GROWING WV FARMERS
BY TOM MCCONNELL, DIRECTOR, WV SMALL FARM CENTER, WVU

As I travel across the state, one theme resonates steadily, “We need farmers”. Community leaders have heard the message that food is not only a big business, but it is a good one too. Once the communities learn how to grow food, they will see the ancillary jobs grow, also. Remember, 80 percent of the ‘food dollar’ goes for marketing, which means nearly half of the $717 billion is spent on transportation, fuels and electricity, profit, and $341 billion or 48 percent of that total is LABOR! Our food industry can contribute to the state’s economy as more processing and wholesaling are created to meet the new production needs.

In 2000 there were 14,267,500 jobs in the US food industry. The breakdown is noteworthy—over 8 million were in the eating and drinking businesses, 3.5 million were employed in food-stores and grocery stores. Common sense suggests that without substantial population growth, those two will not see much expansion. As we grow more farmers, and more farmers begin to grow, logically, we will see an increase in food processing and wholesaling jobs. The same data set reported $1.6 million processing and nearly $1 million wholesaling jobs.

What are the obstacles of trying to interest and educate young people to join the ranks of farmers? W.Va. farmers are not entrepreneurial. Maybe it’s inherited. Few immigrants who came to W.Va. to mine our coal or cut our timber came from a productive and profitable farm.

The targeted group lacks confidence in the capability of the farm to provide a living. Most of the generation that watched their parents work hard as their profitability shrank to the point they took off-farm jobs to survive. It’s safe to say that the generation that experienced the farm economy dwindle is not going to be the one that brings it back.

We must help our youth to look at farming as a vocation, teach them how to farm profitably, expose them to models that are entrepreneurial and successful, support them with mentorship and equipment and show them how and where to secure operating capital.

At the recent National Farm to Cafeteria Conference in Detroit, a high school agriculture education department and FFA chapter shared how they are approaching this dilemma. They offer a horticultural educational program that includes hands-on experience in their green house, high tunnels, and fields. First, students are issued ‘stock’ in the FFA Chapter Cooperative. This is a real coop that pays its members dividends. The members are taught how to grow for and satisfy a market (as the school cafeteria is one of the best customers). Each class member experiences the process of breaking ground, forming beds, installing irrigation and the intense experience and pressure of harvesting. They learn to market through many differ-

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BEGINNING FARMER LOANS
BY CARRIE SEE, PROGRAM COORDINATOR, SMALL FARM CENTER, WVU

The average age of the WV farmer is 56 years. We’ve probably heard this statistic many times over, as we are in a group of agriculturalists. But what does this mean for the future?

“Our farmers are getting older and older,” says Samp Lewis, State Executive Director for FSA, “and we have to help those who are just now starting out.”

This is the reasoning behind the USDA FSA’s beginning farmer loan program. “The purpose of the beginning farmer loans is to get more people into farming and able to sustain an agricultural income, which includes anything connected to food or fiber,” says Karen McBee of the Mt. Clare Farm Service Agency office. There is no age limit on being classified as a beginning farmer, but you must have been farming for less than ten years to qualify for one of these loans.

FSA offers ownership loans to those purchasing a farm, and operating loans to those who are buying assets (cattle, feed, equipment). Loans can be direct, or guaranteed through another institution. A certain portion of the USDA budget is set aside for beginning farmer loans each year. Lewis advises, “Apply early. Your local FSA office can provide you with the application packet, and help you complete it.”

There are currently 137 beginning farmer loans in the state of West Virginia. “Our loan program can even help a retiring farmer to transfer his operation to a future generation,” Lewis shared. FSA partners with the WV Department of Agriculture on a downpayment program which equates to a very low-interest loan for qualifying new farmers able to pay 5 percent of the loan as a downpayment.

From a personal perspective, these loans are relatively painless, and there is a great “customer service” base in FSA to offer advice and help you take a closer look at your operation. Often as small farmers, we only look at our income and expenses once a year—at tax time. Having a loan through FSA, you not only look at your income and expenses for the past year, but you also project them for the year ahead. This requires the farmer to form a plan and truly focus on the goals of his/her operation.

To learn more about the qualifications and gather information on the Beginning Farmer Loan program, start by calling your county FSA office (listed on the back of this publication), or visit them online at:

“GROWING FARMERS” CONTINUED FROM FRONT PAGE

ent outlets. They learn responsibility by sharing irrigation and marketing dates. They learn problem solving, which might be the best lesson of all as most people learn that art by example. Finally, they learn entrepreneurship; many say it is impossible to teach, but being exposed and mentored allows the member to “pick-it-up” from others. When school ends in the spring, the coop members who don’t want to continue with the project sell their shares to those who choose to continue. At season’s end it starts again.

In an article from Growing Magazine, I learned that Wheatland Vegetable Farms in Virginia developed a unique way to satisfy their labor needs and help other folks at the same time. They hire college graduates (many of whom have no growing or farm experience), and train them while working what they need to be successful in their operation. The farm experience offers the intern-workers to live and cook together in a barn retrofitted to a dormitory.

Throughout the year they experience every farm task, including management and business aspects of the vegetable operation. Think of the obvious incentive to begin growing vegetables as young farmers learn how much profit potential there is available. Imagine the advantage these workers/learners enjoyed as they learned which magazines to read and which companies from which to buy seed and other supplies. The farm owners share their records of production costs to help each employee understand not only how they are doing but why they are doing what they are doing. Not all students lived and learned there as a means to begin farming, but many chose to go into vegetable production. As they did, they were helped through a program that includes sharing or giving market share to the new producers and in some cases renting land and machinery to the beginners.

The plan for growing farmers in West Virginia must also include better supporting our existing farmers. A local equipment pool would help many farmers. They need to expand their acreage to a size that is large enough to make their operations worthwhile, while not overworking the farmer and his or her family. A farmer with a tiller or a bed shaper available for rent would look forward to getting started in the spring. Knowing the weeds were controlled where possible would leave more time to work the crops that can’t be grown under plastic. A group of farmers in Reedsville near the WVU Experiment Farm shared equipment for many years, namely a potato planter and a digger. The experience grew into a sharing of ideas, cooperative buying, and sharing of labor; this made them better informed, more profitable, and part of a group as they grew their potatoes. We could smooth the path for many farmers to increase their production if we had several equipment pools across the state. The value in cooperating and belonging to a production group cannot be overstated.

Maybe there are groups across the state that could begin the work of organizing these pools; maybe a soil conservation district or a USDA RC & D might be interested in this option (as they maintain the lime spreaders and no-till seeders). Farm suppliers should not overlook this opportunity— or maybe better named investment. If a group or business offered the use of machinery and added to it some expertise to share with the farmers overall acreage would increase. As the number of farmers grows, a functional infrastructure would follow. Soon a productive unit would mature that could begin to look at packing and value-adding facilities.

This opportunity is not limited to fruit and vegetable growers. Our largest group of farmers, beef cattle growers needs the same kind of support, too. Maybe that group is in greatest need. Their investment is greater and their product must be processed from the start.

We can promote, and we can support and mentor, but there will never be change until West Virginians decide to look a little deeper into staying on the farm. After all, we know there is promise. At the recent State FFA Convention in Ripley, the WV Small Farm Center exhibit was overcome with enthusiastic young people sincerely wanting to learn about how to make a living while staying on the farm.

We know there is promise.

UNDERSTANDING AGRABILITY

BY CYNTHIA MCLOUD, STAFF WRITER

Farming is difficult work; imagine the increased or extreme difficulty for people with physical limitations due to injuries, age or other causes. The West Virginia AgrAbility Project works with people in production agriculture who have acquired disabilities—whether injured on or off the farm—by making modifications to the farm-site, adapting equipment, and incorporating home accessibility options, said Inetta Fluharty, Field Operations Manager.

Fluharty has been with AgrAbility since it started in W.Va. in 2001. She is also a farmer.

“West Virginia is a fitting choice to host the National AgrAbility Training Workshop Oct. 11-14 in Charleston,” Fluharty said.

