

# Background

n Spring 2009, the Appalachian Regional Commission (ARC) convened the editors of the award-winning *Encyclopedia of Appalachia* in a series of conversations to identify existing and emerging assets and think creatively about how these assets might best be used for economic development and enhanced quality of life in the Appalachian Region. Facilitated by Dr. Jean Haskell and her research associate Dr. Katherine Hoffman, the scholars visualized together the ways in which lessons learned from the ten years of exhaustive research on the *Encyclopedia* could be applied to continued sustainable economic and community development.

One area that received enthusiastic attention was Appalachia's agricultural heritage and local food economy. Identified assets in Appalachia included an ongoing tradition of small farming and home gardening; the Region's vast food diversity, knowledge of seed saving and cultivating heirloom varieties of local food; an emerging infrastructure of farmers markets, food processing facilities, shared-use kitchen incubators, and community canneries; a growing trend for chefs using locally grown ingredients in their menu offerings; a rich heritage of culinary foodways and of craft, music, storytelling, literature, and custom related to food; and, some of the nation's most respected leadership in the local food movement.

From this conversation with the editors, ARC launched an exhaustive assessment of food system development in the 13 states and 420 counties of the Appalachian Region. The author identified numerous organizations and leaders involved in the local food movement throughout Appalachia, examined the depth and breadth of activity in various parts of the Region, synthesized best practices and available resources, and began to understand the gaps and needs for expanding this growing sector of the economy. The results revealed a vigorous and growing regional food economy that has the potential to increase employment opportunities, improve community vitality and quality of life, and become a sustainable and healthy part of Appalachia's future economic and community development.

This document provides an executive summary of that research report, which is available on ARC's web site at www.arc.gov.

## I. Introduction

ppalachia boasts many assets for community and economic development—scenic landscapes, sparkling waterways, abundant flora and fauna, internationally famous music and craft, a competitive work force, natural energy resources, a proud history, and much more.

But perhaps the Region's most vibrant assets, and maybe the most sustainable, are its agricultural and food assets. As Gary Nabhan says in *Place-based Foods of Appalachia*, the local foods of Appalachia "are treasures of global importance, just as much as the bluegrass music of the same region."

Nabhan is not the only one who sees the food produced in Appalachia as a treasure. A 2011 study identified Appalachia as the most diverse foodshed in North America.

Anthropologist and former farmer, James Veteto, claims we should "just go ahead and say it: People across...Appalachia are crazy about plants and animals. In my lifetime of interacting with Appalachian farmers, gardeners, and wildcrafting enthusiasts, I have never ceased to be amazed by their knowledge and love for all things green and growing."

Bill Kovarik in *Appalachian Voices* says, "farming in Appalachia is somewhat different from the rest of the nation. Despite the economic challenges, there seems to be a Faulknerian quality of endurance among Appalachian farmers."

Bloggers have called food in Appalachia "particularly distinct," perhaps the best example of "hyperlocal, community-driven cuisine," concluding that "Appalachia boasts one of—if not the—strongest, original, and consistent regional cuisines in America." Another blogger writes that "a natural adoption of local, sustainable, and organic principles means that Appalachia

"Local foods of Appalachia are treasures of global importance, just as much as the bluegrass music of the same region."

—Gary Paul Nabhan, Conservation Biologist, Author and Founder of Renewing America's Food Traditions Alliance

Entrepreneurs such as Mark Woods, fruit and flower vendor at the Roanoke City Market in Roanoke, Virginia, sell their products at local farmers markets throughout Appalachia.

Cameron Davidson www.camerondavidson.com.
Virginia Tourism Commission.





#### **Local Food Systems Have Potential** to Create Thousands of New Jobs

The Union of Concerned Scientists released a 2011 report that cited evidence of the boom in local and regional food systems: more than 7,000 farmers markets (up from just 340 in 1970), more than 4,000 community-supported agriculture ventures, and sales of agricultural products through direct marketing channels at \$1.2 billion in 2007. After careful examination of the economic potential of local food systems and public policies that support them, they conclude that "further growth in this innovative, entrepreneurial sector has the potential to create tens of thousands of new jobs," adding "it's an investment we can't afford not to make."

