

Closing the Loop: A Zero-Waste Sustainable Food System:

- ~ Recycling Nutrients via Composting to build Healthy Soils ~
 - ~ Food Production via Small Urban Farms ~
 - ~ Food Preparation at a Commercial Kitchen ~
 - ~ Food Distribution via Farmers Markets ~
- ~ Healthy Consumption at our Pay-with-what-you-can Café ~
 - ~ Food Access for Children At-Risk for Hunger:

Kids Helping Kids Hands-On via Food Bank Smart Sacks Program ~

~ Advocacy, Education & Community Stakeholder Grassroots Representation via a Food Policy Council ~

The Culinary Consortium is driven by Renewable Energy







What can we grow in Suitland? Lots.





But will they eat what we grow? You bet!





The Culinary Consortium is Teaching the Community How to Close the Loop on a Zero-Waste Sustainable Food System

The Culinary Consortium is a partnership between growing SOUL, Drew-Freeman Middle School, Windsor Crossing, the STEER Center and Councilwoman Karen R. Toles

Growing SOUL 12 Lesson Core Curriculum: Creating a Sustainable Food System

Lesson 1: August:

Nature's Cycles, the Importance of Soil, and Getting our Hands Dirty (Option to build one or more raised garden beds)

SUPPLEMENTAL LESSON: Where Does Our Food Come From? Field trip / workday at a local farm

Lesson 2: September:

Why Compost? Building and Using a Compost Bin (Option to begin a school-wide composting program)

Lesson 3: October:

You Can Grow Anywhere with a Container Garden (Containers can be kept in classrooms or taken home)

Lesson 4: November:

Introduction to Seasonal Eating (Includes making seasonal food posters)

Lesson 5: December:

Healthy Eating on a Budget: The Great Grocery Challenge (Optional field trip to grocery store or farmers market)

Lesson 6: January:

The Wonder of Worms! Castings and Vermicompost Systems (Option to create/continue a class worm bin)

Lesson 7: February:

Planning a Pesto/ Kim Chi/ Salsa / Pizza Sauce Garden (Includes ordering seeds and/or plant starts)

Lesson 8: March:

Reusing Straight Waste-Vegetable Oil and Recycling WVO into Bio-Diesel (Can be on-site or include a field trip)

Lesson 9: April:

Preserving our Food 1: Fermenting, Freezing, and Dehydrating (Students taste, make, and keep a variety of seasonal goodies) SUPPLEMENTAL LESSON: Sharing the Bounty Field trip/ workday at a farmers' market or food bank

Lesson 10: May:

Preserving our Food 2: The Canning Corner (Option to make pickles, sauces, or preserves)

Lesson 11: June:

Spectacular Salads and a Plethora of Pestos (Nontraditional but delicious salads and spreads with take-home recipes)

Lesson 12: End of Session:

Final Project / Harvest Celebration

FROM COUNCILWOMAN KAREN R. TOLES, DISTRICT 7



(L to R: Jessica Weiss, growing SOUL Executive Director; Councilwoman Karen R. Toles, District 7; George Nader, Commander District 3)

What follows is the history of our Urban Community Farm Project and a selection of recipes made with ingredients that we are growing in our Prince George's Urban Agriculture Center at Drew-Freeman Middle School and Windsor Crossing. The partnership between myself, growingSOUL, Drew Freeman Middle School, Windsor Crossing and the STEER Center is one I am proud to support in order to bring more locally grown produce, to encourage healthier eating options and to support job creation in the Suitland community.

I believe that the best way to empower and engage the community is to support efforts that nourish our spirit as well as our bodies. The Suitland Urban Farm, Farmers Market and Commercial Kitchen present multigenerational economic and educational possibilities, where young and old engage in safe, hands-on opportunities where they can exchange

knowledge, become lifelong learners and connectors. It is my hope that you will spread the word and be a part of a growing movement that is happening right here in Suitland, MD.

Get your taste buds ready....



WHY AN URBAN AGRICULTURE CENTER?

