Have you ever wondered what it takes to be an urban farmer? As it turns out, it takes a lot of drive and creativity. For our Chicken Coop and Urban Farm Tour on July 11, we will feature 25 sites all around Seattle that feature entertaining urban livestock like chickens and goats, plus innovative edible gardens that will inspire even the most seasoned farmer.

I had the great pleasure to talk to some urban farmers that we’ll include on the tour this year and they shed light on the struggles and accomplishments of urban farming.

Jake Harris and Emma Klein, Stone Soup Coop

What prompted you to raise chickens?
Having fresh eggs daily. We never have to buy compost again! We love listening to the little clucks in the morning and watching them stretch—we call it Chicken Yoga.

Have you eaten any of your chickens?
Once a year, we cull our flock of 2-3 chickens if they’re misbehaving or have stopped laying. It’s important to us to understand where our meat is raised, and that is one way.
We Might Merge with Tilth Producers

Andrea Platt Dwyer, Executive Director

For several months, Seattle Tilth has been exploring the possibility of merging with one of our sister organizations, Tilth Producers of Washington. Tilth Producers is a statewide organization serving a membership of approximately 500 farmers. Their mission is to promote ecologically sound, economically viable and socially equitable farming practices that improve the health of our communities and natural environment.

Our organizations share a common ethic—a commitment to a way of growing that is sustainable, regenerative and healthy. We also share deep expertise and commitment to experiential, peer-to-peer education.

Together, we would be a larger, more visible and influential organization with increased capacity to advocate for and create systems change. In addition, a merged organization has great potential to:
• Increase the amount of food grown locally using organic principles, in gardens and farms
• Grow the market share for organic foods
• Expand access to healthy, fresh food
• Increase the number and financial viability of organic farms
• Reduce food miles travelled
• Build strong community connections between and among farmers and consumers
• Increase the number of educated consumers demanding nutritious organic food
• Slow or reverse climate change

Both boards voted to embark on this discussion in November 2014. We formed a merger exploration committee consisting of board members, community stakeholders and both executive directors. After a series of meetings and in-depth discussions exploring potential concerns and benefits, our respective boards approved an intent to merge in May.

The next step in this process will consist of comprehensive negotiations. We’ll resolve questions that range from bylaws to programs, membership, staffing and finances. If all goes well, we expect to approve the merger late this year, with an effective date of January 1, 2016.

Through our early discussions, we identified a lot of common ground as well as a few legitimate concerns that need to be addressed. While the concerns are not insubstantial, we firmly believe we can resolve these issues constructively, and that our organizations can come together in a way that preserves our programs, protects our staff and serves our members.

Ultimately, we believe that by coming together we can more effectively engage both rural producers and urban consumers, we can accelerate our progress and we can achieve our vision of a healthy, just and sustainable food system more quickly.

I welcome your thoughts on this important topic. Please email me with questions, concerns, or just to voice your opinion at andreadwyer@seattletilth.org or give me a call at (206) 633-0451 ext. 104. Thank you for your interest and support.
Building Community After War
Michael Neguse Coordinates East African Elder Farming Program

Michael Neguse has coordinated our East African Elder Farming Program for the past four years and exemplifies a community leader. Living in the midst of the Eritrean War of Independence during his formative years, Michael says “war refugees have been through hell.” He escaped Eritrea’s civil war by walking through the desert for five days carrying nothing.

Arriving in Sudan as a refugee, he thought, “I am the luckiest person on the earth.” He became a medical social worker at the refugee camp and spent the next three years working with 100 patients per day, many of whom had tropical diseases.

Since moving to Seattle in 1984, Michael has spent most of his energy helping other immigrants and refugees put roots down in this foreign land. He explains, “Growing older in a foreign country is very depressing. The worst thing for a human is being uprooted.”

Each week 10-20 elders work at Rainier Beach Urban Farm and Wetlands doing various farm tasks, and at noon everyone sits down to share a community meal. Many of the elders live in isolation, and the farm gives them a chance to feed their hunger for community, to be physically active and to enjoy a healthy meal among friends. Michael explained, “The elders face a lot of problems getting older in a strange country. There is not a strong support network for them here, so they use me as a resource. I’m the cook, the case manager and a friend. The farm is a therapeutic, beautiful and special place.”

Michael’s recipe for community building is a perfect match for Seattle Tilth. It involves bringing people together to work side by side. They bond by telling stories, sharing laughs and keeping their cultures alive. “The kitchen and the garden are powerful tools for community organizing. We joke, we talk, we share and we work together.” And Michael speaks from experience.

