

Everything's Changing: Can Your Urban Forest Thrive?

Interview with Karen Zumach, Director of Community Forestry
Tree Trust, Minneapolis, Minnesota

Interviewed by Lindsay Campbell and Erika Svendsen, USDA Forest Service

Karen Zumach (KZ): I've been Director of Community Forestry and I have been the director since May 2016. I like to say: "I put trees in the hands of people." Whether that's in a park or in their front yard—my work is to facilitate tree plantings for communities. We also manage tree distributions for planting on private property for various municipalities. We do educational outreach and engagement with elementary school students. And we plant anywhere upwards of 3,000 trees every year with volunteers at community parks, schools, and neighborhoods throughout the Twin Cities, Minnesota.



Karen at left.

I've been working at Tree Trust for a few months shy of 10 years, which is outrageous!

Erika Svendsen (ES): *Outrageous? Why?*

KZ: I moved to Minnesota from the east coast about 10 years ago, originally intending and hoping to work on green roofs. But it was really difficult for me to find employment doing that. A job had come up at Tree Trust, and while I appreciated trees, I never really had much of a driving desire to go work in arboriculture. But I thought "oh well I'll just do this job for a year, it's an educational and outreach position, no big deal." And then I found myself completely enamored with the whole process of planting trees and what that does for communities. And the social aspects of trees just pulled me right in: very similar to the way green roofs did earlier, but on a far more accessible level.

So, it's outrageous because I never would have thought I'd be here for 10 years and really settling into what I could consider my "forever career." It has transformed my personal path and my career in ways I never anticipated.

Lindsay Campbell (LC): *Can you reflect a little bit about the work you've done with the Tree Trust, both in terms of environmental stewardship, but also community development—or the "social aspects" as you mentioned? What do you think has changed over those 10 years?*

KZ: Because I've become more involved in the inner workings of urban and community forestry throughout the state, I've come to recognize how political trees are. I never thought that would be a sentence that one would utter, because: they're trees—how could they be political?

But they really are; it's a surprising thing to navigate.



For example, when I'm doing work to try to get trees into under-canopied areas in the city of Minneapolis, those who live in higher-canopied areas perceive it as unfair. It's just shocking to me that this is the kind of reaction that you would get.

I think as I've become more involved in the work I'm more deliberate in doing outreach to those well-canopied areas of the city that are well-canopied. I try to navigate interactions with those who deem our actions unfair in a much more eloquent and effective way.

I wasn't doing this before I worked in urban forestry because I hadn't been exposed to the perception that some people have about nature in general—they think everyone has access to the same benefits. But that's really not true, and I've come to see that over the past 10 years.

ES: *Are the under-canopied areas also low-income areas and are the higher canopied areas also higher income areas?*

KZ: The Twin Cities is no exception to that national trend we in the field try to change. It's not only that there's low canopy [in low income areas], but these areas also have the greatest potential to increase canopy.



There are places like front yards and backyards where there just *aren't* trees like there are in other parts of the city. It's really great to have conversations with people and help them understand that not everyone has the same kind of access. I'm most gratified when, after I talk about that kind of inequality, people say things like: "Oh yeah you're right, you're right, that's a really good thing you should be doing then; that's a fine way to go, we've got plenty of trees here."

These are the kinds of little victories I feel really grateful for, because it's not just planting a tree; it's really changing the way people think about trees and how this all plays in more vibrant neighborhoods for everyone.

LC: *Can you talk a little more about how you decide where to plant trees?*

KZ: Our decisions go where our contracts are, especially for the private tree distribution programs. For example, the city of Minneapolis does an annual tree sale for its residents where they offer low cost trees to residents to plant on private property as a way of increasing the canopy without increasing the cost of tree maintenance for the city. We've been administering that program for about 12 years now, about 1,500 trees per year.

Lately, drawing on survey data and canopy studies, we've helped the city of Minneapolis recognize that areas of the city are under-canopied and lower income, with lower rates of participation in this tree sale program. So we shifted to try removing as many barriers to participation as possible in those areas. This means we focus on particular areas of the city.

There are some decisionmakers who get it. But others don't think it's necessarily fair that the city-funded program is now targeting a particular area as opposed to making it accessible to all – even though higher canopy, higher income areas gobble up 25 or 30 percent of the available trees year after year.

To promote more equitable distribution, we instituted a presale for those lower canopy, lower participating areas of the city so residents were able to order their tree first. Then the rest of the interested city residents had to enter a lottery and be selected to get their tree. Things turned out a little better, not a whole lot because there was still a very high percentage of participants coming from higher canopy, higher income areas of the city.



