



Cooperative Extension

Down to Earth: Reports from the field

Innovative Small Farmers' Outreach Program (ISFOP): East Central Region

Greetings from the ISFOP - East Central Team! As the cool weather and fall colors march in, we wonder what has happened to summer. It's time for football games, bonfires and pumpkin carving. The days fly past at an alarming rate and we start to think of winter coats and snow boots. Looking back over the past few months, we have seen flurries of activities within the Innovative Small Farmers Outreach Program. With our first full year of service behind us, we have become known as a valuable resource within our communities. We are grateful to every farmer and agency personnel we have had the pleasure of working with.

Our workshops have been well attended and those who participated learned a variety of new skills from vegetable plant grafting, to composting, high tunnel construction and urban farm production. We listen and learn from our clients and will be offering more information on requested topics. Plans are underway for organizing many events for our collaborating farmers and gardeners in the coming months like a grant writing workshop, Grow Your Farm course beginning in February, and an urban farm tour in the summer of 2011, to name a few.

We pride ourselves for being able to provide one-on-one assistance to our clients. As we go from farm to farm, we are pleasantly surprised to see so many new ideas that the farmers are trying out in our region. It definitely feels like a new day in Missouri agriculture! We see such innovative practices as pastured poultry and beef production, organic fruit and vegetable production, hydroponics and much more. With season extension techniques such as high tunnels, it is not uncommon to see fresh Missouri-grown tomatoes in December. This was simply unheard of a few years ago. Thanks to the techniques our farmers now employ on their farms, we can enjoy fresh food well into the winter months. Isn't it wonderful to have locally grown lettuce and spinach return to our plates in October? Expect farmers' markets to continue for a few more weeks, and don't forget to include them in your grocery shopping routine. Dollars spent at those markets circulate through the community many times over. Not only do you get the freshest food possible, but your dollars make a difference in the local economy.

The ISFOP Farm Outreach Workers (FOWs) are on the job throughout the year. To access our services, please call the FOW based in your county. Their names and telephone numbers are listed on page 4.

IN THE SPOTLIGHT: CROOKED LANE FARM

At a bend on Highway 19, just as travelers enter the small farming town of Wellsville, is Crooked Lane Farm where Gene and Linda Langford have resided for over 10 years. This is a landmark stop for many families who are traveling to Mark Twain Lake for a weekend getaway.

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Table with 2 columns: Topic and Page Number. Topics include Who We are, In the Spotlight, Composting, Meet David Price, FOW, Grow Your Farm, About Our Program, and The IPM Corner.



# COMPOSTING: THE BASICS *by Jim Pierce, ISFOP FOW - Platte & Clay Counties*

**Composting** is a simple method for small farmers to produce an amendment that is good for the soil and the environment. This article will cover aerobic composting, but should you have any questions about anaerobic or vermiculture composting just contact your FOW.

**What is composting?** In effect, composting is creating an environment for the exploitation of the microbial community, satisfying anthropomorphic needs to convert organic wastes into stable humus-like material without unpleasant odors. Put another way, composting is taking an action to encourage decomposition. Whether you are raising vegetables, flowers or a lawn, composting is a valuable tool for producing an amendment for your project.

### Why should you consider composting?

There are several good reasons to convert organic waste to compost. Some of these are:

- 1) The composted waste improves the condition of the soil. Over time it will contribute to available nutrients in the soil, improve water holding capacity and improve soil structure.
- 2) Compost can suppress some soilborne diseases, particularly root rot diseases, by providing an environment with greater microbial diversity.
- 3) Composting organic waste keeps it out of landfills and keeps the constituents cycling in the environment.

**What can be composted?** Many organic materials can be composted besides grass

and leaves such as shrub trimmings or chipped twigs, faded flowers, weeds, and leftover plants at the end of the gardening season. Also straw, coffee grounds, eggshells, fruit and vegetable scraps, shredded newspaper (black and white print), small amounts of wood ash and sawdust are useful. Meat scraps should be avoided because they attract pets and rodents.

**How to compost?** The basic method for composting is to mix ingredients in a carbon to nitrogen ratio of between 25-35:1. This means 25-35 parts carbon materials to one part nitrogen material. Compost can be made by piles, windrows or containers.