West Virginia’s disability rate of 24.9% is twice the national rate. “Our disability rate is so high because West Virginians work at timbering, mining, and farming – the three most hazardous jobs in the nation. And our farmers often have dual careers,” Fluharty said.

“We are small farmers and we’re housed smack in the middle of Appalachia,” she said, “which makes farming difficult and dangerous and our farmers have had to figure out ways to continue farming with challenges.” Farmers like Moody Collette.

Collette, a farmer in Barbour County, walks with metal braces on his legs. He was hurt in a car accident in 1969 and again on a job a few years ago.

Before he called AgrAbility for help, he was inventing things to help him do his farm work. He designed a sled for hauling round bales and feeders with his four-wheeler, which is safer than using a spike bale spear to haul hay on steep hillsides. He welded a hand clutch to his tractor so he could raise himself to different heights when he needed to repair a shed roof or retrieve something from storage.

The ingenuity of farmers, like Collette, who were making their own assistive devices caught the eye of someone who could help and in

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COMMUNICATING THE MESSAGE THAT “FARMING IS RISKY BUSINESS” CONTINUES TO BE A CORNERSTONE OF THE WV SMALL FARM CENTER. THIS YEAR, THE CENTER BEGAN TO FOCUS ON THE TRUE FUTURE OF FARMING IN WEST VIRGINIA-YOUNG ADULTS. AS PART OF THE “RISK MANAGEMENT IN THE CLASSROOM” SERIES, THE SMALL FARM TEAM VENTURED TO HIGH SCHOOL AGRICULTURAL DEPARTMENTS WITH OUR “RISK ON THE FARM” WORKSHOP AND BOARD GAME. THIS SPRING THE TEAM VISITED RITCHIE COUNTY, CAMERON, TYLER CONSOLIDATED, LIBERTY (HARRISON), DODDRIDGE, AND BRAXTON COUNTY HIGH SCHOOLS. THE TEAM HAS ALREADY REACHED OVER 240 YOUNG WV AGRICULTURALISTS, WITH PLANS FOR MORE VISITS THIS FALL.

THE WORKSHOP INCLUDES A DISCUSSION ABOUT THE MEANING OF “RISK” ON A FARM AND ENCOURAGES STUDENTS TO EVALUATE HOW THEY SEE THESE RISKS TAKE SHAPE ON THEIR FARMS AND IN THEIR CLASSROOMS. THE WORKSHOP ALSO COVERS VARIOUS WAYS OF REDUCING THAT RISK, SUCH AS INSURANCE OR PREVENTIONARY MEASURES. WE TOUCH ON HOW TOPICS LIKE MARKET PRICE FLUCTUATION, HUMAN RISK, FINANCIAL RISK, AND LEGAL RISK AFFECT FARMERS-LARGE AND SMALL.

STUDENTS FROM THE SIX HIGH SCHOOLS WERE INTERESTED AND VERY INTERACTIVE WITH THE PROGRAMMING—ESPECIALLY WITH THE GAME. THE SECOND PORTION OF THE LESSON INCLUDES THE “RISK ON THE FARM” BOARD GAME, DESIGNED BY THE SMALL FARM CENTER STAFF. BY PLAYING THE GAME, STUDENTS LEARN TO PLAN AHEAD AND CONSIDER THE EFFECTS OF THEIR ACTIONS ON THEIR “FARMS”. THE GAME SETUP MIMICS TRADITIONAL BOARD GAMES WHERE PLAYERS MUST MAKE CHOICES THAT DIRECTLY AFFECT THEIR CHANCE OF BEING SUCCESSFUL. ALL PLAYERS BEGIN THEIR “FARMS” WITH ONLY $5,000 AND ONE COW. THE PLAYER WITH THE MOST COWS AT THE END OF CLASS WINS THE GAME.

“MY FAVORITE PART OF PLAYING THE GAME WITH THE STUDENTS IS THE MOMENT YOU SEE IT CLICK FOR THEM. “HOW WHAT WE, AS A CLASS, JUST WENT OVER REALLY DOES APPLY TO REAL LIFE,” SAID KELLEN FALKENSTINE, SMALL FARM CENTER PROGRAM ASSISTANT AND “RISK ON THE FARM” COORDINATOR.

NEARLY FORTY GAMES WERE REQUESTED AND ARE BEING SENT TO AGRICULTURE TEACHERS AND DEPARTMENTS ALL OVER WEST VIRGINIA. FOR MORE INFORMATION ON HOW TO SCHEDULE A VISIT FROM THE WV SMALL FARM CENTER TEAM OR HOW TO GET YOUR OWN COPY OF “RISK ON THE FARM,” PLEASE CONTACT BONNIE THOMAS AT 304-293-2743 OR BONNIE.TOMAS@MAIL.WVU.EDU.

ORDINARY EVELYN’S
BY KELLEN FALKENSTINE, WV SMALL FARM CENTER

Evelyn McGlothlin has been canning for her family in Clay, WV for many years; but it wasn’t until her daughter visited Tamarack that the idea of starting a business was born. Evelyn’s daughter, Christina, called her from Tamarack Market in Beckley, WV and told her mother that all the things she was simply giving away were being sold. She encouraged her to start selling all the canned goods as a business. Evelyn was skeptical; however, Chris was certain her mother could do it and called the WV Department of Agriculture to find out what Evelyn would need to do. Soon after, a Food Marketing Specialist from the WV Department of Agriculture, Teresa Halloran, went to visit Evelyn in Clay. Evelyn was finally convinced to start canning her jellies, jams, butters, and beets.

After her visit with Teresa Halloran, Evelyn needed to have a certified kitchen. So the local health department helped the McGlothlin’s meet the necessary requirements. Rather than adding to the house, they decided to convert their daughter’s old bedroom into the kitchen. Out went the bedroom furniture, and in went a three bowl sink, two stoves, two stainless steel tables, shelving and a hand wash sink. They were able to get several of the needed items used, which helped reduce cost. Evelyn felt the process was fairly easy, and the investment was doable. With her kitchen ready, she was ready to start making some “not so ordinary” food.

She started “Ordinary Evelyn’s” (named by her daughter Christina) in 1996. By 2000, she had an approved kitchen and was well on her way to a full-time business. She continued to work as a school cook while she was canning, but retired two years ago to work full time in her home kitchen. She enjoys the work and is glad to be doing what she loves.

Evelyn primarily uses local products. She grows some of her own fruits and vegetables, buys some from local farmers, and even picks some wild. As soon as she has the fruits and vegetables in, she cleans, chops, and freezes them so that they are ready when she is. With those things already prepared, she can spread out the work load. When Evelyn starts canning hot pepper butter, for example, she gets peppers out of the freezer, purees them in a food processor, adds her special ingredients and then cans them. Evelyn does the canning herself to maintain quality control. She does have some assistance, but she wants to make sure the products are the same every time.

Evelyn uniquely labels and boxes her products so they are ready for sale. Evelyn’s busiest time of the year is from July-December. She spends about 30 hours each week canning. Her husband usually helps her in the kitchen, to deliver goods and grow produce.

Evelyn sells most of her products to the Tamarack now and to a few other stores in W.Va. She also goes to several fairs and festivals to “show” her products, so that people get to know her. It was during one of those shows that her daughter-in-law decided that they should start selling dry mixes, as well as, canned items. “Daughter-in-Law’s Cheese Ball Mix” was born, and several other mixes have emerged since then. The dry mixes have been a great business asset to Ordinary Evelyn’s and require less work than canning.

“You have to enjoy the work otherwise it is drudgery!” Evelyn said. For beginners, she suggested to attend as many ‘shows’ as possible to get your name and samples out in the public, and to have a consistent and unique product. She also advises initially keeping a second job simply to be cautious, because it takes some time to make a profit.

