

Sustainability on a Community Level

Here's a look at memorable models of sustainability from the AHS National Children & Youth Garden Symposium in Madison, Wisconsin, this summer. BY ERIKA CHRIST



Making apple cider at Troy Kids' Garden, above left, and harvest time at Goodman Youth Farm, above right, both part of Community Groundworks.

FOR MOST home gardeners, gardening in environmentally sustainable ways means cultivating native plants, composting and mulching, avoiding pesticides, collecting rainwater for watering plants, and saving seeds, among other horticultural practices.

In many cities and communities, however, organizations are taking environmental sustainability to a new level—

employing unique strategies and forming collaborative partnerships to reduce, reuse, or recycle materials, and achieve zero waste.

According to the Zero Waste International Alliance, zero waste refers to “the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threat-

en the environment or human health.”

At the American Horticultural Society's (AHS) 27th annual National Children & Youth Garden Symposium (NCYGS) in Madison, Wisconsin, this past July—where the overarching theme was “Building Blocks for a Sustainable Future”—attendees learned about or experienced several innovative programs incorporating reduce, reuse, and recycle principles.



JOIN US IN 2020! The American Horticultural Society's 28th annual National Children & Youth Garden Symposium will take place in July 2020 in Santa Cruz, California. Learn more in future issues of *The American Gardener* and on our website at www.ahsgardening.org.

COMMUNITY COMPOSTING FOR HEALTHY SOIL

Detroit Dirt, a company specializing in compost and food waste solutions for the Detroit metro area, is on a mission to create a zero-waste mindset in the local business community and to drive forward a low-carbon economy. As a leading model of organic waste recovery and reuse, the organization takes food waste from companies like General Motors and Blue Cross Blue Shield, spent grains from local breweries, and herbivore manures from the Detroit Zoo, and turns them into compost for local urban farmers and gardeners. A foundation created by the organization's founder, Pashon Murray, also helps local STEM teachers educate kids about the importance of composting and how it contributes to healthy soil.

Murray is an intrepid entrepreneur and a passionate educator who's committed



Pashon Murray, founder of Detroit Dirt

to transforming the next generation into environmental stewards. During a keynote address at the symposium, Murray highlighted Detroit Dirt's work to build awareness and develop solutions to the food waste epidemic, and her organization's development of a "compost toolkit" containing age-appropriate teaching materials, which will be piloted in schools this fall.

"If you're looking at food waste—capturing the energy, as well as keeping it from landfills—we can now empower people to understand this from an awareness standpoint, but we also can teach young people to take initiative and become ambassadors of the environment," said Murray.



Symposium attendees visit the Irwin A. and Robert D. Goodman Greenhouse in July.

TRULY "GREEN" GREENHOUSE

At Spring Harbor Middle School in Madison, environmental science is integrated throughout the magnet school's curriculum. Seventh-grade science teacher David Ropa—a 20-year employee who recently guided groups of NCYGS attendees on a tour of the school's extensive gardens—explained that Spring Harbor originally had no outdoor growing spaces. In 2004, that changed when the school built a small rain garden. From there, it went on to construct more gardens and outdoor learning spaces, including a compost station, butterfly garden, edible schoolyard, and, eventually, a greenhouse conceived by Ropa.

To avoid the large carbon footprint generated by many conventional greenhouses, Ropa chose to build a completely sustainable greenhouse. With the support of Spring Harbor students, volunteers, industry professionals, grants, and generous donors, the school built a 1,600-foot structure from reclaimed, repurposed, and sustainable materials such as foundation bricks made of recycled wooden pallets, ceiling insulation composed of cellulose from recycled newspapers, and windows made from sliding glass doors turned on their sides. The Irwin A. and Robert D. Goodman Greenhouse at Spring Harbor officially opened its doors on Earth Day 2016.



Spring Harbor Middle School's greenhouse features interior walls insulated with light straw clay.



A Troy Kids' Garden staff member makes kale chips in a solar-powered oven.

Over the past few years, the greenhouse has taken on a prominent role in the community. “Besides using it for school classes, we run a summer garden camp for young people throughout Dane County,” said Ropa. “We’ve also hosted a local jazz concert, teacher trainings, community garden space, and even a family pizza night using a portable wood-fired pizza oven.”

FROM PLASTICS TO PLANT HOLDERS

Community GroundWorks, a Madison nonprofit connecting people with nature and local food, embodies the principles of reuse and recycle. The organization—which served as AHS’s local host for the 2019 symposium—develops, manages, and stewards Troy Gardens, a 26-acre parcel of urban property comprised of community gardens, an organic farm, and restored prairie and woodlands. The property also includes Troy

Kids’ Garden, a nature-based playscape providing hands-on gardening, arts, nutrition, and environmental education for kids from local community centers and schools.

Strolling through Troy Kids’ Garden one summer evening, symposium attendees had the opportunity to admire its productive vegetable gardens, colorful compost bins, and outdoor cooking facilities, including a homemade wood-fired pizza oven and a solar-powered oven for making crispy kale chips and other healthy garden-grown treats.

As the garden’s manager, Community GroundWorks staff member Ida Sobotik tries to help children make meaningful connections from what they learn. Kids, for example, have used a bike-powered blender to make homemade apple cider, thus using renewable energy—their own pedaling—to blend ingredients.

HOME GARDENER TIPS TO PROMOTE SUSTAINABILITY

- If you’re composting at home, consider contacting a local school or place of worship to ask if you can pick up their used coffee grounds and tea bags on a weekly basis.
- Updating your home windows or furnishings? Try transforming your old windows into a cold frame or using desk drawers as flower boxes.
- Connect with other sustainability proponents in your community via your neighborhood listserv, local Freecycle network, or Nextdoor.com, and offer to swap seeds, share cuttings, or take unneeded construction materials—such as bricks and cinder blocks—off their hands to use for raised bed gardens.

Now the garden is using cutting-edge techniques and technologies to address another sustainability issue: plastic pollution. Touched by one child’s comment that “plastic is so ugly; it just never disappears,” Sobotik connected with a global community called Precious Plastic to tackle the garden’s perpetual plastics problem.

With the financial backing of several community organizations and foundations, Community GroundWorks is using Precious Plastic’s open-source resources and collaborating with a designer and engineers to build a tricycle-operated plastics shredder for Troy Kids’ Garden. Once the plastics are shredded into flakes, they will be heated and molded into new objects like plant holders and pots—with kids lending their creativity to the finished products, said Sobotik.

What can home gardeners learn from these community models of sustainability? Besides gaining inspiration for small-scale sustainability projects, they can share information about these successful programs with key influencers in their communities. More important, they can reflect on their own roles, and responsibilities, in helping future generations connect with plants and become stewards of the environment. 🌱

Erika Christ is manager of communications and marketing with the American Horticultural Society.