What has produced such lavish praise for a food culture that has at times been misunderstood? Appalachian communities are discovering that attention to sustainability of agrarian landscapes, protection of clean water, conservation of heirloom seeds and plants, production of local food products and connection of food to the rest of the Region's rich heritage have enormous benefits for community and economic development.

Communities in Appalachia are capitalizing upon the impact of the "locavore" or local food movement affecting the rest of the nation. Farms are increasing in number, farmers markets have become ubiquitous, local food is the new buzzword in tourism and for regional restaurants, and demand for local food products has soared.

Some communities, however, are struggling to meet demand, needing improved infrastructure and distribution facilities, more and better trained farmers and food entrepreneurs, better education for growers and consumers, enhanced community capacity to deal with planning and policy issues, and innovative ways to maintain local culture and heritage while growing community economies.

Good news for the Region has been growing support for sustainable agriculture and local food in government agencies and from voices influencing the government on policy and funding. In 2012, the United States Department of Agriculture (USDA) announced a goal to create 100,000 new farmers and provide loans to beginning farmers that will total nearly \$2 billion, with emphasis on specialty crops and organic food.

The USDA's Regional Innovation Initiative urges collaboration in five key areas, one of which is regional food systems and supply chains. Secretary of Agriculture Tom Vilsack argues, "We need generations of leaders in American agriculture to continue our position as the number one agricultural country in the world."

Charles Fluharty, director of the Rural Policy Research Institute, gave forceful testimony in 2012 to the United States Senate Agriculture Committee that effective rural development requires a regional approach and more investment in rural programs from the federal government and major philanthropic organizations. He noted he was encouraged by the Obama Administration's guidance to create a "Place-Based" domestic policy. Part of his argument that rings especially true for the Appalachian experience is his observation that "the people appear ahead of the policy development process," since rural communities themselves have realized how critical collaborations are to their future competitive advantage.

Even the corporate world seems to be changing its perspective. In 2012, an event in New York on slow food and big business highlighted the growing number of private-sector partners committing to sustainability and sharing stories of how small beginnings can achieve scale. One blogger commented, "the fact that these food leaders are getting together says a lot about the public dialogue today. They *are* listening."

As Anthony Flaccavento, noted Appalachian advocate for local food, has said, "If a region known primarily for its coal mining, tobacco farming, and clear-cutting can come to exemplify sustainable development, it will be difficult to ignore." Asheville-based Appalachian Sustainable Agriculture Project, which keeps its finger on the pulse of the local food movement, says unabashedly that Appalachia "leads the country in developing local food systems that build local economies, sustain farms, and ensure that everyone has access to the freshest and healthiest locally grown foods."

# II. Entrepreneurs

ike "locavore," another word spawned by the local food explosion is "agripreneur," a term for entrepreneurs involved in agriculturally based pursuits that extend beyond traditional farming. Agripreneurs may be engaged in Community-Supported Agriculture (CSAs), value-added food production, agritourism, growing specialty crops, food marketing, creating capital for food ventures, or a host of other entrepreneurial activities. Supporting the growth of food and farm entrepreneurs adds value to existing products and improves the viability of farm and food businesses, helping increase sustainability and improve profitability.

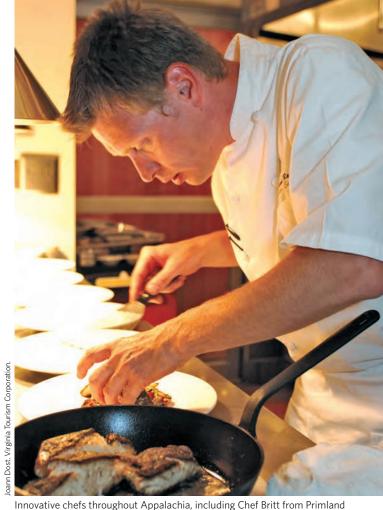
Many of these agripreneurs in Appalachia are farmers, farm families, and farm communities themselves. They are finding new and diverse ways to supplement income. Dale Hawkins, farmer and chef in Rock Cave, West Virginia, is an excellent example of the phenomenon. In his career as a chef, Hawkins helped develop what has been called a "new Appalachian cuisine," using local ingredients and traditional cooking methods in new ways. He continues the focus of making the past part of the present in his farming enterprises. Dubbing his venture the New Appalachian Farm and Research Center, Hawkins has brought innovation to his farm community.

