GARDEN CALCULATIONS

URBAN AGRICULTURE METRICS ROLL OUT IN NEW YORK CITY.

BY BRIAN BARTH

Just off the eastern shoulder of Manhattan, on Randall's Island, Nick Storrs is making compost with a group of summer campers. While some kids layer up a fresh pile—first leaves, then food scraps from the garden, then more leaves—another group is scooping up the remains of a pile from last fall. They put it in white, five-gallon buckets and tally up the volume before spreading it across the planting beds.

Storrs is the urban farm manager at Randall's Island Park, which welcomes around 40 New York City public school groups each year. The students help grow food, of course, but there's more than collecting fruits and vegetables going on here—Storrs is collecting data. He records the number of students and the amount of compost and food they help to produce, along with other more detailed facts, like their favorite activities in the garden.

At the end of the growing season, Storrs will upload the figures from his spreadsheet into an online portal that New York urban farmers and gardeners have come to know as the "Barn."

"[The Barn] is about sharing information and making the case for why urban agriculture is important," says Susan Chin, executive director of the Design Trust for Public Space, a New York-based think tank that has helped to develop the online data collection portal. "The benefits of urban agriculture go way beyond food," she says. "This data set will make a much stronger argument about why urban agriculture is valuable."

About five years ago, the Design Trust started Five Borough Farm, which is not an actual farm, but a research and advocacy platform. The plan was to nudge the existing network of community gardens, rooftop farms, and other growers in the five boroughs toward a more cohesive, politically empowered coalition. As the Design Trust investigated the conditions on the ground and strategized about what a supportive institutional structure for urban food production might look like, it became clear that providing evidence would be of major importance. The organization set out to quantify the
FARMERS AND GARDENERS WILL BE ABLE TO RECORD ECONOMIC DATA BUT ALSO QUALITY OF LIFE.

multilayered value of urban food production.

A pilot group of 30 farmers and gardeners collected data last year, creating 16 quantifiable indicators of urban agriculture's worth, including obvious economic indicators like gross market sales and people employed, along with environmental data such as the volume of green waste diverted from landfills. These are the metrics by which New York's 900-plus growers will now be able to measure their contribution to the physical, economic, social, and environmental health of the city and its citizens. This spring, urban farmers began uploading their data into the web portal, and by fall the fully functional interface was to be ready for use. "In the next phase we're including data visualizations, like charts and graphs, so farmers and gardeners can see infographics from their data," Chin says.

Going beyond production statistics, growers will be able to add quality-of-life data such as how community members feel about the presence of a farm or garden in their neighborhood. Instructional videos will train users on statistically sound ways to collect the information, as well as how to upload it to the system. "We initially thought the farmers and gardeners wanted a phone app," says Chin, "but with water and dirt they needed a simpler data collection method...like a bucket to collect compost and a notebook with paper forms that they can photocopy."

Two hundred growers have signed up this year, and Chin hopes to double that number for next year. Soon, politicians, funding organizations, and the public will have access to a second portal, known as the "Mill," that will aggregate the farmers' data and organize it into categories. So, if you want to know how many pounds of carrots are coming out of the South Bronx, for example, the Mill will serve up a ready-made, poster-worthy graphic.

Some of the data isn't so empirical. It deals less with harvest weights and inputs and more with perceptions and emotions. One of the most helpful for Storrs is a game called "yum and yuck." "When the kids arrive, we do a taste test where they have to vote on their favorite and least favorite vegetables. Before they leave we do it again and compare the results after they've learned about the garden," he says. As any urban agriculture advocate would hope, the results show that spending time working in a garden makes kids receptive to vegetables they previously rejected. Now Storrs and others will have the data to prove it.