

NON-PROFIT
US POSTAGE
PAID
PERMIT 526
NEW HAVEN

195 Prospect Street
New Haven, CT
06511-2189
T: 203 432.6570
F: 203 432.3817
www.yale.edu/uri

NEW HAVEN/URBAN
RESOURCES
INITIATIVE



FALL 2016
VOL. 27, No.2

URBAN ISSUES

Newsletter of the Urban Resources
Initiative at the Yale School of Forestry
& Environmental Studies



Photo Credit: Leana Weissberg

EXPANDING AND INFORMING NEW HAVEN'S BIOSWALE PROGRAM

by Kevin Dahms

Over the past year, URI, in collaboration with the Yale Hixon Center for Urban Ecology, has expanded its work on rain gardens, also called bioswales, to include the construction of seven new installations on Daisy Street and Watson Street in the Newhallville neighborhood of New Haven. Bioswales are essentially gardens that are optimized for stormwater retention and planted in the strip between the street and the sidewalk. The Newhallville implementation builds on prior URI work on West Park Avenue, where eight bioswales were constructed and monitored in 2015. One of URI's GreenSkills crews completed construction on the Newhallville bioswales in

March 2016. These installations will serve as natural stormwater drainage basins, which will collect and filter stormwater runoff from the roadway and adjacent properties. New Haven engineers helped select these locations in Newhallville based on their upstream position in the sewer system, which allows for monitoring and may help reduce peak flows during large rain events that contribute to flooding downstream. This strategy for managing stormwater, called green infrastructure, has become increasingly popular throughout the country and New Haven is on the verge of implementing a large scale installation of these systems. In 2014, the City was awarded a federal grant to install

(continued on page 3)

In this issue:

Newhallville's Learning Corridor	4
Tree Care Extraordinaire	5
Announcements	6



FROM THE DIRECTOR

**NEW HAVEN / URBAN
RESOURCES
INITIATIVE, Inc.**

**Yale School of Forestry
& Environmental
Studies**
Dean Indy Burke

**Hixon Center for
Urban Ecology**
Gaboury Benoit,
Director

URI Faculty Advisors
Mark Ashton
William R. Burch Jr.

URI Staff
Colleen Murphy-Dunning
Christopher Ozyck
Katherine Beechem
Anna Ruth Pickett
Matthew Viens

**New Haven/URI
Board Members**
Anna Bartow
Michael Bruno
Josephine Bush
Heidi Coutu
Gordon Geballe
Christine Kim
Laurence Nadel,
President
Sara Ohly
Erik Pearson
Britton Rogers
Joseph Ryzewski
Errol Saunders
Semi Semi-Dikoko
Harry Wexler
Don Williams

URBAN ISSUES
Fall 2016
Vol. 27, No.2



URI continues to successfully engage people across New Haven on a broad range of projects that they have identified as important. As Elias Estabrook shares in his article about planting with Doreen Abubakar along a stretch of the Farmington Canal, there is ample opportunity to find common purpose to improve our shared environment even when there may be a wide range of visions of why and how to do so.

Fortunately, we have built strong bridges across government and civil society to meet the challenges we find in the urban environment. Whether we are discovering the best way to construct bioswales as a means to address unemployment and stormwater pollution or to plant a tree to meet the desires of a New Haven resident like Jane Kinity, articles by Kevin Dahms and Jared Newman describe how we continually seek to understand how to meet the priorities of the people who inhabit our city.

Our mission continues to recognize the importance of involving people across our City and forging a shared agenda. Together we are laying a foundation of genuine partnership to enhance, restore and protect New Haven's legacy of beautiful parks and our vibrant tree canopy to increase their use and enjoyment for the benefit of all.

Colleen Colleen Murphy-Dunning

Expanding and Informing New Haven's Bioswale Program

(continued from page 1)

approximately 200 of these rain gardens in the downtown area to reduce chronic flooding in the area around Union Train Station and improve water quality entering Long Island Sound.

While New Haven has been able to reduce its point source pollution, which comes from identifiable locations such as industrial plants, there is still much work to be done in terms of non-point source pollution such as runoff from city streets and private properties. As rainwater lands on impervious surfaces such as roads, sidewalks, and roofs it becomes stormwater that runs as surface flow towards drains and catch basins and into the storm sewer system. On its way to the sewer, the runoff collects pollutants such as nutrients from fertilizers, contaminants associated with motor vehicles, and sediment. After entering the storm sewer system these pollutants are transported along with the stormwater to Long Island Sound, which reduces water quality and causes environmental degradation. Furthermore, during large storm events, the high stormwater flows cause severe flooding in the storm sewer system downstream. Green infrastructure strategies aim to mitigate these water quality challenges and reduce the impacts of flooding throughout New Haven.

