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NEW HAVEN/URBAN RESOURCES INITIATIVE

**ENVIRONMENTAL STUDIES** 

Yale school of forestry &



URI

SPRING 2020 VOL.31, No. 1

# URBAN ISSUES

NEWSLETTER OF THE URBAN RESOURCES INITIATIVE AT THE YALE SCHOOL OF FORESTRY & ENVIRONMENTAL STUDIES



# THE SCIENCE OF LITTER

by Melinda Tuhus

Walking around Beaver Ponds Park with longtime URI board member Nan Bartow is like getting a tour of her personal garden—she is that intimately knowledgeable about this 109-acre parcel of forest and water near her home, bounded by Southern Connecticut State University, Newhallville, and her neighborhood of Beaver Hills.

During a recent walkabout on one of the rare cold days this winter season, Nan and I passed through a diverse wooded area, following a path that connected the two ponds. She showed me the three biggest of the eight outfalls that bring water into the ponds from surrounding areas—and with the water comes lots of litter. Cleaning up that litter is

the focus of a new collaboration between Yale's School of Forestry and Environmental Studies, SCSU, Urban Resources Initiative, and the City of New Haven.

"There are many underground springs that keep this water going all summer, even in a big long drought," Nan says, "but also we get a lot of water from rainfall and a lot from the streets, which is our big problem. It has many impurities, like salt and oil, and some people think the sewer grates are where you can pour stuff into."

Nan's late partner, Bill Bidwell, first came up with the idea of collecting and categorizing all the trash as a step toward understanding where it originated and thereby suggesting ways to

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# FROM THE DIRECTOR



In our fall newsletter two years ago, I shared some of the late Bill Bidwell's revitalizing accomplishments at Beaver Ponds Park. As part of our Community Greenspace program, a group of about 25 volunteers, called the Friends of Beaver Ponds Park, have gathered together weekly for fifteen years to care for their 109-acre park, just east of Southern Connecticut State University.

Their efforts continue to broaden as they think of new ideas to improve the condition of the park and its neighbors' access to enjoy it, and our URI team is compelled to find the means to support their impressive agenda.

In her cover article, URI Board member Melinda Tuhus describes our partnership with city staff and students from both Yale and SCSU to capture litter from storm-drain outfalls before random trash empties into the ponds, a concern pinpointed by Bill Bidwell years ago. Increasing access to the park from the Newhallville neighborhood is also progressing. Cooperation with the New Haven Parks staff, who obligingly removed some rusted chain-link fencing, enabled URI to extend trails where the fence had acted as a barrier and blocked entrance to the park.

Our work plans for 2020 are equally ambitious in support of other New Haven park volunteers' goals, including installing a splash pad at Cherry Ann Park this spring. We are also embarking on construction in West Rock Park of the New Haven Botanical Garden of Healing for Victims of Gun Violence on Valley Street by the West River.

Meanwhile, after serving as Rhode Island's State Urban Forester, former intern Caroline Scanlan has fortunately returned to URI and now works alongside field supervisor Will Tisdale to lead our tree-planting endeavors. In her article, Caroline explains how a network of Tree Ambassadors encourages recipients of new trees to accept the three-year stewardship care of the street trees planted on their behalf by our GreenSkills teams comprised of our partners at EMERGE, Common Ground and Sound Schools.

As we approach the 50th Earth Day, we face grave environmental concerns. Nevertheless, I am optimistic as I witness the efforts by Greenspace volunteers and GreenSkills tree adopters whose collective actions will culminate over time to transform neglected areas into beneficial, healthy landscapes.

Colleen Murphy-Dunning

## **SAVE THESE DATES!**

#### Rock to Rock Day of Service

April 4, 2020 | 10 a.m. - 12 p.m.

Help clean up sites along the Rock to Rock bike route at Watson & Bassett, Hazel & Shelton Ave, or Scantlebury Park.

## 12th Annual Rock to Rock Earth Day Ride

April 25, 2020 | New Haven, CT

Join us in a community celebration of the 50th Earth Day as we bike from Common Ground High School in West Rock Park to East Rock Park! We invite you to join our team as a rider or volunteer to help raise funds for URI's GreenSkills tree-planting and Community Greenspace programs. Register or donate: https://rocktorock.donordrive.com/team/uri

## **CHRIS'S ADVICE COLUMN**

Chris Ozyck is URI's Associate Director, Greenspace Manager, bioswale and plant technical expert, and Rock to Rock Team Captain. Everywhere Chris goes, he is frequently solicited for his expert tips. Here are a few common springtime topics he covers.

