The Edible Garden
by Scott Beuerlein, Cincinnati Zoo & Botanical Garden

It is generally recognized that civilization began when mankind developed crops and domesticated livestock—in other words, when humans began to farm. Edible gardening is simply farming on an amateur, smaller scale. In Africa, the traditional farm more resembles a diverse vegetable garden than the farms we know in this country. They are small plots of land richly planted with many different crops. Native Americans in the Western Hemisphere developed their society largely without livestock. Instead, they took wild plants and transformed them through careful selection into high yield corn, beans, tomatoes, potatoes, peppers, and squash. Where would the modern world’s diet be without these foods? Before Columbus, the whole of North and Central America had a population larger than Europe’s that sustained itself mostly from garden-like farms. During World War II, Victory Gardens in every backyard ensured citizens a full, healthy, and varied diet during a time of strife and rations.

In this fast-paced time of global trade, the internet, and Xbox, we’re too often finding ourselves disconnected mentally, physically, and spiritually from this source of our sustenance. Where does our food come from? What is the value of our earth? The soil? Plant life? Animals? Ourselves? How are we all connected? Likewise, our diets are lapsing. As we rush about our busy lives, it becomes too easy to take shortcuts on nutrition. Bad habits develop quickly. In many parts of our cities, fast food, snacks, and soda, can be found cheaply and conveniently, while fresh, high quality, nutritious, foods cannot.

Fortunately, many people—from the backyards of suburbia to community gardens in cities—are now rediscovering the vital importance of taking a piece of land and growing food on it. It enriches our lives in so many ways—from improving our diets to knitting communities together to rooting ourselves again to the planet. People find that the gentle exercise of working the land strengthens our bodies and minds, and most worries somehow disappear when working in a garden.

The Cincinnati Zoo’s small edible garden, located near the Schott Education Center, is meant to demonstrate how easily and compactly a productive vegetable garden can be built. It was designed and constructed by our Horticulture Staff in collaboration with Peter Huttinger of the Civic Garden Center of Cincinnati, and Tracy Williams of Greensleeve Designs of Louisville, KY. Featured are raised vegetable beds, which will rotate between legumes (beans and peas), cold crops (kale, cabbage, cauliflower), tomatoes, peppers, and more. Vertical window boxes provide a rich diversity of nutritious lettuces, other greens, and herbs. An orchard of trees and assorted berries will provide fruit.

Come visit the garden, explore and learn! Gardening is fun and enriching. It benefits us and the planet.
When shopping at a large grocery store, knowing where your food comes from can be confusing. The 30 Mile Meal project promotes buying and eating food produced within a 30 mile area of where you live. First introduced in Athens, Ohio it recently spread to Licking County. Natalie Woodroofe, co-founder of the Athens program said “we have found the 30 Mile Meal brand to be extremely successful in promoting local economic development and improving the bottom line for local producers, processors and businesses.”

A recent study done by Denison University revealed that Licking County produces a wide variety of healthy, local food. In response to a growing interest in sustaining local agriculture and building a stronger local food system, the Licking County Local Foods Council is leading an initiative to raise awareness about eating locally grown and produced foods. During informational meetings this past January, farmers, specialty food producers, restaurateurs, consumers and local officials have been turning many positive ideas into realities.

One unique 30 Mile Meal program held this past April was a Local Grower/Buyer Summit. In partnership with The Ohio State University Extension and their MarketReady team, the Licking County 30 Mile Meal project hosted a comprehensive educational program that prepared local food producers to sell directly to consumers and wholesale buyers. In addition to learning how to improve marketing planning and marketing relationships, growers and buyers had a chance to network and potentially develop new buying/selling relationship.