Overall, Evelyn has found that she enjoys the work and that it is a profitable business. She plans to continue making and selling “not so ordinary” products as long as she is able.
LIVESTOCK RISK PROTECTION:
LET’S LOOK AT IT THIS WAY

BY KATE PETERS, EDIT CHIEF WV SMALL FARM ADVOCATE & CATTLE FARMER, PRESTON COUNTY

On the face of it, Livestock Risk Protection combines the worst of all possible worlds- the futures market and insurance companies. Everyone knows someone who was burned in the market and many of us have unpleasant memories of collecting on policies. Maybe that is why there has been so little enthusiasm for this product. That is unfortunate because LRP is simple to use, relatively low-cost and very useful for cattle producers. The Risk in the product name refers to financial risk. This product guarantees producers a minimum price for their calves from the minute they buy the coverage. Not only that, the federal government pays 13% of the premium.

**So what is LRP?** It is an insurance policy. Just as most of us have fire insurance on our barn, we can now buy price insurance on our calf crop.

**Who can buy it?** LRP is available only to bona fide cattle producers. It is not for market speculators. You have to own the calves and yearlings, and they must be fed in West Virginia or another state that has the policy. To find that list, go to the WVU Extension Small Farm Center website and click Livestock Risk Protection.

**How does it work?** When your cows have calved or you bought your calves to winter or graze, contact an agent who handles this product. Many agents from West Virginia and surrounding states are licensed to sell LRP to West Virginians. The list can be found at http://www3.rma.usda.gov/apps/agents/result.cfm Tell the agent how many steers and how many heifers you have and what month you plan to sell them. Together you’ll choose a date to buy the policy—you’ll then send a check and that’s it. You’re covered.

**What does that mean?** It means that if the national market drops below the price you insured your calves for, you will be paid the difference.

**How do I make a claim?** You don’t have to. If the national market drops below your protected price the insurance company will automatically send you a check.

**What if the market doesn’t drop?** Be happy- just as you are when your barn doesn’t burn down.

**How much does it cost?** That depends on several factors but prices range from $8 to $15 a head with the USDA picking up 13% of the cost.

**Why should I spend more money on my calf crop?** Most established cattlemen prefer to sell their calves through a licensed stockyard because they can buy the certainty of honest weights and guaranteed payment under the protection of Packers and Stockyards Act. This certainty costs from $10 to $ 25 dollars a head.

We buy vaccines to insure against arthritis, spinal cord injuries/paralysis, back impairments, amputations, brain and head injury, vision, hearing and breathing impairments, disabling diseases and cerebral palsy.

**Sometimes Fluharty loans equipment for farmers to try before deciding to buy it for themselves.**

In 2006, Butcher was worried about getting around on the farm, as his muscular dystrophy progressed. He contacted AgrAbility. Fluharty, after visiting the farm, recommended extra hand holds for the tractor and a chair that would help Butcher get into a standing position by himself by pulling a lever.

She also loaned and temporarily installed an Ag Cam, a camera that allows people with back or neck problems to see what’s going on behind them without turning. Butcher, whose type of muscular dystrophy weakens his shoulder muscles, tried out the Ag Cam before deciding if he’d buy it.

Besides traditional livestock or fruit and vegetable farmers, W.Va. AgrAbility working with WVDRS, helped Becky Conrad, a blind greenhouse owner in Braxton County, obtain a computer with a screen-reader and a Voice-It-All. This is hand-held electronic device that identifies colors, as well as, monetary bill denominations. Fluharty also helps Conrad solve problems, such as labeling her plants by marking in Braille with a stylus on copper that won’t break down in the wet soil.

To learn more about West Virginia AgrAbility or to contact Inetta Fluharty, call (800) 626-4748 or e-mail agrability@wvagrability.org.
HUNTINGTON FOCUSES ON LOCAL FOOD & LOCAL ECONOMY
BY GAIL PATTON, DIRECTOR, UNLIMITED FUTURE INC., HUNTINGTON, WV

Long before Jamie Oliver’s Food Revolution came to Huntington, the community and Board of Education were working to promote the need for healthier food and lifestyles. ‘Healthy Huntington’ was founded in 2003 with a mission to bring the Healthier US Initiative to the tri-state area. The school system had taken steps to limit soda consumption and offer more nutritious meals, but the Food Revolution put the national spotlight on the lack of fresh food in our schools. As a result, Huntington’s Health Revolution was formed with representation from individuals, community organizations, businesses, the health care industry, churches, media outlets, universities and more.

As the next logical step, a collaborative of civic and nonprofit groups has begun to form in the Huntington - Tri-State area with the vision of developing a local food system. The goals are to increase production of local food, provide support for producers and value-adders, promote a market for local food, increase awareness of the benefits of local food, and ensure equitable access to fresh food for all residents.

Led by Ebeneezer Medical Outreach (a free medical clinic for low income people) and the Huntington Community Gardens, several groups are promoting the health aspects of eating locally produced foods. Their work includes teaching children and families to grow their own vegetables in community gardens throughout the city; teaching them how to cook that food in a healthy way at Huntington’s Kitchen (formerly Jamie’s Kitchen) and teaching them how to preserve that food for consumption during the winter months or “off-season”. The vision also includes providing access to healthy foods through Fresh Markets located around the city - especially in economically depressed neighborhoods.

Spurred by the understanding that less than 1% of the over $7 billion that West Virginians spend on food every year is locally sourced, other groups such as Unlimited Future, Inc. and the Center for Economic Options are interested in the economic development that will surely occur if more people begin to demand locally grown foods. An entire market segment will be developed that will include processing and aggregating local food. Huntington is fortunate to have a commercial kitchen facility that will be home to the Mountwest Community and Technical College Culinary Arts Institute and available to entrepreneurs who wish to develop specialty food products. A major part of the plan is to develop a distribution network and hub to collect food within the region and distribute it to market.

The collaborative is focusing their work in the Tri-State area surrounding Huntington (roughly a 50 mile radius, including 15 counties). It is estimated that this targeted area spends over $1.2 billion on food annually. The group is working with non-profits, the WV Community Development HUB, extension agents, the USDA, civic groups and other key stakeholders. Plans are in the works for public events that will highlight the health and environmental benefits of eating local food and a conference later this fall, sponsored in part by the WV HUB, for current/potential producers and interested consumers. The West Virginia Small Farm Center is planning to assist with a ‘gap’ analysis of local agriculture to survey producers, consumers and suppliers and identify areas that need to be developed and improved. An emphasis is being placed on involving students by encouraging agriculture as a vocation and providing training on cutting-edge production techniques.

Hopefully the efforts to establish a local food system in Huntington will result in improvements to the overall health, economy and sustainability of the region. To get involved, or for more information, contact Gail Patton of Unlimited Future at gail@unlimitedfuture.org or call (304) 697-3007.

BUILD CONTINUED FROM PAGE 8

Another handbook available from WVU Extension Office entitled Pole and Post Buildings will be most helpful to the novice, as it explains the entire process from site selection to setting the trusses and the roofing. This resource will also advise the builder about building for snow loads. This past winter many buildings were damaged by not having heavy enough construction.

The part of the project that is the most intimidating, but offers the greatest opportunity for savings is truss construction. The process requires the builder to follow a plan and make several cuts with angles. Yet another helpful publication from the WVU Extension Office is the Midwest Plan Service Glued (nailed, too) Trusses design book. This handbook provides plans of various lengths of trusses accounting for different snow loads. Before the days of nail guns, this process would require several hundred nails to be driven by hand in the multiple gussets required to keep the chords, kingposts, and web boards together. Even though it serves as a great family activity, the most efficient and fastest way to attach gussets is with a nail gun. The building of the first truss is a very intense event; however, after that is completed, a jig is built, and pattern boards are cut, the rest of the plan goes very quickly. Obviously, the truss construction will have to take place on a flat area larger than the trusses themselves. It is important not to oversimplify this process and decision, especially as the building gets bigger and the trusses get longer. Many communities have crane trucks to ease the concerns about setting the trusses. Another important part of constructing your own building is price discovery and comparison. This is required for every part of the process. Especially in these turbulent financial times, suppliers find themselves with inventory they have to move even if it results in a slim profit. Information is a powerful resource when you are considering this option or considering hiring out the work. Knowing the cost of your inputs will make you a better negotiator with a contractor or supplier.