Material	C:N Ratio
Coffee Grounds	20:1
Corn Stalks	60:1
Cow Manure	20:1
Fruit Wastes	35:1
Grass Clippings	20:1
Horse Manure w/ Litter	60:1
Leaves	60:1
Newspaper	50-200:1
Rotted Manure	20:1
Straw	80-100:1
Table Scraps	15:1
Vegetable Trimmings	12-20:1

Chart from Florida's Online Composting Center. <http://compostinfo.com/tutorial/ElementOfComposting.htm>

For the pile method, start by laying down 8-10 inches of yard, fruit and vegetable or newspaper waste (or any combination) and wet to about 50 percent moisture. This should be followed by an inch or two of manure. Green grass, blood meal or cottonseed meal could also be used. Do not use pet or human feces. Next, add an inch or two of soil or compost from a previous pile to provide microorganisms to the new pile. Repeat the layers until a height of five feet is reached on a pile with a five foot diameter. The reason for this is to keep the pile neat and provide aeration, because a robust aerobic environment is the goal. Turning will prevent disagreeable odors, hasten decomposition and expose seeds and disease to the hot inner temperatures. There is no clear rule on turning, but in general, the more frequent turning occurs the faster the decomposition. A pile should be done in two to four months, if properly turned, and kept to around 50 percent moisture.

### Sources:

Composting (a SARE-sponsored workshop) hosted by Lincoln University Cooperative Extension on May 24-25, 2010.

Composting and Mulching: A Guide to Managing Organic Yard Wastes, University of Minnesota. [www.extension.umn.edu/distribution/](http://www.extension.umn.edu/distribution/)

Making and Using Compost for Organic Farming by Emily Marriott, University of Illinois. [www.extension.org/article/18567](http://www.extension.org/article/18567)

## MEET YOUR FARM OUTREACH WORKER

**David Price**, a beef producer from Troy, Missouri, joined the ISFOP team in January of 2010. Price was born in St. Louis, Missouri, and grew up in St. Charles County (Harvester). He graduated from Francis Howell Sr. High School in 1994. In 2004, Price earned a bachelor's in middle childhood education from Missouri Baptist University. Price and his wife, Lana, married in 1997. Shortly thereafter, the couple bought a 23-acre farm in southwestern Lincoln County where they

began raising and finishing beef cattle. All the while, Price was working in the Lincoln County R-III school district as an educator.

Through innovative marketing and relationship building, Price created a direct market for his beef. He currently sells approximately 60 beeves annually, in bulk freezer sections, to a network of customers throughout east central Missouri and be-

*David Price, farmer, family man, FOW for Lincoln and St. Charles Counties.*



yond. He joined the ISFOP team to assist and encourage other regional producers in realizing their farming goals through the implementation of innovative production methods, and by marketing

their products directly to an ever-expanding local foods market. The Prices are members of the First Baptist Church in Troy, and have been blessed with three beautiful children: Emma-Mae, Wyatt and Elsie.



## CROOKED LANE FARM (continued from page 1)

There are two reasons travelers stop at Crooked Lane Farm. One, to fill their coolers with a weekend's worth of homegrown goodness. And two, to experience the hospitality and friendliness of the salt of the earth couple that farm the 10 roadside acres.

Gene, an Army veteran and Wellsville

native, has been farming all of his life. Linda is originally from Kansas City, Kansas.

Gene says that it wasn't long after they had married that he converted the city girl into a country girl. Linda is glad that he did, and wouldn't have it any other way now. Crooked Lane Farm is a

small, but diversified operation. The Langfords raise both pork and beef

, which they harvest to sell as individual cuts (i.e., steaks, roasts, burgers and brats) or as bulk freezer sections. Currently, they

have 16 beef cows and 25 hogs on the farm. The farm also boasts a chicken house full of hens that produce approximately 24 dozen eggs each week. There are also two large gardens from which a bounty of fruits and vegetables are grown and picked. Linda bakes pies and makes apple butter, which is sold at their farm store.



*Gene Langford explains the layout of Crooked Lane Farm.*

On Saturday mornings during the growing season, the Langfords haul their surplus produce to a St. Charles County farmers' market in an enclosed trailer they recently purchased. From the back of their mobile farm stand

they sell frozen cuts of meat, fresh vegetables and eggs by the dozen to patrons at the O'Fallon Farmer's and Artist's Market. Since they started coming to the farmers'

***Crooked Lane Farm is diverse. The Langfords produce beef, pork, eggs, fruits, vegetables and baked goods.***

market, they have expanded their customer base and receive a higher price for their farm-raised produce.

David Price, the FOW in Lincoln and St. Charles Counties, has been working

with the Langford's since April. That was when they contacted Price for assistance in identifying and suppressing the spread of blight in their tomato crop. Price contacted Dr. Jaime Piñero, Lincoln University Cooperative (LUC) State Integrated Pest Management (IPM) Specialist, who quickly responded with recommendations to implement. As a result, the Langfords were able to save a number of their plants that would have otherwise been lost to blight. According to Linda, "The Innovative Small Farmers' Outreach Program has been, and, we hope, will continue to be, a wonderful resource for us, specifically when we are making a few adjustments to make our farm more diversified and efficient."

## GROW YOUR FARM 2011 contributed by Shelley Bush-Rowe, MU Extension Warren County

**Grow Your Farm**, a program offered by University of Missouri (MU) Extension and LUCE, will connect people considering a farm career with successful farm operators and business experts.

