SURVEY SAYS

FOR URBAN FORESTERS, CITIZEN INVOLVEMENT BUILDS MORE THAN DATA SETS.

BY KYNA RUBIN

In the past six years, more and more cities and states have been training local volunteers to survey neighborhood trees. The goal is to collect data, but also to create passionate grassroots tree advocates who will implement plans to address canopy threats. Data is more likely to be used, and used faster, when citizens have collected it themselves, says Angie DiSalvo, Portland, Oregon's urban forestry outreach and science supervisor. In Portland, where urban forestry budgets are small, and homeowners are financially responsible for maintaining and replacing street trees, 1,300 volunteers spent seven seasons mapping more than 200,000 street trees.

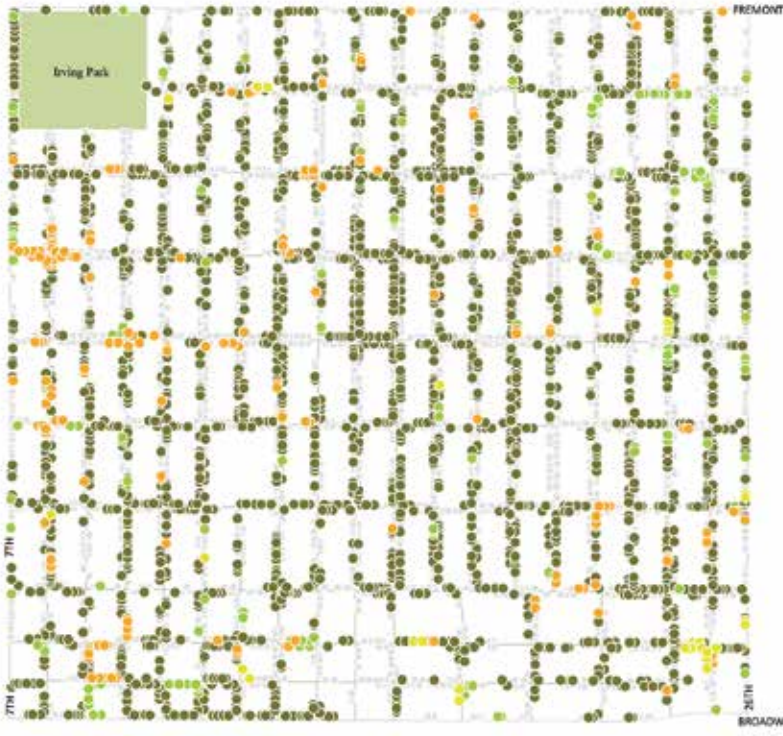
Urban forestry staff trained volunteer team leaders how to measure and identify trees, rate their condition, spot high-voltage wires, and explain the benefits of street trees to residents. Armed with block-by-block maps and tree identification materials, pairs of volunteers hit the streets, penning data onto paper that volunteers later entered into a central GIS database. City staff on bicycles were on hand to help with hard-to-identify tree species. From this data, Portland's urban foresters produced neighborhood reports with easy-to-use maps and recommendations to remedy problems such as age, lack of species diversity, and the need to get more ecological bang for the buck by planting, say, Douglas firs rather than dogwoods in capacious planting strips.

Getting the average resident, let alone those struggling to get by, to invest thought and money in trees is challenging. But neighborhoods are responding. One formed a tree team that knocked on the doors of residents living in distressed properties, securing their permission to replace withering trees cost-free, through a grant the team secured after receiving seed money from the city. As a result, DiSalvo says, dead cherry trees planted in the 1960s will be replaced by longer-lived species.

The whole idea of "urban forests as a managed thing" is new, says Eric North, a research fellow in the University of Minnesota's natural resources science and management graduate program. North has worked with smaller towns in Minnesota to help them prepare for the emerald ash borer. The U.S. Forest Service is on board too, he says, with its new Urban Forest Inventory and Analysis program, which establishes and tracks statistical plots in cities to see how public and private forested land in cities changes over time. In the small town of Ely, which has no urban forestry staff, residents used tree survey data to raise money to hire a part-time professional to help them incorporate new tree species, North says.

Diversifying is key to most urban tree plans, and North says Minneapolis has done a good job at the city level, after having lost much of its canopy to Dutch elm disease and the emerald ash borer. But he would like landscape architects to be thinking about how to design diversity at the block level. Peter MacDonagh, FASLA, of Minneapolis-based Kestrel Design Group, says landscape architects can introduce diversity while still satisfying the public's desire for order. One method is to plant a line of different genera of trees with similar leaf morphology, such as Kentucky coffee trees and honey locusts, to create the illusion of uniformity.

Diversity aside, tree programs will not succeed unless all involved drop their "magical thinking" about what it takes to grow an urban tree, MacDonagh says. Public money is wasted—and a canopy's benefits eroded—by not giving saplings the soil volume, water, and pruning they need to reach maturity. More fundamental, says DiSalvo, is getting people to understand that trees aren't mere niceties but ecological necessities. "Urban forestry's problem is that people need to hear those messages not just from us and arborists," she says, "but from community members and people designing the landscape." ●



ABOVE
A 2015 map shows the potential vulnerability to key tree pests in the Irvington neighborhood of Portland, Oregon.

PORTLAND PARKS & RECREATION