The Prince George's Urban Agriculture Center, a model for school, community, and economic success, integrates healthy eating and active living (HEAL) and science, technology, engineering and mathematics (STEM) workforce development. The initiative is centered at the Suitland Technology Center in Suitland, Maryland.

Suitland was identified as a food desert in a 2010 University of Maryland study entitled "Access to Healthy Food in Prince George's County: An initial exploration of food access and food deserts in the Developed Tier of Prince George's County, Maryland." And, the National Oceanic Atmospheric Administration (NOAA) National Environmental Satellite Data Information Service (NESDIS) is located in Suitland. NESDIS has identified STEM workforce development needs due to two new sites located in Prince George's County, Maryland.

Last year, with the award of a National Science Foundation grant and a Kaiser Permanente grant, Urban Farming became the signature STEM initiative to prepare middle schoolers for NOAA mission-related careers and the young urban farmer-scientists seeded their first community farm. The project engaged 15 youth in learning about nutrition and agriculture as part of the school's STEM (science, technology, engineering, and math) curriculum. Forty youth will be enrolled in the urban farm program during the next school year.

Also, the grants launched a separate but complementary farm just blocks away at the Windsor Crossing Apartments, home to 253 apartment units. At the farms, the youth are harvesting garlic, onions, kale, spinach, sweet potatoes, beets, peanuts, strawberries, tomatoes, sunflowers, basil and cilantro, part of an entrepreneurial project for the youth to sell locally made salads, salsas, pesto, tomato sauce and brownies; replicating a successful economic development venture in Cleveland, Ohio.

The community farm provides an active, experiential learning opportunity for students, teachers, and community stakeholders, and illustrates the connection between three important national issues: childhood obesity, food deserts, and environmental stewardship (climate change). Urban farming is as a solution to all three.

ABOUT OUR PROGRAM

The Drew Freeman Urban Community Farm is an activity of the Science and Math Investigative Learning Experiences (SMILE) Club supported by a National Science Foundation Grant (DRL-1031015). The SMILE Club is a Science, Technology, Engineering, and Mathematics (STEM) afterschool and summer extended learning opportunity for students and professional development for teachers. Core outcomes of the SMILE Club are:

- (1) Motivate students to be interested in NOAA mission-related careers.
- (2) Use inquiry-based, experiential learning tasks and activities to help students deepen their understanding of what they are learning and why they are learning it.
- (3) Support, promote, and reinforce responsible environmental habits through recycling, trash managements, sustainable energy, and other environmental stewardship activities.

STEM CURRICULUM

(Science, Technology, Engineering, Mathematics)

Urban Farming is Environmental Science: We learned about creating a sustainable food cycle including: composting to make healthy soil for our food production; the water cycle and conservation using rain barrels; planting and nurturing food growth; healthy food preparation and consumption by making our own snacks each week (recipes follow); and recycling leftover nutrients by composting with worms in our classroom. In our food preparation, we learn about: evaporation and condensation making sauces; breaking down cellulose membranes by adding salt to kale in the massaged kale salad; fermentation by making pickles; and caramelizing natural sugars in greens and root vegetables making kale chips, sweet potatoes tacos, and our favorite beet brownies.

Urban Farming is Engineering and Mathematics: In order to transform our courtyard into our urban farm, we did A LOT of measuring, building and positioning making the raised beds and composting bins at Drew Freeman as well as the irrigation system we installed at the Windsor Crossing hoop house.

Thanks to the growingSOUL Staff:
Recipes courtesy of Ibti Vincent
Carpentry courtesy of Jeff Wilkes
Photos courtesy of Jeff Wilkes and Jessica Weiss

THE COMMUNITY URBAN FARM

At DREW-FREEMAN MIDDLE SCHOOL...





Our urban farm school dedicated classroom and onfarm kitchen





It ALL starts with recycling our nutrients by composting and using worms to build good soil





Building our compost bin & raised beds for our farm, measuring for accuracy is key





Digging out
3000 pounds of
Soil with
SOUL compost
and moving it
300 feet to fill
our selfconstructed
raised beds.