Another resource available for price comparison is the Board Foot Planner, which can be found on the WVU Extension Web Page at http://www.wvu.edu/~agexten/farmman/template/index.htm.

Your county WVU Extension Agent can help you to find this excel worksheet on the WVU Extension Farm Management page. This worksheet allows the builder to take a MBF (per-thousand board foot) price from the saw mill and convert it into individual board prices. It will also do the opposite, so a builder can compare board prices from a store against a MBF price.

Farm families operate with slim margins and generally do without because of that. Improving and increasing the value of the farmstead is necessary for every farm business. Building your own buildings allows the operation to improve by trading ‘know how’, existing resources, and labor for capital outlay.
Small scale egg producers that utilize sustainable practices must demand a premium for their eggs due to increased labor and cost of production. Consumers have justified spending more for these eggs because they perceive animal welfare and nutrition are enhanced compared to conventionally produced eggs.

The reality is that while animal husbandry differs, the nutrient content of eggs produced by the two systems is typically very similar. Small scale egg producers would undoubtedly benefit from use of production strategies that alter the nutritional quality of their eggs relative to most conventionally produced eggs.

Sustainable animal production encompasses practices that provide decreased environmental impact, respect for animals, a fair wage to the farmer, and enhancement of rural communities. Recently, consumers have increased consumption of sustainably produced animal products. The WVU Animal and Nutritional Sciences Program and Extension Service Small Farm Center, are currently investigating strategies to create sustainably produced animal products that meet consumer nutritional expectations.

The project will involve the production of Omega-3 fatty acid enriched eggs from pastured laying hens. Omega-3 fatty acids are said to promote cardiovascular health, reduce both inflammatory responses and risks for cancer as well as improve cognitive development and behavioral function in children. Currently the most popular and direct methods to obtain the most beneficial Omega-3 fatty acids are through the consumption of marine products or marine derived supplements. However, functional foods may offer an alternative source for consumption.

Functional foods are defined as a food that provides health benefits beyond face value nutrition. The Omega-3 fatty acid content of eggs may be increased in a variety of ways within a sustainable small farm system. This increase may be achieved by simply providing pasture to laying hens or may be further enhanced through dietary additions of oils and cereals such as fish or flax.

The goal of this project will be to provide small farmers with a management framework for the successful production of Omega-3 enriched eggs in order to increase economic returns and to meet consumer demands for functional foods.

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**PLANT A ROW FOR THE HUNGRY**

**BY LARRY CAMPBELL, WVU EXTENSION AGENT, HARRISON COUNTY**

In the United States, 33 million people, including 13 million children, live in households that experience hunger or the risk of hunger, according to the U.S. Department of Agriculture (USDA).

More than 3 percent of U.S. households frequently skip meals or sometimes go without food for an entire day. Twenty-five million people, including 9.9 million children, have substandard diets or must seek emergency food, because they cannot always afford the food they need.

As the demand for assistance increases, local food banks are not able to meet the need. Hundreds of people are turned away from food banks each year. At the same time many people produce more fresh vegetables and eggs than their family can consume in a timely manner. And the fact that many food banks are equipped to handle perishable goods is not generally known.

West Virginia gardeners can help feed hungry children and adults through the national Plant-A-Row for the Hungry (PAR) program. PAR is public service program of the Garden Writers Association. Its purpose is to encourage gardeners to donate their surplus produce to food banks.

PAR began in Anchorage, Alaska, when a local garden columnist asked readers to plant a row of vegetables for an area soup kitchen. The program grew into a national campaign based on a simple concept: if each of the 70 million U.S. gardeners would plant one extra row of vegetables to donate to local food banks, hunger could be reduced significantly.

Since PAR began in 1995, annual donations have averaged more than 1 million pounds of food. The program has been endorsed by the Master Gardeners and other gardening groups.

West Virginia Master Gardeners have participated in the PAR program since 2001, when Lee Reger of Harrison County organized the first PAR campaign to raise one ton of donated produce in his county. The program more than doubled its goal, providing more than 4,000 pounds of produce that year.

Since 2001, the WVU Extension Harrison County Master Gardener PAR program has provided an average of one ton of produce to area food pantries each year. The Harrison County WVU Extension Office has conducted a PAR program at the W.Va. Industrial Home for Youth for the last seven years. More than a ton of produce was donated to a local mission through that effort.

As you plan your garden for the year, think of the impact that you could make on reducing hunger by planting an extra row for the hungry. A pound of garden-fresh produce can make about four nutritious meals for less-fortunate neighbors. If you’d like to participate, send an e-mail to PAR (PAR@gwaa.org) for information.

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**FUNCTIONAL FOODS...THE FUTURE OF SUSTAINABLE FAMILY FARMS?**

**BY JOSEPH MORITZ, POULTRY SPECIALIST & PROFESSOR, WVU EXTENSION SERVICE**

**AND BY LAUREL SHIERES, GRADUATE RESEARCH ASSISTANT, WVU EXTENSION SERVICE**

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**WVU Organic Farm, broilers**

**Harrison County Master Gardeners at PAR kickoff campaign**
Who doesn’t love a farmers market? It’s a place where one can find locally grown onions, tomatoes, sweet corn and much more—baked goods, jams and jellies, fresh eggs, local beef and maybe even lamb by the piece. The market may even offer shiitake mushrooms, herbs, and live music. At the farmers market, one can always find conversation, as the town’s residents come to meet and greet after a week’s passing.

This year, the WV Farmers Market Association (WVFMA) counted 84 such markets compared to our count of 68 in 2009, and who knows when the growth will slow. The boom is nationwide: between 1994 and 2009, the national number of farmers markets has tripled from 1,755 to 5,274. Many communities are finding the excitement and pride generated by a farmers market reason enough to start one—while positive economic effect rests on the minds of farmers and town officials.

The association has posted the survey results, gathered in May by our all-volunteer board, to assist with the USDA’s Agricultural Marketing Service (AMS) annual canvas for the state-by-state figures. These results are available on our website www.wvfarmers.org, with the current graphic entry point shown below.

The Abbreviated Version is an easier-to-print document with condensed information, compiled by our friends at the Collaborative for 21st Century Appalachia. Oppositely, the Detailed Version is a lengthier Excel spreadsheet containing answers to all USDA-provided questions. On-farm markets nor CSAs were included in the survey.

This year the USDA automated the process for market managers to update their own listing in the National Directory of Farmers Markets. Another USDA farmers market-focused effort this year is the National Farmers Market Managers Survey, which is designed as a do-it-yourself survey. There are still some bugs and glitches with these systems, therefore the WVFMA will continue to stand by our own survey, even though it is more time-consuming. It also serves as an opportunity to touch base with all of you.

As with the survey in 2009, our board divided up the state’s fifty-five counties among ourselves to contact for surveying purposes. In addition, the board worked to track down, by e-mail and phone, any new markets discovered by word-of-mouth, in articles, and on the Internet. The majority of questions remained the same as in 2009, except one additional USDA provided question regarding operational winter markets.

USDA requested information included the following:

- Market Name, Months of Operation, Market Location (City, State, Zip), Name of County, Days of Operation, Hours of Operation, Mailing Address (City, State, Zip), Covered Facility: Y/N, Market Manager Name, Does the market accept Electronic Benefits Transfer (EBT)?, Market Manager Contact Number, Does the market accept Senior Farmers Market Nutrition Program (SFMNP) Coupons?, Does the market accept Women, Infants, and Children (WIC) Coupons?, Market Website Address, Winter Market: Y/N.

Our association added several more questions about insurance and membership in the WVFMA. Insurance for farmers markets continues to be one of the WVFMA focal points. This is a large issue to tackle for an all-volunteer organization with only seven board members. Regardless, our board organized itself in a way as to take advantage of the time we would already be spending contacting every market in the state this spring, and also gathered information about farmers market insurance issues. We hope to have the results prepared for our annual meeting in February, supplemented with national information from the Farmers Market Coalition (FMC).

