

School Garden Spotlight: Waddington Elementary

Melissa Guillet, Master Gardener

Melissa Guillet became a Master Gardener in 2011, was named Audubon Educator of the Year in 2012, and will have her school garden featured in Whole Foods magazine this April.

School Garden Funding:

Educational Opportunities with Learning Materials: ASRI

Take FREE "*Schoolyard Science for the Urban Ecosystem*" (funded by RI Foundation) and get books, science tools, garden materials, and more, plus very useful knowledge and a great network of people!

Contact Kristen Swanberg
Senior Director of Education
Audubon Society of Rhode Island
1401 Hope Street, Bristol, RI 02809
Tel: 401-245-7500 ext. 3111
Fax: 401-245-9339
kswanberg@asri.org

Grants:

Look at past winners. Be very specific in goals. Will others match part of grant? Consider what you will need in the future to keep the garden going. Is program sustainable? Cite evidence! Helpful tips here: <http://www.fns.usda.gov/farmtoschool/census/#/toolkit/module/11>
<http://www.gardenabcs.com/uploads/nativeplantgrantadvice.pdf>

January Deadline \$300-\$500

Kitchen Gardens International/ SowItForward.org

http://kgi.org/grants?gelid=CjwKEAiAodOIBRDCjr-UIJDjtVUSJABR7fxyGTPpfYDT0XQB976-ZUNGW2fKI-is0cn42TZnOt8NIhoC5prw_wcB

February/October Deadline \$2000-\$5000

Lowe's

<http://www.toolboxforeducation.com/>

April \$20,000

Farm to School (requires matching 25% of funds)

<http://www.fns.usda.gov/farmtoschool/farm-school-grant-program>

September \$500

Green Thumb Challenge

<http://www.greeneducationfoundation.org/greenthumbchallengesub/green-thumb-challenge-winners/712-green-thumb-challenge-grant.html>

October \$2000

Whole Kids Foundation

RI Recipients (including Waddington): <https://www.wholekidsfoundation.org/about/grant-recipients/>

December \$500 to use in online store

Kids Gardening

<http://grants.kidsgardening.org/2015-youth-garden-grant-1>

Even More Grants:

<http://www.gardenabcs.com/Grants.html>

http://www.creec.org/grant_opps/79

Local Donations:

City compost: Contact city or town maintenance. Some will deliver to schools free.
Rain barrels: <http://www.narrabay.com/Education/Rain%20Barrels.aspx> or Google “free rain barrel RI”
Free paint from Home Depot/Lowes (ask for abandoned mixed paint and tell them it’s for a school)
Feinstein Good Deeds (Use money for seeds; donate some of plants to local food banks)
Parents and local community: Plants, tools, labor, refreshments

Networking:

ASRI (school workshops for \$\$)
Community Gardens in your area
[EdibleSchoolyard.org](http://edibleschoolyard.org) (download beta version of Eco-Warriors badge book at <http://edibleschoolyard.org/resource/eco-warrior-handbook>)
Farmers’ Market (ask for school visits)
Revive the Roots
RWPZoo
Southside Community Land Trust
URI Master Gardeners

Recycling:

Terracycle.com: Send in juice pouches, candy wrappers, empty toothpaste tubes, etc. for cash! Set up your school as the charitable entity you wish to donate to.

Resources:

“Do the Rot Thing” Compost Activities:
http://www.cvsdmd.org/uploads/6/1/2/6/6126179/do_the_rot_thing_cvsdmd1.pdf
www.FlyingWild.org Bird-based activities
[How to Grow a School Garden](#) by Arden Bucklin-Sporer and Rachel Kathleen Pringle
[Hands-On Nature](#) by the Vermont Institute of Natural Science (featuring great puppet show scripts)
[The Nature Connection](#) by Clare Walker Leslie (focusing on writing and drawing)
[No Student Left Indoors](#) by Jane Kirkland (creating field guides)
NFW's activity-focused [Access Nature](#). 45 hands-on, habitat-based activities. Disability-friendly.