Another innovative program called Donation Station recently launched at the Granville Farmers’ Market. This collaboration between the Local Food Council, the First Presbyterian Church of Granville, the Salvation Army, the Newark YES Club, and Sharing the Harvest encourages donations of excessive fresh foods during the farmers’ market. These food donations are used to feed nutritious and tasty meals to Licking County residents in need and bring awareness to local hunger issues. Additionally dedicated volunteers pick up unsold food from farmers’ market vendors after each market. This food is then delivered directly to the Salvation Army and the YES Club, a Newark youth organization that serves low-income youth. With 210 pounds of food collected the first day of Donation Station, the effort is right on track to meet a goal of donating 5,000 pounds of food this growing season.

To learn more or get involved with the 30 Mile Meal project and other local food issues, contact the Licking County Local Food Council at lickingcountylocalfood@gmail.com, or visit www.facebook.com/LClocalfoodcouncil.
Over the past several years my wife and I have morphed from making our living as teachers to retiring as small-time farmers. We grow and sell our produce from a stand in front of our home on Catawba Island. So far it has been a labor of love. We are very happy that we are not under the pressure of making a living at this because we would probably see it as the hard work it is rather than a retirement release. Our roadside market provides us with all the benefits of working with nature and continuing the enjoyment of interacting with (and yes, teaching) people.

You may have never thought about what great information is available from small produce-ventures like ours, but you might be surprised.

At roadside markets (especially the smaller ones), you’re liable to be buying from the people that actually grew the produce. Not only is it enjoyable to chat with these folks but you can drive away with the freshest examples of nature’s bounty and many lifelong produce buying guidelines. That owner/operator can easily tell you more than you ever thought was important about your edible treats.

My wife Diana and I spend most summer days answering a multitude of interesting questions and sharing the experiences that we’ve gained since planting our first trees. The list is too long to recount but here is a small sample.

Which variety is best?
Today the most sought after peach at our roadside stand is the Redhaven. Most customers do not understand the vast and ever-changing nature of peaches. It is amazing how many varieties almost every fruit or vegetable has. Peaches, for instance, have over one hundred varieties! Schwan Orchards grows around twenty-two (sometimes more) varieties. Each variation of produce provides a different size, color, taste, and/or ripening date. Although everyone has different tastes we have found that our favorites change from year to year. Growing conditions seem to change the taste more than we would have thought.

How can I tell if it is ripe?
Even more important than variety is how and when a peach is picked. Diana and I chose to raise peaches because of their local history and the fact that roadside markets are the only place you can eat a peach that was on the tree hours (if not minutes) earlier. When it comes to peaches this is the most important fact. You see, a peach will never ripen once it is taken from the tree. Yes, it will soften. However, the true peach taste, sweetness and texture of a tree ripened peach can never be found in one that had to be picked early for shipping. Although there are “tricks” associated with each type of produce, the most important thing to remember is that the small roadside market does not need to pick before the item is ripe to allow for shipping time. What you buy at these markets was probably grown and harvested closer to perfect ripeness than you can get anywhere else. By the way, they also don’t need to grow varieties that are “tougher” because they don’t need to be able to take shipping and handling abuse.

How should we store this?
Surprisingly each edible item has a “perfect” storage condition. Peaches, asparagus, blueberries, broccoli and lettuce keep best at 32-35 degrees while beans, peppers, zucchini, and potatoes last longest at 40-55 degrees. Storage life is also vastly different depending on the item. Some items, like sweet corn and raspberries, are usually at their prime for only a few days (if not hours), while beans, eggplant, and cucumbers can be quite tasty for weeks.

Do you use chemicals?
In order to maintain the highest quality produce, farmers are forced to use a variety of chemicals. Some items require more, some items little or no chemicals at all. The answer to this question is completely dependent on the product, weather conditions, and more. Just ask if you are interested.

Are there less expensive items available for canning or cooking?
Usually! The small marketer is often able to find “seconds” that will save you money. A fruit with a small blemish that would make an item less appealing would be thrown out at the grocery store but sure could make a delicious pie!

When will this or that be available?
Mother nature is great at throwing curve balls, and each year, everything changes. The grower can usually predict the picking dates as each one gets closer, but due to changes in seasonal weather, it’s nearly impossible to tell far in advance.

There are too many questions to cover here but from home growing tips and driving directions, to recipes and orchard tours, you should consider stopping at the next roadside market.