Furthermore during our survey, we asked markets who were not WVFMA members “which benefit or service would encourage them to join” and if they would like more information.

If your market has not joined the WVFMA yet, we certainly hope you’ll consider doing so before the year is over. We work on things you most likely won’t have the time to and we work with many state and national agencies involved with agriculture. All year long we help coordinate issues related to West Virginia farmers—like conducting the above survey each spring that helps determine funding for certain market programs (including grant programs) and helps your customers find you. We’ve discussed food safety rules with the WV Dept. of Health & Human Services to help them understand the farmers’ viewpoint. We meet several times a year with the WV Food Council to guide them in encouraging local food efforts. The association creates web pages for all members (see www.wvfarmers.org/members.html). The newest member benefit is an automatic cross-listing at another website WVFARM2U hosted by the Collaborative for 21st Century Appalachia. Our Buy Fresh Buy Local WV® Chapter constantly works to educate consumers on the benefits of eating locally, a topic important to you (according to the member-application survey).

Additionally, our organization actively participates in multiple community events statewide, including Green Night at the Morgantown Public Library, a BFBL Harvest Potluck in Berkeley Springs, a table at the WVU Organic Farm Open House and two displays at the WV State Fair.

In the winter, we organize and publicize the Winter Blues Farmers Market (mark your calendar for Feb. 17, 2011) in market-eager Morgantown, to make the most of farmers’ time and travel when they are coming to the WV Small Farm Conference. Last year, we wrote a small grant to the FMC so four new markets could receive funding/WVFMA scholarships to attend that conference. The WVFMA also organizes most of the Farmers Market workshops for the conference and plans to do so again this year. You’ll find an application for the WVFMA and member categories described at www.wvfarmers.org/howtojoin.html. Please contact us at wvfma@farmers.org with your questions. We’d love to add your market or farm name to our list of supporters.
In 1936 Gone With the Wind went to press, Jesse Owens won four gold medals in Berlin and the first Strawberry Festival in West Virginia was held in Upshur County. The festival, started to highlight a crop that played a significant role in the local economy, continues today as one of the largest small town celebrations in the eastern United States. Unfortunately, not long after the festival was begun, local strawberry production entered a steep decline. For a long time now the festival has been more of a celebration of community than a showcase of agriculture. But there are some very good reasons to look for the festival to return to its roots.

The good news is that the trends in food production and marketing are beginning to change. Transportation costs are making it less lucrative to continue the current methods of marketing. Consumers desire fresher produce and produce in which they have a greater knowledge of its origin. They also want to know the growing methods used for its production.

If producers in W. Va. are to take advantage of this growing trend in food production, we will also have to be willing to examine our production and marketing methods. We need to continually search for the most effective system of food production for the local grown produce consumer.

In Upshur County we have been working with strawberry production methods that will provide early season production. We also are trying to address some of the production and marketing problems that caused the decline of strawberry production in the state.

In order to have strawberries for the festival, we have initiated production methods for earlier production. We also are working with production systems that will improve weed control, quality of the berries and increased productivity.

High tunnels are a viable means of early strawberry production. At this time this production technology provides the most consistent method of early season strawberry production. Strawberry production can begin in April in a high tunnel. A producer can take advantage of improved pricing during this “off season”. Also, the quality of the berries is excellent. Some of the production methods utilizing a high tunnel for strawberry production include:

* Establishing the beds in the fall including amending the soil for pH and soil nutrients.
* In the spring, nitrogen is injected through the drip system for improved berry production.
* In the spring, weed control may be needed but there is relatively little work needed until spring.

There are numerous advantages to high tunnel production, but there are also some disadvantages. Compared to field grown plants it is a more costly system. You will need to receive a premium price for your berries to make it cost efficient. In Upshur County, we also have started various field grown early season production methods. In many ways these methods do not vary much from the high tunnel practices.

We utilize raised beds, black plastic mulch, and drip irrigation. We have experimented with many early season varieties. Some varieties that have been successful for early season production include: Chandler, Annapolis, Sweet Charlie and AC Wendy. We need to establish our plants earlier if we are growing outside. Plug plants need to be established earlier in the fall. Dormant plants can be used, but they need to be established in mid to late summer and the bloom and runners removed.

In the spring we will add nutrient amendments to the soil. We will also cover the plants with a second row cover to provide additional protection from frost damage.

We are also utilizing low tunnels for early season production. Low tunnels usually cover one or two rows. They average 3-4 feet in height. This system may be a good compromise for early season strawberry production. It is a growing system that is less costly than growing in a high tunnel and still has most of the advantages of high tunnel production.

In 2010, three adults and 24 Upshur County 4-H youth participated in field grown and high tunnel early season production projects. All participants had enough ripe berries to enter the West Virginia Strawberry Festival Auction on May 15th. Four thousand, eight hundred dollars of early season strawberries were sold at the festival auction. Producers also used direct marketing to sell their early season berries at a premium price.

Our forebears knew that strawberries could be profitable in Upshur County and with modern practices and new genetics we can do the same, and honor them in the bargain.
RURAL ELECTRIFICATION

CONTINUED FROM PAGE 10

Better Living Contests, and built the rural electrification building at WVU Jackson’s Mill, among others. The REA was considered a great success in history for federal policy-making affecting the national economy. By 1938, 1.5 million farms were receiving electricity from more than 350 cooperatives because of FDR’s efforts. In addition to opportunity, electricity brought with it increased manufacturing for desired home appliances, television and radio, and spurred the electrical and plumbing trades in many rural communities.

However, hindsight for some West Virginians paints a very different picture of the REA. While families were now laden with high utility costs—many once had the ability to be self-sufficient with the use of wind energy.

Farmers like the Lowthers became reliant on electricity and subject to its cost. If wind turbines were left, farmers could have had over 70 years of experience and growth with this renewable energy source. “At the time, we were just excited to get electricity,” Velma Lowther Smalley recalls. While rural America was given vast opportunities with electricity, for many W. Va. farmers looking back, the question of “what if?” still lingers.

Right: Glen Lowther of Webster County maintaining a turbine.

EASIER AQUATIC WEED CONTROL

BY KEN SEMMENS, AQUACULTURE SPECIALIST, WVU EXTENSION SERVICE

The regulations have changed and now West Virginia residents may purchase “grass carp” without getting a permit from DNR. In 2009, the DNR decided to require an import permit only from those individuals bringing the grass carp into West Virginia. Also, the grass carp brought into W Va. must be certified as triploid (sterile) and must have an import permit. Only vendors approved by West Virginia Division of Natural Resources (DNR) may sell sterile grass carp in W.Va. Until recently the DNR also required that each pond owner also obtain an import permit before stocking grass carp into their pond. Both the vendors bringing fish into the state and the pond owners putting grass carp in their ponds each obtained a permit for the same fish. The practice requiring two permits of the same type from different people in the supply chain for the same fish has been called double permitting.

Aquatic plants naturally proliferate in small ponds. This can be good or bad depending upon the desired management objective. Aquatic plants function as a food source to wildlife, and as habitat for fish and many other organisms. Aquatic weeds interfere with swimming, boating, fishing, irrigation, and other human activities. Pond owners often wish to solve these problems by removing problem vegetation.

Traditional methods for controlling aquatic vegetation include mechanical removal of the weeds or spraying aquatic herbicides. Another method is to stock fish which will eat the vegetation.

Grass carp is a fish that eats tender rooted aquatic vegetation. Triploid grass carp are sterile and do not root in the pond bottom like common carp. They will eat preferred plants first and then graze less desirable plants. They may not control plants like filamentous algae or duckweed - especially if the water is cold.

Grass carp is a good option if the pond owner desires total control of rooted submerged aquatic vegetation. Stocking recommendations are based on the determination amount of aquatic vegetation covering the pond’s surface plus areas covered by submerged vegetation as far as you can see into the water. To estimate the surface area of a pond in acres, divide the number of square feet by 43,560. Estimate the percent of aquatic plant coverage from a vantage point where you can see the entire pond.