Supplies:

Alibris: Used books (I recommend books by John Himmelman)
ASRI: Puppets, Peterson Guides, Science Kits (coupons for members!)
The Bone Room: Insects in lucite
Dollar Tree: Bird “beaks” (salad tongs, pliers, tweezers)
Ocean State Job Lot: Science Kits/Bird Seed/Garden Seeds
Oriental Trading: Visuals, Science Models
URI Master Gardeners: Seeds

What to do with the results:

Teach health eating, how to cook, how to can (pickles are easy)
Grow a theme, like a pizza or salsa garden or fairy tales (Jack and the Bean Stalk, Cinderella’s pumpkin)
Measure and track for math (plant growth, weather, species sighting)
Make dyes from flowers, beets, etc., art from seed pods and dried flowers
Draw and paint what you see in the garden
Explore the five senses, food chains and food webs, decomposition and compost
Have scavenger hunts
Donate to food pantry

DEADLY LINKS:

Objective: Learn about the food chain and how can pesticides affect it

Time: 20 minutes

Materials Needed: Colored craft sticks

Process: Explain that each of them will have a chance to be a grasshopper, a vole (like a mouse with a short tail), and a hawk. The grass grows because of the soil, water, and sun. The grasshopper gets that energy by eating leaves and seeds (the craft sticks). The vole gets that energy by eating the grasshopper. The hawk then gets that same energy by eating the voles.

Divide children into three equal groups by assigning children as a “One”, “Two”, or “Three”. Group One are grasshoppers first. Toss the colored craft sticks far and wide and have “grasshoppers” hop as quickly as they can, collecting as many sticks of “energy”. About 30 seconds later, the voles (Group Two) may chase the grasshoppers. If they tag a grasshopper, the grasshopper must give up their seeds and sit down. 30 seconds later, the hawks (Group Three) get released to chase and tag the voles, also getting the craft stick “energy” if they tag someone. Call everyone back to see who is still alive and how many seeds they got.

Next, explain that the grass was sprayed with pesticide. The pesticide was on only the red sticks. Now, who is sick (1-3 sticks) and who is dead (more than 3 sticks)? Play again, with Group Two being grasshoppers, Group Three voles, and Group One hawks. Change the color of the poison seed. Check who survived. For the third run, Group Three are grasshoppers, Group One are voles, Group Two are hawks. Select color to be poisoned when groups get called back.

Variations: When hawks are released, they may tag voles and grasshoppers.

When group returned, repeat pesticide color to see if animals learned to stay away from it.

What They Will Learn: Animals gain energy by eating plants and/or animals. If toxins are introduced low on the food chain (grasshoppers), the toxins accumulate in animals eating many contaminated animals. This is why mercury (a toxic metal) is found in hazardous levels in fish near the top of the food chain (such as tuna and sharks). Toxins can affect animals in other ways than sickness and death. Eagles and other raptors became endangered when exposure to DDT caused them to lay eggs with shells too fragile to withstand nesting. The eggs broke and no new raptors hatched.

Courtesy Melissa Guillet, Eco-Warriors Coordinator, from the ASRI program "**Schoolyard Science for the Urban Ecosystem**". Contact: melissaguillet27@gmail.com

FOOD WEB:

Objective: Learn about food webs through a fun game of toss.

Time: 20 minutes

Materials Needed: Skein of yarn. Laminated pictures of rain clouds, wind, sun, rock, dirt, rotted log, pill bug, worm, mushroom, spider, mantis, butterfly, flower, oak leaf, oak tree, acorn, squirrel, mouse, hawk, aphids, ladybug, robin, bee, ant, grasshopper.

Process: Have children sit in a tight circle. Pass out the pictures. Children keep picture on floor in front of them. Explain that every card is connected in some way, and their job is to speak the connection out loud before tossing yard to person holding that picture. For instance, person holding squirrel picture sees an acorn across ring. Holding one end of yarn, child throws rest of yarn ball to child with acorn picture. Child with acorn picture catches yarn and looks for another connection, such as oak tree, wind for air, rain or sun to grow, or eaten by mouse. Game continues as long as possible, taking care that each child gets picked at least once. A “web” will start to form.

What They Will Learn: Children will learn that there are several connections in the natural world, and food “webs” are more prevalent than food “chains”.

Extension: Use Food Web cards from water habitat, detailing what each inhabitant eats. Use cards as a “War” game, where cards higher on the food chain take out lower cards.