This continues to astonish me. It's a \$25 tree and these folks are living in very expensive homes and could easily afford a full price tree! It doesn't change much from year to year, how people value things and feel entitled to have them. I keep having the same conversation with the same people: "how is it possible that this part of the city is being targeted?"

And then when you explain it to them, they say, "well that's where all the money's going, all the money's going to that part of the city to fix it." They don't get it the way we do: "we all do better when we all do better".

LC: *North Minneapolis has suffered from many different types of disturbances: invasive pests, economic decline or disinvestment, and a fast-moving tornado. Across all of these possible disturbances are there differences or similarities in terms of your tactics for re-greening? How do you work in the context of all this disturbance?*

KZ: Our narrative for everything that we're doing right now, for the majority of the cities we work in, is about both slow-moving disturbance and those that bear down on us pretty quickly.

We talk about the emerald ash borer (EAB) and the fact that we are going to lose so many trees in such a short period of time. We do take advantage of that disaster in a way that makes people more aware of the importance of trees. It sounds ironic. But it gets people's attention; they're starting to notice these large trees coming down in large quantities. It's become a much more robust conversation about tree in their community. Disturbance is a key theme when we're engage with people in north Minneapolis and beyond.

Another challenge – the 2011 tornado – hit fast. But dealing with the aftermath has been a long, deliberate process.

Even seven years later, were still helping the communities in those areas of the city replace the trees. They've been hit with a double whammy: still not recovered from the tornado, and then a huge loss of 6,000 or 7,000 big trees from the Emerald Ash Borer. Twenty-five to 30-inch diameter trees coming down on the streets and boulevards being replaced with much smaller trees.



Photo by Tony Webster

We need those trees. Now the canopy is smaller and now the summers are hotter. We talk with new homeowners who are moving into these areas of the city; they just can't believe they bought a house where there aren't any trees. They want to know how to get them back. This becomes an opportunity for us to promote trees because people are really starting to recognize what it's like to live in a place without them.

At the same time, it is hard because we're fighting so many other things. It is a whole lot harder to grow a tree now than it was 30 years ago and I think it is going to be a transformation for our cities. I don't think people are really ready to get their head around that yet, so we provide them with that tree but make sure they understand that this is part of a bigger picture – one that includes them. If you have a boulevard tree that has been planted, you know it's your job to water it too. Those trees aren't going to get big without you. We try to make this be kind of a "it takes a village" message.

LC: *You said it's hard to grow trees now. Did you mean that this is the case because of the heat, or because of cost, or because of the trees' susceptibility to invasives, or all of the above?*

KZ: It's all of the above: dealing with these longer stretches without rain and these strange weather patterns. We have more straight-line winds and bigger thunderstorms. I think that's a trend that is undoubtedly going to continue. When we're talking about these larger areas of no trees, they're working against a lot of other forces like wind exposure. Without surrounding trees, there's no protection of the trees that are left, or new ones that are planted.

LC: *It sounds like the memory of the tornado is still really powerful in north Minneapolis. You also mentioned newcomers coming in and saying 'what's going on with this bare landscape'? And they want to transform it. And then with the EAB and loss of the larger canopy trees there are folks who've probably been in this place and maybe didn't even realize what they had until it was gone?*

KZ: We have this really interesting opportunity to talk about trees to residents in a different way. We also need to talk about tree management in a different way. The Minneapolis Park Board (they are responsible for the management of the city's urban forest) is cutting down every single one of their 40,000 boulevard ash trees.



The decisionmakers at the Board have decided that pesticides are not an option and that removal and replacement is the most efficient way to manage this pest. Thankfully, the department is being pretty thoughtful about it. They try to remove no more than 20 percent of the trees on a particular block.

But the city of Minneapolis was set up with an urban street tree design that was block-based so there are blocks of just ash trees and then there will be another block of just honey locust. In the areas where they're infested, they have to take down all of the trees.

This has happened before. Minneapolis was 96 percent planted with elm before Dutch elm disease, if you can imagine that. They had to essentially restart after Dutch elm disease. They didn't replant with 96 percent ash, it was 20-30 percent which is pretty typical across the state, but it's still a large percentage.

LC: *What about economic disinvestment or reinvestment? You talked a little bit about newcomers, perhaps with different demographic shifts, that might go along with neighborhood transformation. Do you use a community forestry approach?*

KZ: At this point it's voluntary, so we're not driving in the streets of north Minneapolis and saying "numbers 22 to 27 X Street could use a tree." We have the free tree program; we do outreach to those neighborhood groups to let them know that their members can come to us.

LC: *So you are really focused on the household or the residential landscape?*

KZ: City-owned properties are a very complicated story here. City-owned properties fall under the purview of the city, the boulevards and parks are managed by the Park Board, a separate taxing entity.