MICROBES UNITE TO HEAL THE WORLD  Continued from page 1

What seemed far flung just a decade ago is being backed by elaborate research today. From autism to allergies, obesity to type one diabetes, even autoimmune diseases are now being examined in a new light.

This is in stark contrast to the antibiotic (meaning “against living things”) lifestyle we have adopted, both in healthcare as well as in agribusiness. Instead of mobilizing around the benefits these invisible bacteria offer in order to restore our bodies and land, we have capitalized on the destruction of microbial life.

A new dimension of interconnectedness has been linked between soil and health. It is time that we think critically about what is happening and take action, starting in our gardens and kitchens.

What can you do?

• Promote biodiversity in your own soil by composting (we offer Composting 101 in fall).
• Avoid the use of synthetic pesticides and herbicides.
• Make and eat your own fermented foods (we offer Intro to Fermentation in October).
• Avoid eating meats raised with antibiotics.
• Use antibiotics with caution and awareness. Replenish probiotics after a round of antibiotics by eating fermented foods (yogurt, kefir, kimchee, miso, kombucha and sauerkraut).
• Support farmers, businesses and organizations working to preserve biodiversity.
Why Eggs are Egg-citing

Bethany Fong, Senior Congregate Meal Site Dietitian

Did you know that the United States produces over 75 billion eggs per year? Eggs may be small but they pack a nutritional punch with high quality protein, reflected by the fact that these shelled wonders are consumed by most cultures.

Eggs contain all essential amino acids—the building blocks of protein that help with metabolism, growth, repair and energy. Eggs are also one of few foods that naturally contain vitamin D, which is necessary for bone health. Deficiencies in Vitamin D are associated with weakened bones, osteoporosis, a weakened immune system and certain cancers.

Egg whites and egg yolks are nutritionally distinct. The whites contain over half of an egg’s protein and most of its potassium, sodium, riboflavin (vitamin B2) and niacin (vitamin B3). A chicken’s breed correlates to eggshell color, while a chicken’s diet determines the color of an egg’s yolk, though nutrients do remain similar from breed to breed. Egg yolks contain all of the fat in an egg, as well as vitamins A, D, E, K, phosphorus and folate.

Quail eggs, which are about one-fifth the size of a chicken egg, are relatively higher in cholesterol (76 mg) due to a larger yolk-to-white ratio. Duck eggs have the highest levels of iron and vitamin B-12, and 300% of daily-recommended amount of cholesterol. Compared to chickens, duck eggs are also higher in omega-3 fatty acids, which are healthy fats linked to a decreased risk of heart disease. Interesting factoid: people who are allergic to chicken eggs often tolerate duck eggs.

Eggs are an inexpensive source of protein, vitamins and minerals that can be used often in the kitchen. However, if dietary fat and cholesterol are not what the doctor ordered, consider limiting the yolk and sticking to the whites. And if an ostrich egg ever lands on your plate, invite friends to share it—one ostrich egg is equivalent to 24 chicken eggs!

PORTRAIT OF AN URBAN FARMER  Continued from page 1

What is the best part about having a flock of chickens?
Every coop that we’ve built has been right on the sidewalk. We are often known as “those folks with chickens.” We love starting conversations and bringing people together in the neighborhood by sharing eggs and information.

Which is your favorite bird and why?
We love Rhode Island Reds. They are not as snuggly as Americanas, but they are very intelligent, great layers and act as companions as we get the coop settled in the mornings.

What is your favorite thing to grow in your garden?
Mushrooms! We are growing many different kinds right now: oysters, shiitake, wine caps, turkey tail and shaggy parasols. Turkey tail mushrooms have been approved by the FDA as a trial treatment for cancer patients.

What’s next for your urban farm?
Getting mason bees, installing an herb spiral and setting up a cistern. Eventually we’re planning to use cistern water to fill our toilets.

Joan Engelmeyer and Steve Irish, City Art Farm

Why is urban farming on the rise in Seattle?
Seattle people want to do the right thing. Organic food can be expensive; if you have the time to grow your own organics, do it. Seeds are worth more than gold. We save as many different kinds of seeds as we can for future growing seasons.

What’s next for your urban farm?
We have an interest in growing my own timber bamboo since we use it all the time for art and trellises.
Aquaponics: A Fresh Approach to Growing Food

Anthony Reyes, Seattle Youth Garden Works Farm Coordinator

Farming evokes an image in our minds: tilling the soil, planting seeds and harvesting abundant fields. Recently, interest in aquaponics for producing food has surged. These systems are now seen frequently as a solution for food production in an ever-expanding urban sprawl, where access to land and uncontaminated soil can be limited.

