experience with a community supported agriculture (CSA) operation that works with family farms, wanted to work “in a climate-positive, forward-thinking job.” She acknowledged that climate news can be “devastatingly sad,” but also opined: “It doesn’t have to be that way!”

Part of addressing food and climate needs with hydroponics includes taking advantage of urban spaces that cut the delivery miles and carbon footprint for food. Indoor urban hydroponic gardening also allows more food growth year-round, since, as Francesca Santos-Vargas, Farm.One’s front of house manager, said, “Weather doesn’t really exist here.”



A worker at Farm.One. Photo by Caroline Mardok.

Hydroponics and other alternatives to soil-based farming often spur debates about commitment to soil health. Santos-Vargas, who has experience in environmental engineering, suggested that a facility on Bergen Street avoided such tensions, though, since “there was never going to be dirt on this plot of land.”

Santos-Vargas arrived at Farm.One after “a decade working in, and opening, some of New York City’s premier cocktail bars and restaurants.” Farm.One heralded her arrival as an employee whose “love of all things sustainable started in the New Jersey highlands, back when [she] was an engineering student, volunteering as a beekeeper and growing [her] own plants and wildflowers for the first time.”

FARM.ONE’S HYDROPONICS SETUP HAS ATTRACTED VISITORS FROM AROUND THE COUNTRY, INCLUDING ONE FROM THE MIDWEST INTERESTED IN FARMING INDOORS ABOVE A BASEMENT COMPUTER FACILITY.

Santos-Vargas maintains the experience “opened [her] eyes to the importance of biodiversity and supporting the development of more thoughtful farming practices in order to help mitigate global problems, like climate change and food security.”

In general, hydroponic systems with indoor grow rooms allow for precise control of temperature, humidity, light and other environmental factors. Growers who optimize these conditions can promote faster growth and higher yields. With sensors to monitor factors like pH, nutrient levels and temperature, hydroponics facilities aim to provide a stable, optimized growing environment.

Farm.One’s hydroponics setup has attracted visitors from around the country, including one from the Midwest interested in farming indoors above a basement computer facility. The envisaged aquaponics facility there would, ideally, use heat generated by the computing machinery, averting energy waste.

LEARNING AT THE FARM



Mizuna, sweet alyssum flower and other edible plants. Photos by Caroline Mardok. Farm.One also hosts workshops and events on-site. A free Music for Plants event recently offered “ambient and luxurious music in a welcoming space surrounded by plants” and non-alcoholic botanical drinks to sample. A “plant-cutting swap” invited New Yorkers to bring their “rare and unusual plants to swap” and featured Farm.One plants. The Farm.One free “holiday mart” in December boasted bud vase arranging, card making with pressed flowers and other craft activities, as well as mini-tours.

A two-hour introduction to hydroponics class covers principles of hydroponics and hydroponic systems, climate and nutrients, overall management of the crop from seed to harvest, addressing pests without pesticides, and best practices for pruning and harvesting. A dozen participants at any level of experience can learn about growing herbs, greens and flowers indoors in a controlled environment with artificial light. “This introduction to the high-tech world of indoor growing will open your eyes to the possibilities of year-round, pesticide-free, high-quality, high-yield agriculture suitable for any size,” the course description suggests.

The small class offers hands-on experience “from seed to harvest,” guided by Farm.One’s director of farming, Kate Lodvikov, who is also an instructor at the New York Botanical Garden. It’s next offered on January 25 at 6:30 p.m., for \$150, luring participants with descriptions of how their “entire class will be actually inside the hydroponic farm—there is no other hydroponic learning space like this!”

Farm.One offers wheelchair-accessible, small-group tours each week, tempting visitors to “taste herbs [they] guarantee you’ve never, ever tried before” and learn about leading hydroponic technology. The farm’s street-level pavilion also serves as a showroom and event space for receptions or discussions, a non-alcoholic bar class and brew lab, a site for kids’ cooking classes, and offers a view through “a glass garage bay door so people walking by can see the beautiful space.”

Hayley Gorenberg has worked in environmental justice and trained this spring with the Climate Reality Project.