You can visit Schwan Orchards at 1797 North West Catawba Road, at schwanorchards.com, on Facebook, or Twitter @schwanorchards. We would love to chat or show you the orchard!
EECO’s New Career Ambassador Initiative
Counting Down on the Launchpad

EECO is partnering with Ohio EPA and the Ohio State University School of Environment and Natural Resources to launch a new two-year effort to help Ohio middle and high school students explore careers in environmental science and engineering. Environmental professionals willing to make school presentations about their careers, or provide field trips, internships and shadowing opportunities, are being recruited as Career Ambassadors through OSU’s existing online Environmental Professionals Network at http://epn.osu.edu/. Once enough Ambassadors have volunteered, the network will be advertised to educators looking for career speakers. The Career Ambassador pages are expected to go live on the EPN website http://epn.osu.edu/ in mid-July. EECO’s regional directors will also be working with local career and technical centers around the state to promote the initiative.

Buy Local, Eat Local
by Green Umbrella Local Food Action Team Members
Vickie Ciotti, Robin Henderson, Jody Robinson, Mary Singler

There was a time in our history when the question “where does my food come from” would have been easy to answer. Now, instead of walking back from the garden and into the kitchen to cook your meal, there is a lot more involved with getting food to your table. As food systems have become more global, consumers have asked for greater transparency, which has resulted in increased labeling – country of origin, fair trade, food alliance certification, certified humane raised and handled, to name a few. That certainly helps you know a bit more about your food system, but does not give you the whole picture.

The most rapid growth in the state’s food industry has been direct sales from farmers to consumers, rising 70% from 1992 to 2007. When we keep our food system close by, and have a relationship with our farmers, we can best monitor the safety and quality of what goes on our table.

Of course, there are other benefits to eating more locally sourced food. Consumption of more and fresher fruits and vegetables contributes to a healthier diet and healthier citizens. It supports local and often small businesses. Local purchasing is better for the environment as our food has a much shorter distance to travel to our table.

The Ohio Department of Development reports a decline in the state’s food industry, while personal income has risen 70% and food consumption has risen 32% in the last 40 years. Our money is leaving the state at an alarming rate, given the fact that Ohio is an agricultural state. According to an analysis conducted in 2011 by Ken Meter, Ohio’s Food Systems – Farms at the Heart of It All, it is estimated that 90% of the food purchased by Ohioans comes from out of state. Farmers are buying a large portion of their supplies from out of state as well. A total of $30 billion annually is flowing out of Ohio’s farm and food economy. Keeping even a portion of these funds in Ohio would represent an enormous economic opportunity.

In our region of Southwest Ohio, consumers spend almost $5 billion each year on our food purchases. If we all committed to spending just 10% of our annual food budget on locally sourced, we would be keeping $490 million in our local economy, and potentially creating more than 5400 new jobs. We can accomplish all that without spending an additional penny – just by shifting 10% of how we spend.

The Green Umbrella has launched the 10% Shift to Local Food Campaign. Taking the Pledge means you agree to shift 10% of your food spending to products that are locally sourced. We are also taking a serious look at the current state for growers and are exploring ways to better support our farmers and consumers. Please visit http://greenumbrella.org/action-teams/local-food for more information on taking the Pledge for yourself, or bringing it to your workplace.

Photos courtesy of Green Umbrella
Seasonal High Tunnels for Specialty Crops
By Justin Hunter, USDA Natural Resources Conservation Service of Licking & Perry Counties

A growing trend in gardening and farming is to extend the traditional growing season by the use of hoop houses or high tunnels. With these easily installed structures, the season can begin in March and extend to Thanksgiving. The quantity and variety of garden produce is limited only by the grower’s imagination and amount of time committed to the project. Tomatoes, peppers, and eggplant are some of the early season favorites, while salad greens, carrots, and beets are late season favorites. High tunnel production has become popular with local growers.