So the only place we can have impact in Minneapolis per se is within those private properties. I'm sure it happens everywhere but when you give somebody a free tree and you don't have any buy-in, you drive by a dead tree. We've constantly been trying to find that appropriate level of buy-in that's going to ensure the success and vitality of these trees. It's been a struggle because we still haven't really found that perfect recipe.

One way we try to address that problem is through our Green Team Program. We've really worked hard to improve that program, using the volunteer networks that exist here in the cities where change is most dramatic. We have essentially a Master Gardener Program that's focused on tree care. They're pretty well known throughout the Cities and just they're a great corps of about 100 different volunteers that are available to help schools, to help cities do tree care. We also to enlist them to reach out and continue to work with schools beyond our timeline.



Many of these volunteers work year after year with us, which is really fantastic. They're an extension of our very small community forestry program and invaluable to us because we wouldn't be able to get half as much done without them so.

ES: With this group and others that you're planting trees with, could you say anything more about people's intentions and what motivates them?

MyTree Benefits	
Tree 1: Ash (<i>Fraxinus</i> species)	
Serving size: 20" dbh, Excellent condition	
Total benefits for this year	\$38.89
Carbon Dioxide (CO₂) Sequestered \$8.00	
Annual CO ₂ equivalent of carbon ¹	0.06 lbs
Storm Water runoff avoided \$3.79	
Runoff avoided	424.14 gal
Rainfall intercepted	1450.64 gal
Air Pollution removed each year \$1.98	
Carbon monoxide	< 0.10 oz
Ozone	8.69 oz
Nitrogen dioxide	0.81 oz
Sulfur dioxide	0.10 oz
Particulate matter < 2.5 microns	0.43 oz
Energy Usage each year² \$24.82	
Electricity savings (A/C)	93.77 kWh
Fuel savings (Natural Gas, Oil)	1.06 MMBtu
Avoided Energy Emissions \$8.30	
Carbon dioxide	346.54 lbs
Carbon monoxide	1.75 oz
Nitrogen dioxide	1.34 oz
Sulfur dioxide	8.40 oz
Particulate matter < 2.5 microns	0.35 oz
Carbon Dioxide (CO₂) Stored to date³ \$109.19	
Lifetime CO ₂ equivalent of carbon ³	4695.12 lbs
Benefits are estimated based on USDA Forest Service research and are meant for guidance only www.treetocls.org	
¹ Large trees: sequestration is overtaken by CO ₂ loss with decay/maintenance.	
² Positive energy values indicate savings or reduced emissions. Negative energy values indicate increased usage or emissions.	

KZ: We just surveyed this past cohort of [tree] recipients through the Minneapolis Tree Program to get a sense of why they were participating, and how well the program worked for them.

The reason most people cited for participating in the program was simple: because they were losing trees in their community, or they had lost a large tree on their own property. It seems when someone has a tree and loses a tree, finding a way to get another one is a strong driver. Coming in a very close second to all of that was "I can't resist a deal." Some people can't pass up a \$25 tree that would typically cost them \$150-200.

I imagine there is a little bit of both of those kinds of things pushing and pulling. At our community tree planting events, where we're planting in parks around the cities with volunteers, the overwhelming driver for them to come out is because they want to plant a tree for the next generation. We emphasize that we need these trees more than ever because we're going to be losing so many trees.

We want to inspire these folks and thank them for participating in the event. But we also want to make sure they're going home and talking with their neighbors and making sure they know, for example, what an ash tree looks like, and how everyone needs to think carefully about what they'll do with their trees, or what will happen if they don't do anything.

So at our events, we talk about the quantifiable environmental benefits that a tree provides. We try to help people understand what that 20" diameter ash tree does for us—just standing there, cleaning the air and water, conserving energy and a whole bunch of other things. Then think about how many of them there are in our communities. When those numbers are put together, the magnitude of this issue really becomes evident.

We hope this kind of information creates advocates at the same time. We'll find out after the end of this planting season when we resurvey participants. Because we have only two windows for planting – six weeks in the spring and eight weeks in the fall – many of our volunteers come back repeatedly. We were aggressive in education and advocacy this year. We'll see how well it sticks.

ES: Has anything unexpected come out of your volunteer stewardship programs and the potential loss of more trees?

KZ: We have a group of small business owners from Minneapolis, most from south Minneapolis, who've come together to help improve their city. Most are landscape contractors and tree care companies and residential contractors. They call themselves the *Autonomous Collective* and raise money through a campaign aimed at their customers. All that helps us plant trees in north Minneapolis.



The Autonomous Collective

But the Collective has also mounted a really pointed campaign talking about trees and the benefits they provide, talking about the tornado, talking about EAB and also talking about a way for their clients to help a part of the city that needs trees desperately.