Aquaponics is a soilless growing technique, a synthesis between aquaculture and hydroponic systems. It is gaining popularity as an economically viable system for small-scale and large-scale production. Water from the aquaculture tank runs through beds growing crops that filter out a lot of the nitrogen and other nutrients to then be returned to the aquaculture tank.

Aquaponics is one of the first forms of agriculture, with experiments performed by the Aztecs in Tenochtitlan in 1150 CE with a system they called chinampa. Chinampas are large piles of lake and pond sludge surrounded by water and canals for fish. The fish and pond sludge provided ample water and nutrients for the plants with no need for excess irrigation or fertilization.

The most important aspect of modern aquaponics is water regulation. Monitoring the levels of ammonia, nitrates, chlorine, pH and temperature and levels are the cornerstones of a successful aquaponics system. This requires daily or bi-weekly water quality tests to ensure good chemistry.

At Rainier Beach Urban Farm and Wetlands, we recently installed a deep water raft aquaponics system. This is a standard model for production-based aquaponics. Lettuce and basil float in rafts over nutrient-rich water. The aquaculture tank is filled with fish which transfers ammonia-rich water (enriched by fish poop) into a cinder bed with thousands of worms. The worms transform ammonia into forms of nitrogen that the plants can absorb, including nitrates which can be toxic to fish in large quantities. Plants filter out the nitrates and as a result, clean water is cycled back into the aquaculture tank in good condition for the fish.

We are excited about the educational opportunities that this aquaponics system brings to the farm, and the new way we’ll be growing food year-round!

Composted Manure: Gardener’s Gold

Alex Kazer, Seattle Tilth Farm Works Production Coordinator

Now that you’ve added livestock to your home garden, you probably notice more than just eggs and milk piling up. While manure can seem like a nuisance that needs to be disposed of, when composted properly, it can actually be worth its weight in gold to a gardener looking to add nutrients back to the soil.

With or without your guidance, organic materials will decompose. Composting is simply the process of managing that decomposition to create a safe, nutrient-rich, and odor-free soil amendment. This is done by combining nitrogen, carbon, oxygen and water to provide microbes with the ideal conditions necessary to efficiently break down the desired materials.

Materials high in nitrogen are often referred to as “greens” and include produce scraps and manure, while materials rich in carbon are commonly known as “browns” and include dry, woody materials. A successful compost pile will have roughly half greens and half browns, a 30:1 carbon to nitrogen ratio.

Carbon to Nitrogen Ratios

Poultry – 8:1

Very high in nitrogen with high moisture content, poultry manure on soiled bedding provides a ready-made carbon-nitrogen mixture to serve as a solid basis for a compost pile.

Rabbits – 12:1

Much drier than poultry manure, rabbit droppings are best if used with bedding to capture nitrogen from urine.

Goats – 18:1

Low in nitrogen and moisture, goat manure is best combined with straw rather than wood shavings; add moisture to the pile.

CONTINUED ON PAGE 6
Garden to Table
Rooting for Vegetable Rotini

Janie Bube, Community Kitchens Northwest Program Coordinator

Who wants to spend their free time in the kitchen by a hot stove during Seattle’s gorgeous summers? This pasta and vegetable salad makes a tasty quick meal or side dish. Take it outside and have a picnic! It is also a great way for kids to enjoy vegetables.

This dish is bursting with good nutrients and vitamins with its combination of broccoli, peas, basil and scallions, high in many vitamins and minerals. They all share a common mineral of magnesium. Magnesium is an important player for energy metabolism and other essential metabolic functions. It is necessary to break down food we eat, particularly carbohydrates and fats, and transform it into energy. So while you are out enjoying a picnic at the park, you will get the double satisfaction of delicious food and a power boost to keep you energized through our long summer days. You, too, will be vehemently rooting for vegetable rotini.

Veggie Rotini
Serves 6-8

Ingredients
4 cups whole wheat rotini (dry)
2 cups freshly shelled snap peas (or frozen peas)
4 tablespoons olive oil
2 heads broccoli, chopped
1 bunch scallions, chopped
1 cup fresh basil, chopped
2 cups feta cheese, crumbled
2 tablespoons crushed red pepper flakes
½ cup pine nuts
2 teaspoons sea salt

Instructions
• Cook pasta according to manufacturer’s directions. Drain all but a small amount of water.
• Toss in the shelled peas with the hot pasta and set aside to steam for 5 minutes in pan; then drain water completely.
• Heat olive oil over medium heat.
• Add broccoli and cook until light green, about 3 minutes.
• Add scallions and cook for about 1 minute.
• Combine scallions and broccoli with pasta and peas.
• Add chopped basil and crumbled feta cheese and mix well.
• Add crushed red pepper, pine nuts and sea salt.
• Spoon pasta onto serving dishes.
• Enjoy this dish hot or cold!