There are do-it-yourself workshops happening throughout Ohio with the help of the USDA Natural Resource Conservation Service (NRCS) and local Soil & Water Conservation District offices. Learn how and what types of plants can have an extended growing season in a backyard hoop house. Some workshops include a blue print and a list of materials needed to build a hoop house for home or production use. Go to [http://ohiodnr.com/Default.aspx?alias=ohiodnr.com/soilandwater](http://ohiodnr.com/Default.aspx?alias=ohiodnr.com/soilandwater) to find contact information for your local Soil & Water or NRCS office. Your local office can provide more specific information about hoop house initiatives including workshops and funding for the structures.

Community Gardens in East Toledo
By Patrice Powers-Barker and Lee Richter
OSU Extension, Lucas County

When immigrants from Central European countries like Hungary and Slovakia came to the United States in the early 1900s they continued their farming tradition of growing crops in outlying land surrounding their villages. This tradition was evident in East Toledo where immigrant families utilized lands surrounding the Birmingham neighborhood to grow food. This tradition continues today in community gardening at the Magyar Gardin.

Karen Wood is one of many dedicated volunteers at the Magyar Gardin in East Toledo. She is an Ohio State University Extension Master Gardener Volunteer and an Ohio Certified Volunteer Naturalist. Karen and other community gardener leaders are partnering with the Ohio Ecological Food and Farm Association (OEFFA), Ohio State University Extension Lucas County and Toledo GROWs for a tour of Magyar Gardin at 2353 York Street, Toledo, Ohio 43605 from 10:00am – 4:00pm on Saturday August 17th, 2013.

Magyar community gardeners grow vegetables and more! In 2011, more than 200 pounds of honey was harvested from the garden’s five beehives and there are plans to sell future harvests as a fundraiser for the neighborhood. "Honey-ka", the name of their honey business comes from a Hungarian term of endearment. A monarch butterfly waystation was added in 2012 and plans are in the works to join the Cornell University urban bird study. In 2013, through her work at the garden, Karen was a lead instructor for OSU Extension’s Pollinator Project to teach youth and families the importance of a healthy environment. Not only are bees important for honey production, they and other pollinators are also essential for food production.

After touring the Magyar Gardin, make the most of your visit to East Toledo by taking time to stop for a meal at the original Tony Packo’s made famous on M.A.S.H. and enjoy the Hungarian Festival in the Birmingham neighborhood happening the same weekend.
Now, I am a zoo director, not a hotshot nutritionist. And I’m not 100% clear on the relative differences between Omega 3 and Vitamin D3. However, I have worked with animals for 35 years and they have taught me a lot. And since human beings are animals, I can report that most people today are eating the wrong things.

But take heart, I know the very best path out of this conundrum. It’s easy. And it’s fun! We simply need to eat like an animal. Think about it. Do you know anybody that feeds soda pop and chips to their pets? And yet most of us eat this way ourselves and even give junk food to our kids.

I’m betting you have experienced this before. I remember when I was a boy and my Mom spotted me in the rear view mirror giving my beagle, Herman, a potato chip. She said, “Hey! Don’t feed the dog chips!” So, naturally, I asked, “How come? He loves them!” To which, my Mom gave the eternal answer, “Because they’re bad for his heart.”

Hanging in the air, even then, was the irony that the only alternative was for me to eat the chips myself! Since then I have learned a lot about animal physiology and, in fact, of the two of us it actually would make more sense for a dog to eat a salty, fatty snack, than a person. While we are built to run, dogs are even more so. Yet the irony remains, that the fried chips aren’t a good idea for either of us.

**The Zoo Diet**

All this started a few years ago when I was working with our keepers on Saturday mornings. Part experiential learning and part fun, it is a chance for me as Zoo Director to see what really goes on with our animals on a daily basis. If you came to the Cincinnati Zoo early in the morning you would find that the first to arrive are the folks working in the Zoo Commissary, or kitchen. They load all the food that will be fed out that day and begin distributing it to each exhibit in time for the keepers to get started at 7am. The keepers then spend the next few hours chopping and dividing into plates and buckets the most beautiful food imaginable; every color and variety of fresh fruits and vegetables, whole fish and meat. Nothing processed or boxed. Better looking food, with greater variety, than I would see when I used to walk through Pike Place Market in Seattle when I lived in the Pacific Northwest.