This project started with just two people, one was a former employee of Tree Trust. He was a youth employee when he was very young. Now he owns his own landscape company. He wanted to figure out a way to help others.

We told him “we don’t have funding for our north Minneapolis Program this year. Is that something maybe you guys might be interested in doing?” From that, the Collective took off. So far, they have raised \$20,000 for planting trees in north Minneapolis.

Collective members and their staff will come along with us to private properties and help plant these trees in a one-day event, with funds contributed by their customers. I think it’s going to be really interesting to see how people’s perceptions change after that activity because they have been so instrumental in raising the funding for it, telling the story about it, and then implementing it. That was unexpected and exciting.

LC: All these small business owners came together in this novel way to expand support for tree planting. Any hurdles?

KZ: Once the motivation is there, there weren’t so many organizational hurdles. They did create a nonprofit, because as small business owners, they needed to get insurance for the events on private property. Naturally, they didn’t want to put their assets at risk. Originally they wanted to call it simple the *Autonomous Collective*. But apparently there’s an outfit in New York that has already taken that name so now they’re now the Autonomous Collective of Minnesota (chuckle).

LC: Stepping back, you’ve already shared a lot of lessons, but can you reflect on some of your proudest moments or learning moments over these 10 years?

KZ: Yes. When the mayor of Minneapolis called us after the tornado and wanted us to be that “tree first responder” to what had happened – for me that was a really big deal. To know the first thought he had was to get in touch with us was, for me, a pretty proud moment.

It was one of those things where you watch this happen on TV and you want to figure out what you can do to help. Then we were immediately tasked with helping, even though we weren’t exactly sure how to go about it. It was one of those rare moments when we could step up to do the job, without spending a whole lot of time trying to convince people to let us help.

Another moment. I’ve been doing a lot of advocacy work lately at the state level, trying to get funding for EAB. This has opened new avenues for talking about trees and environmental justice with legislators. All this is so intrinsically important to all the goals the state set regarding climate change and clean water. I help bring urban and community forestry to these conversations. I’m excited because I think this is another area where people in positions like mine can help decisionmakers tie it all together.

I think all the things along the way in my 10 years of working with people in planting trees and volunteering, working with volunteers, and working with elementary school kids – that’s what brought me to this place. I don’t know that I would be able to speak as passionately about trees without having

those experiences. Like having a first-grader tell me why trees are amazing, and hearing them say things like “well because they give us oxygen and because they clean the air.” Watching the excitement they experience when planting a tree for their school. Or having a woman be just so grateful for getting a tree planted in her yard after she lost a tree in the tornado. I think recognizing those human connections has really made it a whole lot easier for me to talk to decisionmakers about trees’ importance than if you asked me to do it when I first moved to Minnesota in 2007.

ES: Do you ever think that what your organization is doing is not only good for the environment but also helps to strengthen our democracy—to make a better city?

KZ: No, but I certainly will now! You know it’s funny you say that because we had the Super Bowl come to town. They come in with a significant effort to be seen as “green.” They partnered with us to administer urban forestry grants to cities across the state – not huge but \$4,000 can and did make a difference. We ended up planting in a park in Minneapolis in a neighborhood with a large Somali population, public housing and a rec center right next door. We asked members of the Minnesota Vikings to help kids from the center plant trees.

So, as we’re cleaning up after the NFL events – me and two of my staff, also women – when a Somali woman and her very elderly mother came by. They told us that her mother had just arrived here from Somalia. She was just standing there watching us and she couldn’t believe that three women were doing this work. She wanted to help, so she ended up picking up shovels and handing them to us to help us clean-up.

It was one of those moments when I realized I would have never had this opportunity to connect with these two women from vastly different parts of the world, if I hadn’t been there planting trees that day. Trees are part of everyone’s life, almost everywhere. It binds people together.

LC: Just one last question: Can you reflect a little bit about your future goals and what’s next on the horizon for the Tree Trust?

KZ: We’re in the midst of some growing pains and at capacity, given our structure and the size of our staff. Two people work with me; we have, I think, 25 plantings happening this fall. Mostly our focus has been on what role we can play in response to the emerald ash borer. We’re talking about a couple of generations before we’ll be able to restore that canopy to the pre-invasion levels.

One big void we need to fill is getting more trees on private property. In Minneapolis, there are 40,000 trees on public property but then another 160,000 trees on private property. In the future, we need to find ways to make people understand trees in a different way before they’re gone.

Along with a strong desire to build advocacy within our own networks, I think these are the two big drivers for me, and the future of the Tree Trust. We can’t let the pending loss of so many trees drop out of the public conversation, because that’s often where the money goes. And trees are going to play a really big role in how we survive into the next century.