The curriculum includes eight group sessions, with two additional farm tours and activities. The course will be offered this winter at the Warren County Extension Center in Warrenton. Classes begin February 1, 2011, from 6:30 p.m. to 9:30 p.m., and continue into March. Most sessions will focus on business planning and the process of selecting enterprises that can be profitable based on an individual's skills and resources. Planning is a big part of the program.

"Along with an instructor, most classes will have actual farmer presenters—people who have been successful at the enterprises they will discuss with the class," says Debi Kelly, Missouri Alternatives

**GROW YOUR FARM SERIES  
BEGINS FEBRUARY 1, 2011.  
Register soon!**

Center Project Manager on the MU campus and the curriculum's coordinating author. "With the continued growth of people moving into rural fringe areas around major cities, extension receives more questions from people who want to make a living, or at least create a profitable business, on their acreage," she says.

*Grow Your Farm* is designed to answer those questions and help them start successful enterprises. It should also be valuable for producers looking for new ideas to make their existing farms more successful. Class sizes will be limited to 20 farms, with two decision-makers from each farm encouraged to participate.

"Farming takes a lot of work and family commitment," says Janet Hurst, LUCE FOW and one of the organizers of the local program. "Participants are likely to be more successful if both spouses, or a parent and an adult child who will be involved in the operation, are both part of the learning process."

*Cont'd on page 4*



About our Program...

## Innovative Small Farmers' Outreach Program

If you are a small farmer and have a need for information please contact one of the following FOW's:

David Price [priced@lincolnu.edu](mailto:priced@lincolnu.edu) (636) 358-7097  
Janet Hurst [hurstj@lincolnu.edu](mailto:hurstj@lincolnu.edu) (660) 216-1749

These people live and work in your community. They can provide information on ways to better manage your resources, reduce expense and increase income. They can also provide information on other available programs and resources that may increase your income and overall quality of life for your family. For more, call (573) 681-5312.

**Coming in the Winter Issue: GOATS,  
GOATS and MORE GOATS!**

### THE IPM CORNER

by Jaime Piñero, *Integrated Pest Management Specialist*

#### Home Garden Disease and Insect Control Begins This Fall

If you have a vegetable garden, by the time most autumn leaves have fallen from the trees and frost has killed your plants, you may no longer be thinking about weeds, plant diseases and insect problems until next summer. But actually, this is the perfect time to start a cultural IPM practice called "fall sanitation."

The following tips can help to minimize next year's diseases and insect problems:

1. Keep weeds pulled. Slugs and some insects can overwinter in weedy areas. Weeds will also seed themselves and be a much worse problem the next year.
2. Clean up plant wastes as soon as the crop is harvested. Many disease-causing organisms (called pathogens) survive the winter in infected plant debris. Examples include pathogens that cause fungal diseases in tomato plants such as anthracnose, gray and leaf mold, early blight and Septoria leaf spot.
3. Be sure to continue controlling major insect pests such as squash bugs and cucumber beetles well into the fall season. In the case of cucumber beetles, the pathogen that causes bacterial wilt of cantaloupe, cucumber and other cucurbits, overwinters only in the beetles.
4. Practice record keeping by writing down the soil amendments you used, what worked best, what didn't work and the crops you grew in each area. That will help plan your crop rotations.
5. Keep in mind that composting will kill most plant pathogens if the compost heats properly and the temperature is maintained long enough (see article on composting).



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Box 29; Jefferson City, MO 65102-0029.

Lincoln University (MO) and the U.S. Department of Agriculture Cooperating.

Dr. Steve Meredith, 1890 Administrator, Cooperative Extension. Distributed in furtherance of Food and Agricultural Act, 1977 PL 95-98. Dec. 22, 1981.

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### GROW (continued from page 3)

A fee of \$225 per operation (two participants) includes courses and one set of materials. For each additional person, there is a small extra charge. Fees include the cost of a course notebook and additional textbook, a copy of *Grow Your Farm* PowerPoint presentations, group sessions with guest speakers, farm tours and refreshments. To register, contact Warren County Extension Center at (636) 356-3444 or contact Bush by email at [bushs@missouri.edu](mailto:bushs@missouri.edu).

You can also go to the *Grow Your Farm* website at [www.extension.missouri.edu/growyourfarm](http://www.extension.missouri.edu/growyourfarm). Up-to-date locations and schedules for courses will be posted.

### UPCOMING EVENTS

- **Thursday, November 4, 2010:** Women in Ag Conference. Doors open at 5 p.m. and the meal is at 6 p.m. "Keeping it Local" is the theme of the evening. Contact Sheria Yancey, FSA Union, Missouri at (636) 583-2303.
- **Thursday, November 4 through Saturday, November 6, 2010:** Small Farm Trade Show, Columbia, MO  
[www.smallfarmtoday.com/tradeshows/](http://www.smallfarmtoday.com/tradeshows/)