The comical part is that after spending most of the morning preparing such luscious food, the keepers all go on their 10:30 break and wolf down cheese pizza, French fries, and soda pop! Now every time I witness this I make a big deal of declaring, “If anyone here tries to feed any of this junk to their animals, they’re fired!” Some keepers chuckle awkwardly. Most just keep eating.

**A Fun & Creative Program**

Growing out of what we’ve learned from animals, the Cincinnati Zoo has created a fun educational program for kids and families called “Eat Like An Animal!” We use a common sense approach based on the simple premise that nobody likes to be told what not to do.

So instead, we investigate and celebrate which animals eat what, and why. Along the way everybody learns a bit about metabolism, such as how Florida manatees weigh over a ton while just eating lettuce, while super-active river otters can eat their body weight in fish. We learn about picky eaters like the Sumatran rhinoceros, which is the most expensive animal in the world to feed since it only eats fig and ficus leaves from Asian trees. Our two Sumatran rhinos at the Cincinnati zoo consume about 20% of our annual food budget, since their leaves are shipped in daily from southern California on Delta Dash.

Along the way we learn about animals who are more like us. Species like bonobos, our closest relatives, whose diet is straight out of a farmer’s market. And omnivorous animals like black bears and bearcats, who share our basic nutritional requirements.

Through it all, we do not make a big deal about what people should not be eating. But eventually, especially with kids along, somebody brings up questions about why animals don’t get our favorite foods.

We even have one of our Zoo
Eat Like an Animal Continued
Commissary bins in the lobby of our Education Center so that when kids are leaving our programs parents can let them grab an apple, orange, or banana rather than a less-healthy, processed snack.

Move Like An Animal
A big challenge when keeping animals in a zoo is to give the enrichment necessary to keep them up and active. Along with proper nutrition, staying active is the key to most animals leading a healthy life. Of course, the same is true for us.

This “food as energy” equation came into focus for me a few years ago when I was out on a run. I had run the very same route every day that week, then suddenly, late one afternoon, I realized I was running 8-minute miles rather than 9s. For an old guy, that is significant.

So, on my way back to the house I ran through what might have been different about that day and came to the revelation that the only thing I had done differently was that I started the day with oatmeal.

Over time I have come to think of steel cut oats as rocket fuel. A big bowl the morning before a marathon or half marathon, and I don’t fade at the end. To tell the truth, I am still not a fast runner, but I can keep going when I have the proper fuel.

Similarly, at the Cincinnati Zoo we explore why animals need to eat what they do. In our program “Move Like An Animal!” kids get to do things like use a stopwatch to time a 100-meter dash of our all-time world-record holding animal, “Sahara,” an African cheetah, when she runs 61 miles per hour. In the wild cheetahs are so fast because they have to catch a speedy antelope every single day in order to survive. At the zoo our cheetahs also run for their dinner. Their favorite reward by far is when they get a whole rabbit to crunch up.

The Good News
Perhaps the best thing about this animal diet plan is that it can save the world. No kidding. When you stop to think about the immense challenges we are facing today, pretty soon you’ll realize that the whole lot of them are interrelated. All the economic, cultural, and environmental issues that are ever increasing in the 21st Century stem from our demands and expectations outstripping our finite resources. And the solutions are not going to be from the top down. No, the world will not be saved by the United Nations or the World Wildlife Fund. The only way to save the world is through hundreds of millions and even billions of better decisions being made every day, all over the world.

And of course, the very best place to start is in our kitchens. That is where people begin and shape their day, and in turn, begin the process of deciding what matters to them most. Making informed choices that make sense is the first step toward a healthier life – for all of us and the systems that support us.