To the bottom right is a chart with recommendations regarding how many fish to stock for each acre of pond surface area. The average pond in West Virginia is about 0.5 acres in size. As such, an average pond with a moderate weed problem will need at least five fish to be stocked in the pond. When there are fractions of a fish, round up. The stocking recommendation does not include fish which do not survive the transfer or are eaten by predators.

Stocking too few fish will result in no impact on the aquatic vegetation.

If vegetation reduction has not occurred by the end of the summer, it is reasonable to stock additional grass carp at half the original rate. For more rapid results consider integrating grass carp with other control methods. For example, stock fish following the application of herbicide or mechanical removal of vegetation.

Grass carp have consistently proven to be an economical and effective tool for controlling many types of aquatic vegetation. For more information on grass carp visit the web sites listed to the right or contact a vendor who supplies grass carp in your area.

WV Division of Natural Resources link on Grass Carp: http://www.wvdnr.gov/Fishing/TriploidCarp.shtml

WVU Extension information on grass carp: http://aquaculture.ext.wvu.edu/farm_ponds/factsheets/grass_carp

<table>
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<th>COMMON STOCKING RECOMMENDATIONS</th>
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<tr>
<td>Maintenance (20% - 40% coverage):</td>
</tr>
<tr>
<td>Moderate (40% - 60% coverage):</td>
</tr>
<tr>
<td>Severe (&gt;60% coverage):</td>
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</table>
Consumer interest in purchasing food from local farmers has increased dramatically in recent years. This trend may provide opportunity for small local fish producers to market directly to the consumer, at a good price. To better understand how, the Aquaculture Product and Marketing Development Project offered trout for sale at Farmers Markets in Morgantown and surveyed customers regarding their experience. No other vendors were selling fish at the farmers market during this study.

Rainbow Trout of marketable size were harvested from the WVU Dogwood Lake demonstration raceway near Morgantown, WV. The dressed fish were offered for sale most farmers market dates, but not all, throughout the summer and fall. Fresh trout fillets were sold on May 2, 9, and 16.

The live fish weight varied from 0.94 to 1.45 lb., and the dressed fish averaged 1.16 lb and fillets from a single fish averaged 0.82 lb/package. Dressed fish sold for individually for $6 each one week and increased to $7 each as the fish became larger. The boneless fillets from a single fish sold for $9 each. Smoked fillets sold for $4 or $7/fillet depending on the fillet size. Fish were sold by the piece rather than by weight.

The protocol was, 20 to 40 fish were harvested on Thursday or Friday and packed during the day for sale on Saturday morning. Dressed fish were held in coolers on ice. Fillets packaged in Ziploc bags and held in coolers on ice. At the market, dressed fish were placed in a long plastic bag that could be tied at the end to keep juices from leaking out. Fish were sold directly from the cooler. At the customer’s request ice would be placed in the bag with the fish to keep the product cold for a short period of time.

As fish were sold, customers were asked to provide contact information so they could be reached for a survey. A customer survey measuring and recording their response was developed. Of the 87 customers contacted through email, 44 completed the survey.

Most respondents claimed they were the main food buyer (92%) in the household, and visited the market every week (69%). Most (60%) ate fish or seafood at least once a week and processed by Friday evening. Fillets packaged in Ziploc bags were sold for $4 or $7/fillet depending on the fillet size. Fish were sold by the fillet size. Fish were sold by the fillet size. Fish were sold for $9 each. Smoked fillets sold for $6 each one week and increased to $7 each as the fish became larger. The boneless fillets from a single fish sold for $9 each. Smoked fillets sold for $4 or $7/fillet depending on the fillet size. Fish were sold by the piece rather than by weight.

The preferred product form was whole dressed trout was the product most often purchased (71%) followed by trout fillets (20%) and smoked trout (9%). Most customers cooked fish themselves (80%) the same day as purchase (40%) or the following day (33%). Fish were cooked right away (25%) or stored in the refrigerator (57%). Only 5% stored the fish in the freezer. Customers were very satisfied with freshness (92%), and the flavor (79%). In every case, customers were very satisfied or satisfied with the freshness, the flavor and the size of the product. The vast majority were very satisfied (54%) or satisfied (44%) with the price paid for the product. Most were also very satisfied (43%) or satisfied (50%) with packaging of the fresh fish.

The preferred product form was head-on, dressed with the kidney removed (53%) followed by single fillets with pin bones removed (19%), butterfly fillet with pin bones removed (16%). There was no interest in purchasing the fish alive, whole, or head-on dressed with kidney left in. It is notable that the kidney was left in most of the dressed trout sold at the market. When asked about a second preference regarding product form, 52% chose single or butterfly fillets with pin bones removed. 24%

<table>
<thead>
<tr>
<th>Customer likelihood of purchasing different types of fish</th>
<th>Channel Catfish</th>
<th>Striped Bass</th>
<th>Yellow Perch</th>
<th>Brook Trout</th>
<th>Golden Trout</th>
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<tr>
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<td>10%</td>
<td>7%</td>
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<td>2%</td>
</tr>
<tr>
<td>Somewhat unlikely</td>
<td>15%</td>
<td>2%</td>
<td>7%</td>
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<td>0</td>
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</table>

There was an interest in a variety of fish products at the market. Investigators will continue to examine customer satisfaction for variety of aquaculture products and examine the economics and regulatory constraints facing the pathways local aquaculture products must take to reach farmers markets.
The conference classes and seminars were grouped into topic areas to accommodate the diverse mix of experience, age, crop enterprise and interests of the state’s small farmers. A track was dedicated to teaching beginning farmers the basics. There were also several topics for more experienced farmers covering new production techniques (including high tunnels and drip irrigation) and skills like marketing, value-adding, green technology. There was a separate track for farmers market management and vending.

Participants were free to choose seminars from any track. Michelle White said her family split up to sit in on as many sessions as they could. In one session, farmers market managers learned how other markets have arranged to accept “food stamps” - or electronic funds transfers from the Supplemental Nutrition Assistance Program.

Jack Dunbar, a farmer from Monroe County, who, his son Daniel says, “grows vegetables from asparagus to zucchini”, was interested in the seminars on root cellars, tomato diseases and new varieties of peppers and corn. Craig and Brad Durst of Durst Farms in Aurora, Preston County, were interested in the sessions on berry season extension and small fruit production as they are looking to add more income to the farm, which is currently a beef-only operation. The two were also interested on the topic of high tunnels.

But right now in their beef operation, the Dursts are trying to get into grassfed beef and selling live animals directly off the farm to consumers instead of sending them to a feedlot. More than simply learning to sell their products at farmers markets or their own farm stands - like the Whites started, conference attendees learned how to direct-market their goods in other ways.

Rick Woodworth of Flying W Farms LLC started his farm stand in a wagon-it has now grown to include a restaurant that sells lunch Monday-Friday and prime rib dinners every Friday and Saturday night.

Besides vegetables and fruit grown on Woodworth’s farm, customers can buy cuts of natural Angus beef and value-added products such as lasagna, meatloaf, marinated ribs, marinated steak for hoagies, beef stick and bologna. Each session Woodworth taught was standing-room only.

Also to kick-off the conference, vendors set up goods for sale at the Winter Blues Farmers Market that grossed over $9,200. Some conference-goers enrolled in the Better Process Control School hosted by the WV Small Farm Center and W. V. Department of Agriculture. The class began just a day before the conference and certified nearly 40 attendees to process and pack low-acid and acidified foods for sale.

One of the conference highlights was a chance for producers to talk with industry regulators, including Linda Whaley, manager of the Food Sanitation Program and Training Program in the state Department of Health and Human Resources’ Public Health Sanitation Division. Representatives from USDA, FDA, WV Farmers Market Association, WVFarm2U, and FSA were also in attendance.

WHAT WE HAVE LEARNED (SO FAR)
ALONG THE LOCAL FOOD PATHWAY
BY KELLEN FALKENSTINE, PROGRAM ASSISTANT, WV SMALL FARM CENTER

According to the most recent Census of Agriculture, WV farmers reported that they direct marketed 1/1000th of the WV $7.1 billion food expenditure or $7.1 million of products.