Got plant pests or diseases? Take a plant sample or photo to the CT Agricultural Experiment Station (123 Huntington St., New Haven). The Ag Station can help identify your issue and tell you how and if to treat it. It also will test your garden soil for free.

Concerned about your lawn? Go smaller and organic! Increase your lawn-care knowledge at CT NOFA and the UConn extension service (305 Skiff St., North Haven).

Looking for organic garden products? Chris shops at Agway (66 State St., North Haven—there's also one in North Branford, just off Rt 80, at 11 Whitewood Lane). They have helpful staff and lots of good garden, bird, and pet stuff.

# The Science of Litter

by Melinda Tuhus (continued from page 1)

prevent the problem. He made piles of like materials, including tobacco products, drug paraphernalia, juice and liquor bottles, wrappers, Styrofoam, and more.

"It's one of the key aquatic, open-space areas in the city," says Yale forestry professor Gaboury (Gabe) Benoit. The school's incoming masters students all participate in hands-on summer modules, and one is this study of litter in the ponds. For the past three years Benoit's students have been doing an exercise where they measure plots between one and eight square meters, collect all the trash in the plot, and categorize it. "We found that some of the litter has dates on it, like freshness dates, and it turns out that with very few exceptions it's new stuff, and that made us think if we could stop the supply, after a few years there wouldn't be any litter anymore and people wouldn't have to go in every year and clean it up. So, it's litter control, but it's also a research project." Funded with a grant from the Long Island Sound Future Fund, the project is relevant because much of the trash, if not removed from the ponds, eventually ends up in Long Island Sound.

Benoit notes that the three biggest outfalls drain 79% of the 1,252 acres that form the drainage area of the park, an area that is completely developed with almost no open space. Those outfalls are the ones that will be fitted with three different methods of catching the litter: a big net bag shaped like a sock attached to the outfall, a floating boom set up a few feet from the outfall, and a chain link fence.

URI is responsible for installing the litter traps, and the fence is already in place doing its job of capturing trash, as Nan and I noted. The city parks department is responsible for safely removing the trash from the litter traps on a monthly basis, and then the students do the sorting and weighing.



The litter trap at outfall at Cherry Ann Park is working.

In the fall of 2013 the Department of Parks, Recreation and Trees removed a portion of a chain link fence along Sherman Parkway, which had prevented illegal dumping but unfortunately also blocked community access. Over the next six months, URI's GreenSkills crew planted 48 trees to improve habitat and aesthetics, and to discourage drivers from pulling into the area. The Department of Parks also added boulders to further prevent vehicle access and deter dumping.

The recent removal of the police firing range from Sherman Parkway created an opportunity for the Parks Department to clear away the rest of the fence, completely overgrown with invasive vegetation, and transform the area formerly considered dangerous due to the sound of gunfire. This was especially important because that physical and psychological barrier into Beaver Ponds Park was closest to Newhallville, which has very limited open space other than this park. In place of the fence, URI has installed a tenth-of-a-mile accessible stone-dust nature trail adjacent to the Newhallville community. Next,

URI will lead the uprooting of problematic invasive species in an area of three-quarters of an acre, as well as plantings of new trees with our GreenSkills teams.

Steve Brady teaches an Intro Ecology course at Southern to 16 students each semester. He has a degree from Yale's Forestry School, and he remembers fondly, "One of the first things we did was the three-week module with an urban ecology, environmental justice focus." That's where he met Benoit and URI Director Colleen Murphy-Dunning, and he said he's delighted to be teaming up with them again for this project.

He and his students work "on the biological side of it—how the urban environment affects the critters who live in streams in particular—including water quality in the pond [the one nearer Southern], downstream of the pond, and some streams and ponds nearby for comparison. We look at the community of bugs that live in streams—these macro invertebrates are really responsive to changes in environment—and use a score

to determine water quality, in terms of salt and other runoff contaminants, and how that affects the oxygen level and tying that altogether with the litter side and seeing if there's any difference before and after the litter mitigation when the traps get put in." He adds that the project will help students understand how watersheds work, since litter is being transported to the ponds from the entire watershed. Conveniently, the park is a 10-minute walk from their classroom.

Professor Brady's SCSU students are doing the same exercise [as Yale students] of gathering litter, weighing it and classifying it. He says they're surprised by the amount of litter that collects and are motivated to do something about it. "We go out one week and collect it, and then two weeks later it looks like we didn't even touch it."