Measuring the raised beds to plant garlic; watering; and harvesting the curling garlic scapes for dressing







Making a burlap crostada bed of Soil with SOUL

for our strawberry patch



Making a burlap burrito berm of Soil with SOUL to plant sweet potatoes.

Tending our lettuce greens, spinach, bunching onions, tomatoes, squash and peanuts.

Meanwhile, at the WINDSOR CROSSING HOOP HOUSE...





THE SALSA PROJECT







(top left) Mulching our garlic to protect it through the winter months (top right) Weeding our garlic beds in the spring (left) Planting our tomatoes and tomatillos in the hoop house....

RECIPE: RED SALSA

(makes about 6 pint jars)

Ingredients

- 5 ½ pounds of tomatoes, peeled and diced
- 2 onions or 6 scallions, diced
- 2-4 jalapeños, chopped
- 2 tsp salt
- 1 tsp ground black pepper
- 4 TBSP fresh lime juice
- 2 TBSP fresh cilantro, chopped

Directions

Combine all ingredients in a large bowl and mix well. Serve with whole grain tortilla chips.



WE PICKLE EVERYTHING!

RECIPE: REFRIGERATOR PICKLES

Ingredients

vegetables – we used cucumbers (of course) and beets (who knew?!) fresh garlic cloves and dill weed to taste

Pickling spice in brine

Brine

1-1/2 cups sugar

1-1/2 cups cider vinegar

½ teaspoon salt

½ teaspoon mustard seed

½ teaspoon celery seed

½ teaspoon turmeric

½ teaspoon ground cloves

1 teaspoon cinnamon stick, crushed



Directions

Chop veggies and place into sterilized jars with garlic and dill to taste. Combine remaining ingredients in a bowl and stir just until the sugar is dissolved. Pour over veggie mixture. Cover tightly and refrigerate for at least 24 hours before serving.



EAT YOUR GREENS!

RECIPE: PESTO (makes about 1 cup)

Pesto is an Italian word meaning "to pound or crush." Though traditionally made with basil, garlic, pine nuts and cheese, we like to get creative with whatever we have on hand. We say, "If it's green, pound it!"

Ingredients

- 2-4 cloves garlic, peeled
- 1 handful fresh herbs (basil, parsley, cilantro)
- 1 handful chopped onion (scallions, garlic scapes, shallots)
- 2 cups of greens, center stalks removed (kale, chard, spinach, arugula) handful nuts or seeds (peanuts, sunflower seeds, or almonds)
- 2 TBSP oil (olive or grapeseed) a pinch of sea salt

Directions

Pulse ingredients together in a food processor until creamy, adding 1-2 tsp water as needed. Good as a pizza sauce, pasta sauce, on sandwiches, on a spoon. And it's vegan and gluten-free (if you're into that kind of thing).



RECIPE: KALE CHIPS

Ingredients

1 bunch kale

1 tablespoon olive oil

1 teaspoon salt

Directions

Preheat oven to 350°F. Wash kale and blot dry with towels. Remove the leaves from the thick stems and tear into bite-sized pieces. Drizzle kale with olive oil and sprinkle with salt.

Bake until the edges brown but are not burnt, 10 to 15 minutes.

KALE: THE POWERHOUSE VEGGIE!

RECIPE: MASSAGED KALE SALAD – It IS easy being green!

Here is a recipe that is both tasty and healthy, loaded with calcium and iron from the raw, dark green leafy kale, and with a bit of healthy protein from the nuts and seeds. By the second or third day in the fridge, it's even better...that's if you *have* any leftovers...

Toast in a dry pan on the stove or on a cookie sheet in the oven for about 5 minutes: a handful of nuts or seeds (almonds, walnuts, pecans, or sunflower seeds). Cool, chop, and set aside. Meanwhile, take 1 large bunch of fresh, organic kale wash, remove the tough stalks, chop/tear, and put into a large bowl. Add a spoonful of salt or soy sauce (1 tsp to 1 TBSP) -- depends on how much kale, what variety, and how tough it is. Massage salt or soy into the kale with your hands for about 5 minutes, until the kale is about 1/2 to 1/3 its original bulk and darker in color. (Don't be shy, get right in there

with your knuckles.)