In order to help farmers capture more of the $7.1 billion West Virginia food expenditure, the WV Small Farm Center wanted to learn what is required to put local food in cafeterias and restaurants. We are learning how to “source” food for local events. This past year we successfully sourced three events with local food. We learned that the process is more complicated than it may appear to the casual observer.

First was the 2009 WVU Extension Service Annual Meeting at WVU Jackson’s Mill. The staff at Jackson’s Mill happily accepted our challenge to use locally grown products to create five meals for around 300 conference attendees. Some of the things we learned by going through this process include how to make a menu using local products and how far in advance to start ordering food. Guesting what dishes your crowd will love and what food items they won’t is difficult, as is gauging how much food you will need to feed a large crowd with as little waste as possible. The WV Small Farm Center staff had the opportunity to work alongside the staff. We peeled, grated, measured, sprinkled, potwatched, and scrubbed our way to a better understanding of the impact locally grown, raw food has on an institutional kitchen.

Our experience at the 2009 Annual Tax School in Morgantown, WV, was a little different. The food stayed basically the same but the cook, location, and demographic changed. Our team wasn’t involved in meal preparation, so we had less control over the chain of command and the end product.

This event helped us to gain experience in creating contracts. In many instances, we could verbally express what we wanted, but in the catering industry, the person who takes the order isn’t the person carrying it out, so we learned that written specifics are important. Cooking with raw products requires more time and different preparation, so a good rule of thumb in dealing with hotels or caterers is to write out all the recipes and instructions with each item on the menu.

The demographic at this conference was different because we were working with personal tax preparers, not Extension agents. This was an opportunity to showcase local food for consumers outside of Extension. The group was excited to know where the products came from and where they could purchase them. We were encouraged to see people enthusiastic about local food. Some of the bumps in the road helped consumers to realize that local food isn’t mass processed, and isn’t perfect. It is important to note that the expectations of many of the attendees still wanted, to quote one letter, “the sticky, greasy, fattening food we wouldn’t eat at home”.

Our grandest event with local food was our annual 2010 WV Small Farm Conference. We were pleased to work with great chefs at Lakeview Resort & Conference Center who shared our vision of local foods. We learned that chefs can make all the difference when it comes to the food, taking ordinary and making it extraordinary. We had many positive reviews about the Conference fare. Our audience at this Conference was receptive to the idea of local foods, most of them being small farmers as well.

There is much to learn when it comes to local food. Here are some tips for farmers and value adders (i.e. Bakers or Canners) who are interested in selling local food:

- What do we call “local food”? The WV Small Farm Center considers things that are grown and processed within a 200 mile radius to be local. “Locally grown” and “locally processed” aren’t the same, and we try to purchase products that are both.

- Selling local isn’t for everyone. Understandably, many people would not be interested in changing their recipes or methods to accommodate locally grown items, because it is going to change the outcome of their normal products.

- Because we want a local product, there are some things that will not be on the menu like chocolate, bananas and rice.

SEE LOCAL, PAGE 8
CRACKING INTO THE NICHE MARKET OF PASTURED POULTRY IN WV

BY JOSEPH MORITZ, POULTRY SPECIALIST & PROFESSOR, WVU EXTENSION SERVICE
AND BY KELLEY LILLY, GRADUATE RESEARCH ASSISTANT, WVU EXTENSION SERVICE

Marketing opportunity
• Small scale pastured poultry in West Virginia is a niche market that cannot be mimicked by the commercial poultry industry. Growers can raise birds using feed devoid of antibiotics, genetically modified organisms (GMOs), and/or animal by-products in order to attract consumers that would typically purchase poultry products from the grocery store. Small scale producers should capitalize on the positive aspect of being small; local, and due to having more time to observe the flock healthy.

Breeds and uses
• Broilers grow and feather rapidly and most often feather white for clean picking. Murray McMuray Hatchery sells a Jumbo Cornish x Rock that dresses at 3-4 lbs in 6-8 wks for $1.45-$1.98/bird. Expect one bird to consume approximately 1.45 to 2 lbs of feed for every 1 lb of gain.
• Layers have small bodies, high livability, and will not be inclined to brood. Expect these birds to begin laying eggs around 5 months of age. The color of a bird’s ear lobe (located just behind the eye) dictates the color of the eggshell that it will lay. A good white egg laying breed is the Pearl-White Leghorn ($1.99-$2.36; mcmurrayhatchery.com). A good brown egg breed is the Red Star ($2.08-$2.47; mcmurrayhatchery.com). Most consumers prefer brown eggs. Remember, nutritional content can only be altered via feed presented to the animal, not by the color of egg.

Management
• Broilers: Pastured broilers should be reared indoors for the first 3 weeks of their life with supplemental heat, because birds are unable to thermo-regulate (keep environment approximately 90°F for the first week and decrease 5°F every week after). For the first 3 days ensure chicks receive 24 hours of light and then gradually reduce to 14-21 hours of light. If the wish is to maximize meat production, artificial lighting may be necessary to provide the broilers with 21 hours of continuous light. Birds have different nutritional requirements for each phase of life-starter (0-3 wks), grower (3-6 wks) and finisher (6-8 wks). Check with your feed supplier for help choosing the right feed for these stages. After 3 weeks, broilers should be allowed fresh pasture daily as well as a supplemental feed and water. Providing tarps for shade and outside waterers will entice broilers to utilize the pasture provided. Ensure that housing is properly ventilated and litter is kept dry to prevent breast blisters and hock burn (which will decrease the quality and quantity of the sellable meat).
• Layers should receive supplemental heat for up to 8 weeks of age. Feed a starter feed to increase body size for up to 20 weeks and then feed for egg production. Lighting is especially important for laying breeds and careful management of it will determine subsequent egg production. For lighting requirements contact your WVU Extension Agent. Two to 4 nesting boxes, should be provided for mature layers. Housing should be properly ventilated and be of adequate construction to protect birds from predation.

Take home message
• Start small to minimize your investment and risk. Sell products initially to friends and produce products for family consumption. Allow the news of the quality of your products to spread by word of mouth. Be patient, work hard, and take satisfaction in being a self-sufficient pasture poultry producer. The potential to add a significant supplemental income to your household is only limited by your determination.

A LOOK BACK AT RURAL ELECTRIFICATION

BY BONNIE THOMAS, GRADUATE RESEARCH ASSISTANT, WV SMALL FARM CENTER

Not long ago, for West Virginia farms and rural communities to enjoy electricity, they combined wind turbines and DC batteries to light their homes and power their radios. The WV Small Farm Center studied wind energy’s roots in WV to pre-1935. This marks a decade before rural WV fully received electricity and three years before Franklin Delano Roosevelt signed the New Deal agency, the Rural Electrification Administration into place.

Farmers like the one pictured on page 12, Glen Lowther of the Wheeler/Hacker Valley region of Webster County, used the wind turbine to charge batteries to run the lights in his parent’s home. The family used the windmill for over 10 years before electricity was brought to that region in 1944. Before the turbine, the family operated using only kerosene lights.

Prior to the REA, much of rural America was denied electricity from commercial companies or was charged double the price (or more) for the utility in the 1920s. Companies argued that farmers did not have and would not spend enough money to offset construction costs. By placing the REA in rural America, FDR believed he could bring the same opportunities for growth and expansion that urban areas were already experiencing into rural communities.

A 1934 plan to bring electricity to just 500,000 rural American farmers was estimated to cost $200 million; by today’s standards, this is equivalent to more than $3 trillion worth of government spending.

As an attempt to overcome the predicted light use of electricity in rural areas in the 1950’s and 60’s, companies hired salesmen whose job it was to work in the rural communities and farms promoting the use of more electrical equipment. They handed out ribbons at county fairs, gave awards to up-to-date and well-managed farms at county banquets through the Farming for
Like all farm commodities, selling beef, lamb, goat, and pork close to home can increase the farmer’s share of the food dollar. The farmer’s share of red meat sales is roughly 50% of the retail price, but that can be deceiving. Large meat-packing firms are more efficient in yield and utilization than a local plant. To date, few farmers have chosen to market their meat locally, but as success grows, more will take the opportunity.