Organizing a group of family farms in the area under the brand "Fish Hawk Acres," Hawkins and his partners operate a Commu-

nity Supported Agriculture program that extends beyond providing boxes of produce on a regular basis to subscribers. They also offer an extensive list of prepared foods made from local ingredients, responding to what Hawkins calls "market demand," and calling the business a Community Supported Kitchen (CSK). They sell breakfast items, soups, entrees, and desserts, plus artisan cheeses and other products, a few of which are not locally sourced but sustainably produced. Some of their items such as chicken and beef pot pies are cooked and frozen in beautiful and substantial Fiestaware bowls; Fiestaware is a West Virginia product, so even the packaging is local. Hawkins helps conduct local food dinners across West Virginia and does research and training for farmers at his own farm. Hawkins says, "You can't think the way farmers have traditionally thought—you have to diversify to get different streams of revenue."

With the growth of community kitchens and food business incubators in the Region, value-added food products have become a substantial source of revenue for local entrepreneurs. At the Shoals Commercial Culinary Center in Appalachian Florence, Alabama, businesses such as Katie's Mustard Slaw and Two Mama's Salsa have brought financial return to local families.

Growing heirloom crops and transforming them into value-added food items is another area of rapid development in the Appalachian food economy. Orchards, especially apple orchards which thrive in the Appalachian Region, have capitalized on this new interest in old varieties. The Historic Orchard at Altapass on the Blue Ridge Parkway in North Carolina, uses its 105-year-old orchard as the setting for heirloom apple sales, live music, storytelling, dance, tours and bird watching.



Innovative chefs throughout Appalachia, including Chef Britt from Primland resort in Meadows of Dan, Virginia, are increasingly using locally sourced ingredients in their menu offerings.

# **Exponential Growth in Community- Supported Agriculture Businesses**

Community Supported Agriculture
(CSA) is a growing trend in
Appalachia and elsewhere. In a
CSA, a group of people buy shares
for a portion of the expected harvest
of a farm, giving them fresh, local
food and allowing the farmer to
know how much to grow. The USDA
reports that there were only two CSA
operations in the United States in
1986; today, there may be as many as
4,000 such businesses.

In many parts of the Region, agritourism revolves around vineyards and wineries. The Southern Tier and Finger Lakes areas of New York have over 100 wineries and numerous wine trails for tourists. Southeast Ohio has an Appalachian Wine Trail that features several wineries, many of which also provide local food and lodging. Virginia's wine country is divided into regions across the state and at least three of the regions are wholly or in part in Appalachia.

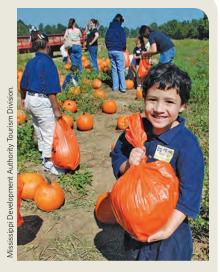
A 2011 study found that Virginia's wine industry nearly doubled in economic impact between 2005 and 2010, providing nearly \$750 million to the state's economy yearly; spending just on winery tourism increased from \$57 million in 2005 to \$131 million in 2010.

Finger Lakes wineries provide the wine pairings for each course of local harvest dinners and farmers, winemakers, and chefs tell stories of their work. The North Georgia Wine Highway offers visitors vineyards, farms, orchards, mills, dairies, herbalists, and restaurants dedicated to preserving mountain foodways and to promoting fresh, local products. North Georgia has more than a dozen wineries and the rate of new vineyard plantings is among the highest in the eastern United States. With over 195,000 gallons of wine produced each year in Pennsylvania (making it the fourth largest wine growing state in the country), many of the wine trails wind their way through the mountains of Appalachian Pennsylvania. Western North Carolina has become such a wine-rich area that the Sustainable Appalachian Viticulture Institute was formed there in 2010 to promote the growing of cool-hardy and disease resistant grape cultivars in the 23 Western counties of North Carolina. Some have called wine production the fastest growing industry in North Carolina, providing over \$1 billion in economic impact to the state in 2011.

In addition, microdistilling for small-batch spirits and microbrewing for beer have also seen tremendous growth in the Appalachian Region. By 2009, according to the "Southern



The Tasting Room in downtown Floyd, Virginia offers wine, cider and mead (honey wine) from six local wineries in one location.