Don’t Overthink It
Very rare would be a person who could eat like an animal 100% of the time. However, once you start ordering salads when you are out with your friends, if they give you any trouble, you can just point at their nachos or fried chicken and say, “Hey, I wouldn’t feed that to my dog!”

The great thing about this ‘zoo diet’ concept is that it is simple as can be. No calorie counting. No label reading. You don’t need to download an app. Eating like an animal is simply a lens through which to view the world. At just a glimpse anyone can tell if a dish is fit for an animal. As Charles Darwin famously put it at the close of his legendary book, On The Origin of Species, “There is grandeur in this view of life.”

So start eating like an animal. Then you’ll know you belong in the zoo!

Photos courtesy of the Cincinnati Zoo and Botanical Gardens

Black Bear
Capelin (a small fish)
Kale
Escarole
Endive
Collard greens
Grapes
Sweet potato
Carrot
Herring (big fish)
Apple
Pear
Papaya
Egg

Sample Daily Diet for a Zoo Director
1/3 cup steel cut oatmeal, with almonds and cranberries
2 apples
1 banana
2000 IU Vitamin D3
1000 mg cod fish oil
1 tablespoon chia seeds
2 tablespoons dog food vitamin supplements
1 bowl of vegetarian soup from Myra’s Dionysus on Calhoun Street
Tossed salad from the Rhino Cafe @ the Cincinnati Zoo
1 teaspoon Srirache hot sauce
Kale salad
Grilled broccoli, peppers, and onions, with chicken on top
Quinoa or brown rice
Oranges or grapefruit
Roasted, unsalted nuts
Light balsamic viniagrette dressing
A Growing Partnership:
The Cincinnati Zoo and Green BEAN Delivery
by Fia Cifuentes, Cincinnati Zoo and Botanical Gardens

As Sustainability Coordinator for the Cincinnati Zoo and Botanical Garden, I began to look for ways to give our employees the opportunity to get involved with some kind of CSA program. Through a meeting hosted at Christ Hospital which had a successful produce program going with their employees at the time, I met Matt Ewer, owner, and John Freeland, vice president, of Green BEAN Delivery.

Matt and John explained Green BEAN and its mission, and immediately it felt like a great fit for our staff. Our staff could customize a bin with produce from twenty-five different farms around the area. In addition to produce, they could also purchase other products like pasta, sauces, salsas, milk, eggs, and meat. Every week staff could change their order, stop the bin for that week, or add to it.

Because Green BEAN Delivery was already visiting most neighborhoods throughout the Cincinnati area, they could easily drop bins off at employees’ houses rather than delivering to the Zoo and worrying about the logistics of pickup and storage. So, our partnership began.

In addition, a pound of food is donated to a local food bank for every bin that is delivered to a Cincinnati Zoo employee home. We were thrilled to have over twenty employees sign up with the first two months, donating over 100 pounds of food. Our relationship with Green BEAN was a great partnership right off the bat that promoted healthy eating, local food, sustainability, and community stewardship.

Around the same time that the Green BEAN relationship started, the Zoo’s Green Team was researching and developing a master plan for the Zoo’s Bowyer Farm property in Warren County. Our goal was for the land to be used to its fullest potential, while furthering the mission of the Cincinnati Zoo. Throughout these discussions, the same topic kept coming up – wouldn’t it be wonderful if we could farm the land sustainably, and grow our own food that is served in the Zoo Café as well as to our animals?

I had learned that Green BEAN Delivery, besides being a home delivery service, was also well versed in farming. They owned their own farm in Indiana, the Feel Good Farm, and just happened to be keeping their eyes out in Cincinnati for a place to farm in the region. We brought the idea to them, they were very open and interested, and the partnership continued to grow!

We planned out a few phases, starting out small and slowly growing into something bigger and better. In 2012, Green BEAN leased fifty acres from us, farming half as cover crop and the other half as produce for their business (with some coming back to the Zoo). Now, collectively we are working toward organic certification for our land.