He said he hopes through the project to promote interaction between Yale and Southern students, who, after all, have a lot in common and can all contribute to improving their collective future.

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# **Tree Ambassadors**

#### by Caroline (Caro) Scanlan

For URI's GreenSkills Program, the winter months are a time for reflection, tree pruning, and making plans for the upcoming spring planting season. The focus of our planning efforts is to muster new tree adopters, as each of the 200+ trees we will plant this spring season is personally requested by a resident or business in New Haven. The community of New Haven tree adopters is now over 2,600 strong, and together they have received and cared for more than 6,000 trees since the program began just over a decade ago.

There are many paths a person may take to becoming a tree adopter! Some learn at a community management team meeting about the opportunity to receive a tree. Others read the tags on newly planted trees in their neighborhood, and still others receive "A Tree For Every Child" postcards from Yale-New Haven Hospital after welcoming their newborns into the world.

One of the most common ways that people become tree adopters themselves is after hearing about the GreenSkills program from a friend or neighbor—in fact, last year 14% of tree recipients learned about the program only through word of mouth. Many prior tree recipients have become our program's biggest advocates.

This winter, the team at URI has been thinking of ways to mobilize the network of 2,600 individual tree recipients to help promote New Haven's tree planting program. If just 5% of our tree recipients, say, 130, recruited five new tree requesters every season, we would easily reach our planting target of 500+ trees every year. This network of tree adopters could be a powerful tool to spread the word about the program via credible, trusted sources—the neighborhood residents and the tree recipients themselves. We envision that some tree adopters could step into a new role, an ambassador of sorts, as champions of URI's street tree planting program

who can build awareness of what we do, speak positively about their experience of receiving a URI-planted tree, and encourage friends and neighbors to take part in positive change for their city and neighborhood.

### About some of our tree ambassadors

It turns out we don't have to look far when imagining what this tree ambassador role would look like, as there have been many residents over the years who have worn this hat, but without an official title.

Lynn Street, president of the Ronan-Edgehill Neighborhood Association, is an avid gardener and lover of trees. Delighted by a recent street tree planting at a neighbor's property around the corner from her, Lynn reached out to URI asking if we might assess the potential of planting in front of multiple homes on Huntington Street. Lynn had already organized "a gaggle of neighbors who [were] willing to coordinate planting [their] block," and offered to act as the "tree yenta," providing extra coordination with URI and watering support should the neighbors need it. Lynn successfully marshalled adopters for nine new trees this past season. When she shared the details of our initial site visit to her neighbors, she signed her email, "in search of shade."

Steve Winter is the Alder for Ward 21, a district that stretches across Newhallville, parts of Dixwell and Prospect Hill, and into East Rock. Since taking office two years ago, Steve has made it part of his mission to support his constituents in getting curb-strip stumps removed and new trees planted. Steve thinks that "tree stumps are a big hook," because when he's able to tell a resident they can not only have a large stump removed from in front of their home, but also have a new beautiful tree planted in its place, he's able to offer a tremendous service to the residents of his ward. Steve is currently one of our most active tree ambassadors. His advocacy was responsible for 11 of the new trees



Tree planting on Audubon Street in spring 2019—thanks in large part to the care and coordination of New Haven Tree Ambassador Arthur Nacht

planted in fall 2019 alone.

To read more URI tree ambassador profiles, visit our volunteer webpage at:

https://uri.yale.edu/get-involved/volunteer

### Now it's your turn

If you are reading this, we would like YOU to become a tree ambassador in the city of New Haven. The overall purpose and goal for each ambassador is to recruit five friends, neighbors, or businesses to request a tree from URI in 2020. We are here to help you reach this goal and can speak to you about customized outreach plans.

A few ways that you can get the word out are by 1) knocking on your neighbors' doors we can provide pamphlets and information; 2) speaking at local community meetings; 3) engaging your faith communities, schools, or civic groups; or 4) sending out the message through social media or email. However, these are just a few of the ways, and we know that our ambassadors will dream up many others.

Please spread the word about our tree planting program—and if you would like to step up as a tree ambassador, please sign up online (https://uri.yale.edu/get-involved/volunteer) or contact the URI team at uri@yale.edu or 203-432-6189.

About the Author: Caroline (Caro) leads URI's street tree planting program. She graduated from Yale F&ES in 2018 and fell in love with New Haven while working for URI as a graduate student. Caro is delighted to be back in the Elm City, collaborating with so many wonderful partners to care for New Haven's urban forest.

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