Agritourism in the Appalachian Region Takes Many Forms

Many farms, such as this one in
Mississippi, are able to expand
revenue streams by encouraging
visitors—especially children and
families—to experience on-the-farm
life. Examples of fun activities include
corn mazes, pumpkin patches, wagon
and hay rides, encounters with farm
animals, and other adventures.

Appalachian Beer Guide" in *Blue Ridge Outdoors Magazine*, in recent years the mountain region has become one of the fastest growing craft beer markets in the country, producing award-winning beers and ales. In Appalachian New York, the Southern Tier Brewing Company in Lakewood produces 28 different beers that they export to 29 states and 12 foreign countries. Asheville, North Carolina, by all accounts, is the epicenter of craft brewing in the Appalachian Region, named in 2011 as Beer City USA for the third year in a row. Mountain State Brewing Company in Thomas, West Virginia, produces their signature beer, *Almost Heaven Amber Ale*, and a seasonal blueberry beer, taking advantage of Canaan Valley tourism for marketing.

Such explosive growth in microbrewing has led to a complementary new entrepreneurial opportunity in growing hops from which to make beer. Virginia was once known as the "hops capital of the world," and state leaders hope to regain that distinction once again. In North Carolina, enough farms have taken up hops growing to form the Southern Appalachian Hops Guild. Appalachian State University in 2012 offered a hops workshop and North Carolina State University started the North Carolina Hops Project to conduct research that will make hops a valuable cash crop. In Appalachian Pennsylvania, the Flying Squirrel Organic Hops Farm began in 2009 using sustainable farming methods, and Demeter's Garden in Centre County responded to demands for local hops from an area café and an ale works.

Major challenges for hops growers include labor intensive production and high costs of processing hops. In the Pacific Northwest and in Germany, hops growers form collectives to manage these challenges, but Appalachian growers have not yet been able to make that much investment up front. Hops still is emerging as one of the growth areas in Appalachian farming, with farms in New York, Pennsylvania, Ohio, North Carolina, Virginia, West Virginia, and under serious investigation in almost every state in the region.

Like microbrewing, development of the fishing industry depends upon the pristine water in much of Appalachia. Mountain trout has long been considered one of the Region's delicacies. West Virginia is home to the U.S. Trout Farmers Association and has become a center in the Region for aquaculture. In Raleigh County, High Appalachian Trout sells trout fillets, trout pâté, and smoked trout jerky to individuals and to places such as the Greenbrier, Tamarack, and Kroger stores. Trout for this company and for many others in West Virginia is raised in water from reclaimed coal mines. In 2000, the Mingo County Fish Hatchery opened using water from a Mingo mine; the manager says the water "flows from the mine by gravity to the incubator and the tanks. We hardly even use any electricity."

West Virginia has benefited from the expertise of its Freshwater Institute, headquartered in Shepherdstown, West Virginia. The Institute has helped open many fisheries, including a yellow-perch hatchery in Pocahontas County, a tilapia farm in upstate New York for Finger-lakes Aquaculture (with Cornell University), and an aquaponics farm in West Virginia that uses water from raising the fish to grow herbs and vegetables.

# Aquaculture, or Fish Farming Offers Opportunities for Appalachian Entrepreneurs

In 2011, the Worldwatch Institute reported that the number of fish farmers in Appalachia was growing, especially in the coal fields, who raise trout, catfish and even salmon. The manager of Mountaineer Trout Farm in Princewick, West Virginia, sees huge growth ahead for the industry, saying "we see 10 years down the road between 1 and 2 million pounds of production," and all the farms are hoping to capitalize on the buy local movement. The Freshwater Institute is just one of many organizations in the Region improving local food systems through research, education and training.

# Impact of Farmers Markets in Appalachia

A 2010 report on local food systems by the United States Department of Agriculture's Economic Research Service revealed that farmers markets nationwide had increased by 92% between 1998 and 2009. Some markets such as the Western **North Carolina Farmers Market** in Asheville are large, permanent facilities that offer space for farmers, food service, and shops, a combination that also attracts a great many tourists. Similarly, the Capitol Market in downtown Charleston, West Virginia has both outside market stalls in season and permanent spaces inside that sell produce, local wine, chocolates and other West Virginia products, plus a restaurant. The Athens, Ohio Farmers Market, the largest open-air market in Ohio, fills all of its 100 spaces for vendors and maintains a waiting list. Smaller markets, such as the one in Jonesborough, Tennessee, have become community gathering places, with live music and a seating area for visitors.