This year, they are leasing more land from the Zoo and growing even more food for the Zoo’s animals, the Zoo’s guests, and their business. Ideally, we’d love to compost some of our organic waste on the farm, harness the energy from that composting and use it to heat the green house that is growing lettuce for the manatees – and the whole cycle starts again.

Green BEAN Delivery has been a great partner. Their knowledge, enthusiasm, and passion for food and sustainability match the Cincinnati Zoo’s mission. Being able to grow a large amount of our food within twenty five miles of the Zoo, including hay for our herbivores will greatly reduce our carbon footprint.

Green BEAN Delivery matches the Zoo’s passion and dedication towards the community, especially for those without access to fresh, local, healthy food. They are very interested and willing to work with us in supporting community projects, including Gabriel’s Place and the Northern-Larona Community Park in Avondale, which is one of our region’s largest food deserts. Additionally, Green BEAN supports the Marketplace that Gabriel’s Place in Avondale hosts every Thursday. There are a lot of education opportunities as well; including connecting urban and suburban youth and bringing them to the farm so they can see a working, rural farm in action.

We couldn’t have asked for a better partner in reaching our goals of supporting the local community and protecting the environment, and we know that these partnerships and sustainability efforts will only continue to grow.

Great Resources


“Herb Gardening for the Midwest”, Debra Knapke and Laura Peters, Lone Pine Publishing International

“Berry Smudges and Leaf Prints,” Ellen B. Senisi


“All New Square Foot Gardening”, 2nd Edition, Mel Bartholomew, Cool Springs Press, www.squarefootgardening.org (Important: refer to the “All New” books, not the original SFG books from the 70’s and 80’s)

Companies/organizations offering free seeds: America the Beautiful Fund, Asgrow Seed, California Seed Association, Neuman Seed Co., Petoseed Co.
Environmental Education Certification Program
By Jen Bucheit, Conservancy For Cuyahoga Valley National Park

We would like to pass along some information about a great opportunity for professional development in the field of Environmental Education. The Environmental Education Council of Ohio has limited spaces available in their Environmental Education Certification Program. This program offers trainings in the knowledge and skills needed to be a highly qualified Environmental Educator. This professional, nationally recognized certification will validate your credentials as an Environmental Educator and help you to progress to being a leader in the field.

This year’s program course will run over three workshops, culminating in project presentations and awarding of certification. The workshops will gather this year’s cadre of Environmental Education Professionals for trainings, networking, and professional development. The workshops cover the core competencies set forth by North American Association of Environmental Education encompassing the following themes: foundations of environmental education, knowledge of environmental processes and systems, personal and civic responsibility, planning and implementing environmental education, fostering learning, and assessment and evaluation. Two graduate credits can be earned by completing the program. Application deadline is August 31, and space is limited. For more information please go to www.eeco-online.org or email eecertificationohio@gmail.com.

Project WILD & Aquatic Project WILD Workshop

Project WILD is an interdisciplinary, conservation and environmental education program that emphasizes wildlife. The goal of Project WILD is to assist students of any age in developing awareness, knowledge, skills and commitment to result in informed decisions, responsible behavior, and constructive actions concerning wildlife and the environment. Participants will receive a copy of Project WILD and Aquatic Project WILD.

When: Wednesday, August 14, 2013, 9:00am – 4:30pm
Cost: Free
Location: Etna Elementary, 8500 Columbia Rd SW, Pataskala, OH 43062
Questions and Registration: Contact Denise Natoli Brooks, Licking Co. SWCD at denisebrooks@lickingswcd.com

Gardening Made Simple
By Susan James, Mohican School in the Out-of-Doors

Do you (or someone you know) want to garden, but are simply overwhelmed by the thought of just getting started? You might live in town and think you don’t have enough space, or perhaps you have plenty of space, but don’t know where to start... Do I have the tools I need? Where should I place my garden? What type of soil do I have? What should I plant? I tried gardening before and nothing grew! Try Square Foot Gardening!