EPA and National Fish and Wildlife Foundation awarded a grant to URI and the Yale School of Forestry and Environmental Studies (FES) to construct and monitor seven bioswales in Newhallville. Yale FES Professor Gaboury Benoit installed hydrologic monitoring instruments to measure the performance of the bioswales in reducing flow rates during storm events. Working with Professor Benoit, I have conducted water quality sampling during large storm events to analyze the



A bioswale on Daisy Street.

effectiveness of the bioswales in reducing pollutant loads such as suspended solids, nitrate, total nitrogen, and orthophosphate.

While the data are still being collected and processed, the initial outcomes confirm what was observed at the study sites on West Park Avenue results, which demonstrated that the bioswales were capable of removing over 75% of the stormwater runoff from the contributing drainage area. Preliminary results from the Newhallville sites show that the bioswales are capable of significantly reducing peak flows and - in some cases of small rain events - managing 100% of the runoff generated from the contributing drainage area. Samples for stormwater quality are still being analyzed to evaluate the bioswales' performance for pollutant removal. URI will post online the final research results from the Newhallville bioswales so the data will be available to the public. In addition, the City of New Haven will use the results from this study to inform design criteria, such as bioswale size and soil media composition, as they embark on installing approximately 200 bioswales in the downtown area starting in 2017.

Harmonious Visions in Newhallville's Learning Corridor

by Elias Estabrook

This past summer, I supported seven Greenspace groups as a community forestry intern. Week by week, I delivered material resources like plants, soil, and mulch to help group leaders beautify their streets and parks. Working alongside Doreen Abubakar and her Greenspace group in Newhallville's "Learning Corridor", in particular, was one of the most formative experiences of my life.

The Learning Corridor is situated in New Haven's Newhallville neighborhood on the Farmington Canal Heritage Greenway, a linear park that stretches 84 miles north from downtown New Haven. The Farmington Canal transported goods as a functional canal for barely a decade in the 1830s before being converted to a railroad that remained operational until the 1980s. In the early 2000s, the abandoned railroad tracks were transformed to a paved path for non-motorized vehicles. Today, this paved Greenway winds through New Haven's Downtown, Dixwell, and Newhallville neighborhoods, serving visitors and local residents of all ages as a safe transit corridor for walkers, runners, cyclist commuters, and recreational bikers. The Learning Corridor occupies a one-block section of this Greenway.

I continue to help Doreen engage neighborhood residents and coordinate events in the Learning Corridor as an AmeriCorps VISTA at Neighborhood Housing Services of New Haven. Weekly I witness the gradual realization of Doreen's vision for the Learning Corridor as "a hub for the community." Her goals are slightly different than the scope of the URI Community Greenspace program, but are harmonious with URI's mission of mobilizing community members to



Young Greenspace volunteers add mulch to perennial beds in the Learning Corridor, at the Hazel Street entrance to the Farmington Canal path.

revitalize and enjoy green spaces in their neighborhood.

Doreen – a social entrepreneur and environmental educator – strives to engage neighborhood constituents in the creation of an active greenspace. Although Doreen is a resident of the West River neighborhood, she has committed over five years to building relationships with residents and community leaders in this predominantly African-American community. This past summer, I saw Doreen tirelessly pass out fliers, strike up conversations with pedestrians, and knock on doors of the households surrounding the Learning Corridor at Shelton Avenue and Hazel Street. These efforts bore fruit, as about 160 individuals joined us for volunteer sessions over the course of the summer.

funding from the Farmington Canal Rail to Trail Association to compensate several Newhallville youth who regularly watered the plants through mid-October.

The urban oasis section of the Learning Corridor serves the community in what Doreen calls a "community station" for environmental "inquiry and discovery." As a next step, she will facilitate educational activities in the Learning Corridor by "developing curriculum and creating signage," with the support of the Urban Oasis partner organizations. Thanks to these organizations, a network of urban oases that now speckle New Haven and can be found in ten parks (including Beaver Ponds, West River Memorial, and Edgewood) and eight school-yard habitats.