COMPOSTED MANURE: GARDENER’S GOLD  Continued from page 1

When creating a compost pile with livestock manure, keep these key points in mind:
• Combine manure (high nitrogen) with bedding (high carbon) to balance the pile
• Layer in produce scraps and garden waste for a diverse pile
• Turn frequently to ensure a steady oxygen supply for hardworking microbes
• Maintain moisture level roughly to the consistency of a wet sponge
• Be a good neighbor! Cap pile with finished compost or a ‘brown’ material to keep odors at bay
• Cover pile with a tarp during rainy months to prevent nutrients from be washed away
Sue Hartman, Garden Hotline Educator

Q. I keep hearing that it is important to know about the NPK of fertilizer. What is NPK and why do I need to know?
A. Ah yes, the ultimate guide to gardener lingo includes NPK amongst its mysterious nomenclature. Let us simplify this for you.

NPK is a reference to the three major plant nutrients considered necessary for plant health, with the N, P and K sourced from the periodic table of elements. Though there are more major nutrients and many minor elements that plants need to thrive, fertilizer products focus on NPK because these elements are not always available in soil at the levels needed for optimum plant health.

N is for Nitrogen and is necessary for green leafy growth. A major component of the chlorophyll in plants (think green), nitrogen is also needed for amino acids and nucleic acids, thus important for strong plants and their reproductive success. In organic fertilizers, nitrogen is supplied by materials like alfalfa meal, bat guano, bloodmeal, feather meal and cottonseed meal. Liquid fish fertilizer is almost entirely nitrogen and thus a great choice for feeding N to hungry plants like broccoli, cabbage and kale and other leafy greens.

P is for Phosphorus and is necessary for flower, fruit, root and shoot development. Since one of the primary reasons we grow plants is to cut their flowers or eat their leaves, seeds or fruit, Phosphorus is crucial to successful harvesting. Phosphorus, like nitrogen, is needed for the nucleic acids, crucial to the structural integrity of a plant. It is also needed for the conversion of energy that forms during photosynthesis. In Northwest soils, phosphorus is not always lacking, so test your soil before adding high quantities of P to your soil. In Washington state, phosphorus is no longer added to lawn fertilizers because of its mobility and tendency to leach from soils and contaminate streams and lakes. Organic fertilizers are slow acting and always a better choice for this reason. In organic fertilizers, phosphorus is supplied by bone meal, rock phosphate and compost, especially mushroom compost.

K is for Potassium, the king of nutrient movement in plants. Integral to the function of plant systems, potassium helps plants be efficient in their use of water and helps make them winter hardy and resistant to pests and diseases. Sources for potassium in organic fertilizers include wood ash, kelp meal, greensand and granite dust.

To learn about how to do a soil, where to send it and other good soil building information, contact the Garden Hotline.
Celebrate Summer by Taking a Class

Three prices are listed for each class: for the general public, for Seattle Tilth members and for two members of a household taking the class together. For example: $45 non-member/$35 member/$68 household. Become a member through our website or use the form on page 7. Advanced registration and payment are required for classes. Class details and registration information are found on our website under the “Learn” tab or by scanning the QR code. Questions? Call (206) 633-0451 ext. 128.

Class venues:
BGP: Bradner Gardens Park, 1730 Bradner Place S, Seattle
GSC: Good Shepherd Center, 4649 Sunnyside Ave N, Seattle

Veggie Gardening
Start Your Fall and Winter Garden,
$36/25/54
Wednesday, July 8; 6:30-8:30 p.m., GSC
Saturday, July 25; 10 a.m.-noon, BGP

Urban Livestock
CSI Bees: Citizen Scientist Initiative for Bees in Seattle, FREE
Saturday, June 13; 2-4 p.m., BGP

Beekeeping 301: Harvest Honey and Winterize Your Hive, $36/25/54
Saturday, July 25; 10 a.m.-noon, GSC

Permaculture and Sustainable Landscapes
Intro to Permaculture, $45/35/68
Saturday, July 18; 10 a.m.-1 p.m., GSC

Teacher Training
Garden Educator Workshop: Summer Intensive, $325/$275
Mon-Fri, July 13-17; 9 a.m.-3 p.m., GSC

Live in an apartment?
Grow food! Compost!
Take free classes in downtown parks this summer:
seattletilth.org

Save the Date: July 11
Chicken Coop &
Urban Farm Tour
See Seattle’s “Top 25” urban farms!
Buy tickets online:
seattletilth.org

Save the Dates
Harvest Fair: September 12
Gala Auction: September 26

Thank you
for sponsoring our
March Edible Plant Sale!

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