Square Foot Gardening (SFG) is a raised-bed method of gardening made simple enough for anyone to succeed. This method requires only 20% of the space of a conventional garden, uses 10% of the water and 5% of the seeds, and requires 2% of the work required in a conventional garden. Sound too good to be true? Rather than tilling a large area, the SFG approach uses 4’ x 4’ boxes (as you learn more about SFG, you’ll find you can be creative with size and shape), and a special soil blend of 1/3 blended compost, 1/3 vermiculite, and 1/3 peat moss. This soil blend is critical to the success of your garden. The compost feeds your plants, while the peat moss holds moisture, and the vermiculite provides air space. You will add mixed compost each time you plant a new crop. Once the box is set up and filled with the soil mixture, a grid is placed on the top of the box, establishing 1’ x 1’ squares, within which you will plant different crops. From this point on, you’ll only need a hand trowel, a pencil and a small pair of scissors. It’s important to keep in mind that anyone can have raised bed gardens, but without the soil mixture outlined above, and without the grid, a raised bed is not a Square Foot Garden.

Just about any type of fruit or vegetable can be grown in a Square Foot Garden. Start small with one box, and choose foods that you like. Depending on the type of crop, you may place one plant in a square (such as tomato), or you may have 16 in a square (such as carrots), but all of the plants are placed in a grid or pattern, so that you’ll know what is a weed and what is your crop plant. Interested? Find a copy of the 2nd Edition of “All New Square Foot Gardening” and get started!
Soil Fertility & Cover Crops for the Home Garden

By Lynn White, Butler Soil and Water Conservation District & Holly Utrata-Halcomb, Hamilton Co Butler Soil and Water Conservation District

Think about the fall when your garden after it has done all of that hard work for you. You may be ready to rest, but your soil is not. A few small efforts on your part can make all the difference for next year’s garden, this can include planting cover crops and checking your soils fertility.

**Cover Crops**

Cover crops (also called green manure) are not just for farmers. They are well suited to all gardens, no matter how how large or small. They might be the hardest-working plants you’ll ever grow.

During the growing season, tilling, weeding, harvesting, and foot traffic tends to destroy the soils structure. Planting cover crops revitalizes the soil along with all of these other great benefits:

- Reduce erosion by shielding and holding on to the soils.
- Root systems reduce soil compaction while improving air and water movement.
- Root systems support microbial life, which improves soil health.
- Hold minerals normally leached from your soil over the winter.
- Suppress perennial and winter annual weed growth.
- Certain cover crops, such as crimson clover (pictured) can “fix” nitrogen from the atmosphere into the soil at nodules on the roots.
- Add organic matter to the soil.

**Soil Fertility**

Fall is also the perfect time for you to have your soil tested. A proper soil test will tell you the nutrients that your soil is lacking. Check with your local Soil and Water Conservation District (SWCD) or the OSU Extension office for soil testing information and kits, In many cases the soil sample is sent to a Tri State Soils Lab at Michigan State University. Once your results are returned, staff can help you interpret your results to find the best “recipe” for your soil.

Many landowners benefit by experiencing an almost immediate increase in productivity and plant quality if they follow the prescribed “recipe” to correct their soil fertility. In most cases, the cost of fertilizer will also decrease. Water quality improvement is an added benefit because only needed nutrients in the correct amount will be applied.

To find out more about soil fertility, soil testing, and cover crops, contact your local SWCD and / or your local OSU Extension Office. In SW Ohio, both the Butler and Hamilton County SWCD’s offer cover crop seed mix for sale.
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Environmental Education Council of Ohio

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Ohio EPA- EECO Partnership

Regional Priorities
Region 1: urban/multicultural, language arts
Region 2: high school, environmental careers
Region 3: social studies, environmental careers
Region 4: urban/multicultural, environmental careers
Region 5: pre-service teachers
Region 6: language arts
Region 7: adult education
Region 8: urban/multicultural, environmental careers
Region 9: pre-service teachers, high school
Region 10: high school, environmental careers
Region 11: adult education, environmental careers
Region 12: early childhood, urban/multicultural

Get in Touch
Contact information for your area’s regional director can be found above and online at www.eeco-online.org