Next spring and summer, local children and families on the Farmington Canal Greenway will be able to observe the bees, butterflies, and birds drawn to the flowers and tree branches of the Learning Corridor. After one season of experimentation in the new urban oasis, Doreen will be ready to help people rediscover "their connection to the environment." Her mission echoes URI's mission of increasing community enthusiasm towards local environmental stewardship. We are excited to have her as a partner.

Elias Estabrook graduated from Yale College with a B.A. in Political Science in May 2016. As a student he concentrated on environmental challenges and social movements with an interdisciplinary lens. He worked at URI as a Greenskills co-supervisor for two semesters and as a community forester intern for one summer.

Tree Care Extraordinaire

by Jared Newman

Every tree planted by URI's Greenskills crews is in response to a request from a resident or business. Some individuals request trees in tribute – honoring anniversaries or the loss of a loved one. Some trees are planted when a child is born, through a collaborative partnership with the Yale New Haven Hospital. Other tree requests are simply from people who want to make their homes and streets more beautiful.

These tree requesters have the responsibility of ensuring their tree thrives. They take responsibility for ensuring the trees are well-watered and mulched, and deserve recognition for their efforts. That is why we recognized exceptional stewards this summer with a report card or “tree check-up” and invited the stewards to tell us about taking care of their new tree. We would like to highlight one of the extraordinary tree stewards here, Jane Kinity.



Jane Kinity and her Tree of Hope.

Jane, a New Haven resident of sixteen years, requested a tree from the URI. A GreenSkills team planted her tree in the fall of 2015. Jane's tree was one of the 306 new trees the GreenSkills crews planted that season. Planting trees is important, but it is only part of the process. It is tree stewards like Jane who nurture the tree that will ensure they bring benefit for years to come.

When asked why she'd requested a tree, Jane cited both “environmental and atmospheric change” as well as “beauty” as motivations. “The tree gives the neighborhood a new look,” Jane said. “It also provides shade from the sunlight for our neighborhood's homes.”

Jane enlisted her family to help with caring for the tree. All of their hard work

is reflected in the “Cardinal” crabapple tree growing vibrantly on her street.

“Thank you for the change you have made in our community,” Jane wrote to URI.

Jane – it is you we would like to thank. Thank you Jane, not only for being a great tree caregiver, but for envisioning how to make your community greener and taking action to make it happen.

Jared Newman is a first-year at Yale College who joined URI's intern crew with a special focus on social media and writing. Jared is a published author and an experienced digital marketer who hails from NYC.

Announcements

Greenspace End of Season Celebration

Together with the New Haven Land Trust, on October 6th, we gathered at the Carousel at Lighthouse Park to celebrate with well over 100 volunteers who have been caring for New Haven's gardens in 2016. Over a delicious dinner, we heard the City's Director of Parks Rebecca Bombero and Chief Administrative Officer Michael Carter praise the community-based greening efforts of URI's Community Greenspace and the Land Trust's Community Gardens. We wrapped up the evening with rides on the carousel and cakes by Marjolaine Bakery. Special thanks to New Haven Parks, Recreation and Trees for hosting us and to United Illuminating for sponsoring dinner!



Yale Trees: Staff Service Recognition at West Campus



In lieu of receiving traditional gifts, Yale staff members celebrating five-year milestone anniversaries have the option of supporting tree planting on campus to commemorate their years of service to Yale. Encouraging Yale staff to memorialize their dedication to the University through environmentally and socially responsible gifts is just one way that URI builds community throughout New Haven. On October 5th, URI, Yale Human Resources, and local volunteers came together on Yale West Campus to honor over twenty Yale employees, three of whom helped plant the six new trees on the beautiful West Campus Urban Farm. Honoree Mark Aronson is photographed here (top row center).

Join URI's Rock Band!

Registration is now open for the 2017 Rock to Rock Earth Day Ride. Join us on Saturday April 22, 2017 for a bike ride from West Rock to East Rock along one of five beautiful routes that wind through the New Haven area's greenspaces, parks, neighborhoods, and streets, accompanied by live music and great food. There will be an 8-mile route, a 12-mile route, a 20-mile route, a 40-mile route, and a metric century. Last year, 1,307 registered cyclists of all ages participated, raising over \$160,000 for more than 25 organizations including URI, supporting our Greenspace and GreenSkills programs. We hope to see you on April 22nd for a fun day of exploring New Haven by bike and celebrating Earth Day with our 25+ terrific environmental organization partners!

To join us, visit www.rocktorock.donordrive.com. Register now!