Stir in:

1 apple, thinly sliced 1 handful of sundried tomatoes, thinly sliced 1 handful of dried cranberries, or chopped apricots 1 avocado, diced the chopped, toasted nuts



1/4 cup chevre or other soft, mild goat cheese (omit this to make it vegan, but it's darn tasty)

Coat with lemon juice, olive oil, chopped garlic and freshly ground black pepper dressing, toss, and enjoy!

SECONDS ON SALADS....

RECIPE: STRAWBERRY AND SPINACH SALAD

Ingredients

2 cups of raw spinach chopped and rinsed
1 cup of fresh strawberries, rinsed, stems removed, and chopped
1/2 cup of nuts such as walnuts, almonds or sunflower seeds (optional)

1/2 cup of soft cheese such as feta (optional)

Dressing

2 tbsp. olive oil juice from 1 lemon 2 garlic scapes, rinsed and finely chopped Pinch of salt and pepper



Directions

Combine spinach, strawberries, and nuts in a bowl. In a separate bowl whisk together olive oil, lemon juice, garlic scapes, salt, and pepper. Pour dressing over salad mixture, sprinkle cheese if desired, and enjoy!

RECIPE: APPLE BEET SALAD

Ingredients Dressing

½ cup olive oil

Salad· ¼ cup balsamic vinegar

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2 apples 1 clove garlic, peeled and minced

2 medium beets ½ to 1 teaspoon salt to taste

2-3 carrots (optional) 1 tablespoon brown sugar to taste

Directions

Core the apples and peel the beets. Grate them on a box grater. Put grated apples and beets in a large bowl. Put all the salad dressing ingredients in a jar and shake well. Pour in just enough dressing to coat the apples and beets, but not enough to drench them. Mix well. Enjoy!

WE LOVE SWEET POTATOES!

RECIPE: SWEET POTATO TACOS

Ingredients

- 1-1/2 cups finely chopped onions
- 2 garlic cloves, minced
- 3 tablespoons olive oil
- 4 cups peeled, grated sweet potatoes (about 3 mediums)
- ½ teaspoon dried oregano
- 1 teaspoon chili powder
- teaspoons ground cumin salt and pepper to taste



Directions

Sauté the onions in the olive oil until they are soft and beginning to brown. Add the spices and garlic and stir until they are fragrant and just beginning to brown and stick to the bottom of the pot. Add the grated sweet potatoes and mix well. Cover and cook for about 10 minutes, stirring frequently to prevent sticking. (You may need to add a little water with the sweet potatoes if they are sticking.) When the sweet potatoes are tender, add salt and pepper to taste and remove the filling from the heat. Stir in the cilantro. Scoop sweet potato filling onto a warm, whole wheat tortilla or wholegrain tortilla chips. Top with one or more of the following, if you like: guacamole, plain yogurt or low-fat sour cream, cabbage slaw, grated cheddar cheese, salsa!



And here are little sweet potato slips we planted at Windsor Crossing's hoop house!



BEETS: OUR FAVORITE DESSERT!

RECIPE: "BEET IT" BROWNIES

Wash and remove the greens from 3-4 small beets. Drizzle with a little olive oil, wrap in tin foil, and roast in a 400°F oven until soft (about 40 minutes). Cool beets, then puree and set aside.



Preheat oven to 350°F, then butter and flour a small (8" or 9") cake pan.

Melt 1 bar of good chocolate (3-4 oz). Set aside to cool.

In a small bowl, mix together:

3/4 cup all-purpose flour

2 teaspoons baking powder

a pinch of salt

In a large bowl, use a hand mixer (or a lot of elbow grease and a whisk) to beat until creamy:

6 TBSP butter (easier at room temperature)

1/4 cup brown sugar

Beat in:

1 1/2 teaspoons vanilla extract

2 eggs (at room temperature)

Stir in:

the beet puree the melted chocolate the flour mixture

Pour into the prepared pan and bake for 30 minutes. Cool, cut, and serve. Don't expect leftovers.



PLEASE HELP SUPPORT OUR PROJECT! http://ecofriendlygroup.blogspot.com



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