Getting started requires perseverance and planning. The process requires close attention to state regulations pertaining to, and including the permitting of the facility that slaughters and packages your meat. Farmers may sell their locally grown meat in individual pieces, or cuts, but if their customers don’t know how to prepare it, or if it doesn’t compare to their grocery store cuts, they won’t be return customers. Feeding or grazing any animal to slaughter weight can be summed up by the adage “the eye of the farmer fattens the calf,” meaning the grower must manage the animals and make changes to achieve the desired product. Harvesting at the proper maturity and weight are essential when entering the local market.

The farmer must ensure that the facility he has chosen is classified as a “Licensed Commercial Establishment.” The animals slaughtered in these facilities can be sold to individuals, businesses, and farmers markets within West Virginia. These should not be confused with the group listed as “Licensed Custom Establishments” whose license allows them to slaughter animals only for “home use.” The WV Department of Agriculture/Meat and Poultry Inspection Division includes both lists on their website: http://www.wvagriculture.org/Division_Webpages/meat_poultry.html. A smaller group of commercial facilities, inspected and licensed by the USDA, will qualify farmers to sell their products across state lines. This option can work the other way too, as farmers often find themselves using out-of-state federally inspected facilities.

Another important consideration in selling meat to your neighbors is labeling. No meat can be sold legally until it is affixed with a label approved by the licensing agency (either USDA or WVDA) under the guidance of the local inspector stationed in your plant. He or she will ensure that the label specifications adhere to the Code of Federal Regulations (CFR), which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government found at http://www.gpoaccess.gov/cfr/.

The code provides for two types of labels, generic and private. The generic label allows the farmer to use the label of the plant where the animals were slaughtered until the farmer develops one of his or her own. The requirements of the label are nearly identical. The labels must contain the following information:

1. The name of the product,
2. If the product is fabricated from two or more ingredients, the word “ingredients” followed by a list of those ingredients,
3. The name and place of business of the manufacturer, packer, or distributor for whom the product is prepared,
4. An accurate statement of the net quantity of contents,
5. An official inspection legend with the license number of the establishment,
6. A safe handling statement including Keep Frozen or Refrigerated.

Another factor you should consider is travel distance. High fuel costs with small loads can drive the cost per pound beyond your customer’s willingness to pay. Organizing larger loads and employing freezers (with generator backups) can help avoid this.

It is important from the marketing side to be able to discuss your product knowledgeably, but it is vital to know what these animals should yield. Fatter cattle yield higher than leaner cattle, of course, but species specific carcass knowledge helps you respond to your customer when he or she asks, “Where did all my meat go? Someone stole it.” It is good management to study a reputable source of meat information like ‘The Meat We Eat’, 14th Ed. (Romans, Costello, Carlson, Greaser, and Jones).

Selling meat to your neighbors can be a good business and a sound way to increase farm income. It will require a few steps to get qualified but there are many people and agencies to help you succeed.
BETTER PROCESS CONTROL SCHOOL
BY CYNTHIA MCLOUD, STAFF WRITER

In 1977, a Michigan restaurant served peppers that a former employee had canned at home. Fifty-nine people got sick in the largest botulism poisoning in the United States to date.

In 1979, the Food and Drug Administration put into effect regulations designed to prevent public health problems in low-acid and acidified low-acid canned foods.

Today, food processors and packers are taught how to apply those FDA rules in practice at Better Process Control Schools all over the country. The schools teach the training requirements of both FDA and USDA.

A Better Process Control School (BPCS) was offered in March by the W. Va. Department of Agriculture in conjunction with the WV Small Farm Conference held at Lakeview Resort in Morgantown. Jean Smith, WVDA Director of Marketing and Development worked with the WVU Extension Small Farm Center to host the school. Partial cost of the training was offset by funding from the USDA Specialty Crop Block Grant Program.

Nearly 40 interested students attended the one time training and became certified for life. “The individual is certified,” the trainers pointed out, “not the establishment where he or she works.” Each processor must have at least one certified employee to oversee the production and sign off on records. If that person leaves employment there, a new person must be certified for production to continue.

Not designed for the home canner, the intensive training details the science of food and contamination and describes how to package food in metal cans, glass jars, bottles, aseptic foil or paperboard containers in a way to keep it safe from contaminants that could cause food-borne illness.

Attending the class in March were producers and entrepreneurs from all over West Virginia, and even a couple from neighboring states. One of the attendees, restaurant owner Kathy Lucente of Tubby’s Café in Clarksburg, wished to bottle and sell her home-made salad dressing. She serves the dressing in her restaurant, which is known for its hot dogs and Italian brick oven-baked pizza.

Though she hasn’t started on her goal yet, she feels more than prepared. “I came away knowing more than I did when I got there,” Lucente said. “The instructors are very helpful. I liked the way the entire class was handled. They were more than happy to stay and talk with you after class when you had a question.”

Along with students looking to become certified to sell their home-made value-added items, were attendees who already pack food on a commercial scale. Cristy Christie, owner of Gourmet Central in Romney, was enrolled in the class.

Gourmet Central has its own line of products including sauces and jams. It also works with individuals who bring their ingredients and recipes to prepare, package and label for sale as value-added items. Another commercial processor in attendance was Magdalena De La Cruz Cook-Garcia, founder of Maggie’s Authentic Mexican Fresh Salsa, which is made in Charleston and sold in Whole Foods Markets.

BUILD YOUR OWN
BY TOM MCCONNELL, DIRECTOR, WVSFC

Farmers don’t build their own buildings anymore. And I know several who need more roof space but feel that they can’t afford it. Many claim they are too busy, others say they just don’t have the handiness to build their own. My observation and experience tells me that farmers often have more time to build their own buildings than their operation has profit to hire it done.

Using your own labor and talents, on your schedule with lumber from your farm or a local sawmill will result in a rewarding experience with a significant outcome. While it may seem intimidating at first, there are plenty of designs and detailed instructions available to help even a novice through the project. Professionals, of course, are faster builders than the rest of us, but after a while the quality of our work will soon rival theirs.

With some careful shopping, local lumber can be cheaper than store bought. But it is important to compare prices between local mills and builders supplies. The old axiom, more money is saved shopping than buying, could never be truer. Often the cost savings will be astounding and the business given to the local sawmills will be greatly appreciated.

There is great variation among mills and lumber stores, but in one instance a farmer built his own trusses for only 15 percent of the price a commercially built truss would cost. That local sawmill is probably the best place to start the process. The sawmill personnel or some other local expert will be able to give you good advice about which species to use and how to handle it prior to, during, and after construction.

Study this yourself in a publication from the local WVU Extension Office entitled Lumber from Local Woodlots. This publication among other things discusses the quality of lumber one must have to construct a truss, including acceptable knothole size and location. Specie comparison is another worthwhile discussion.

Many farmer/woodlot owners also cut their own trees for their buildings. This practice is very dangerous and should only be done by an experienced woodsman. That said, farmers who report using a structure that was built from home-grown and sawed lumber by their hands, neighbors, and loved ones describe it as a very satisfying experience.

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### Important Websites

**West Virginia University Extension Service**
www.ext.wvu.edu/

**Agriculture & Natural Resources - WVU Extension Service**
www.wvu.edu/~agexten/

**West Virginia Soil Conservation Agency**
www.wvca.us

**West Virginia Dept. of Agriculture**
www.wvagriculture.org

**Farm Service Agency (FSA)**
www.fsa.usda.gov

**United State Dept. of Agriculture Natural Resources Conservation Agency (NRCS)**
www.nrcs.usda.gov

This publication was developed by the WVU Extension Service - Small Farm Center Team in cooperation with the Times West Virginian.

Tom McConnell
Director
WV Small Farm Center

Extension WV Small Farm Center Team
Carrice See
Kellen Falkenstine
Bonnie Thomas
Kate Peters - edit chief

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