### III. Infrastructure

n Appalachia's agrarian past, farmers built local infrastructure to get their food to consumers. Small farm stands or roadside stands sold directly to customers. Farmers trucked products to wholesalers or grocery stores, doing most of the processing on their own farms. Home canning and community canneries helped preserve food for home use and for sale. In today's more sophisticated agricultural economy, the same needs exist for growing food, food aggregation and distribution, food processing, and food preservation. Many communities are rapidly developing the kind of infrastructure needed to move food from farm to table, but there are also major gaps to be filled in many parts of the Appalachian Region. Infrastructure is a critical component of any robust local food system and helps drive the growth of local food ventures, farmers, and businesses.

At its most basic level, agricultural infrastructure begins with soil and seed. Good soil is critical and many farmers in the Region do their own composting for soil enrichment. In some communities, this has become an entrepreneurial opportunity to create community compost centers for farmers and gardeners. For example, Appalachian Organics in north Georgia uses poultry litter to create organic compost and an identically named Appalachian Organics in Travelers Rest, South Carolina, uses worms and worm castings for its organic mulch. French Broad Organics and Frog Holler Organiks offer organic compost in the Western North Carolina area.

Seeds are equally critical for the local food system. Drawing upon the oldest agricultural heritage in the Appalachian Region, the Cherokee Traditional Seeds Project in Cherokee, North Carolina, led its initiator, Kevin Welch, to create the Center for Cherokee Plants, a



According to a 2011 report funded by Southern Sustainable Agriculture Research & Education (SARE), Appalachia has been identified as the most diverse foodshed in North America, with nearly 1,500 documented folk and indigenous crop varieties of heirloom vegetables and fruits; apple cultivars alone make up nearly a third of the varieties identified.



Tribal seed bank and native plant nursery. Welch believes that the Cherokee tradition of gathering wild plants is a kind of farming and hopes to revive this ancient knowledge among the tribe. With similar goals, the Appalachian Center for Ethnobotanical Studies at Frostburg State University in Maryland is a collaborative that is devoted to multidisciplinary study and conservation of native plants of Appalachia. Their aim is to foster economic growth in the Region through networking among growers, retailers, and consumers and helping develop enterprises that use regional plants.

As noted earlier, a critical element of Appalachia's agricultural history has been selling farm products directly to consumers in roadside stands or farmers markets. When tourists first started coming to the mountains in great numbers in the 1950s, homemade wooden roadside stands filled with produce and jam, jellies and ciders were ubiquitous on the landscape. Small farmers markets were a staple in many communities. Today, direct sales of farm products to consumers take many forms, such as larger farmers markets, pick-your-own farms, on-farm stores, community-supported agriculture (CSAs), and direct sales to grocers, restaurants, and institutions such as schools, colleges, and hospitals. Often these sales are facilitated by websites for internet orders. Local food infrastructure and agricultural entrepreneurship have grown in complexity and sophistication.

A 2011 news story in the *Chattanooga Times Free Press* points to both the successes and challenges of farmers markets and direct farm sales to consumers. At local markets, the farms within 100 miles of Chattanooga sold only \$10.3 million of local food products directly to consumers in 2007, up from \$6.7 million in 2002, but still a low percentage of total food sales by the farmers. Nevertheless, some of the farmers did more business in one day than in their farm's history and see the markets as a reinvestment in the local economy, along with their growing Community Supported Agriculture business. Gaining Ground, a local food

# Farm-To-College Programs Taking Root Across Appalachia

Most universities and colleges across the Appalachian Region have embraced bringing local food to their campuses. Cornell University in Ithaca, New York, conducts sustainable agriculture research. Their extension service helped Broome County launch a Farm Friendly website. At Virginia Tech in Blacksburg, Virginia, there is a student garden for organic, sustainable vegetable gardening and a Sustainable Food Corps, a student organization committed to bringing fresh, local food to campus and delivering bags of locally grown fruits and vegetables to area Head Start offices. One of the student leaders said: "Food is obviously an essential issue for all of us. There is a movement sweeping not just **Montgomery County but across** the nation to re-localize our food production and to provide a farm-tofork link. My student colleagues in the Sustainable Food Corps are paving the way." (Roanoke Times, 2009)

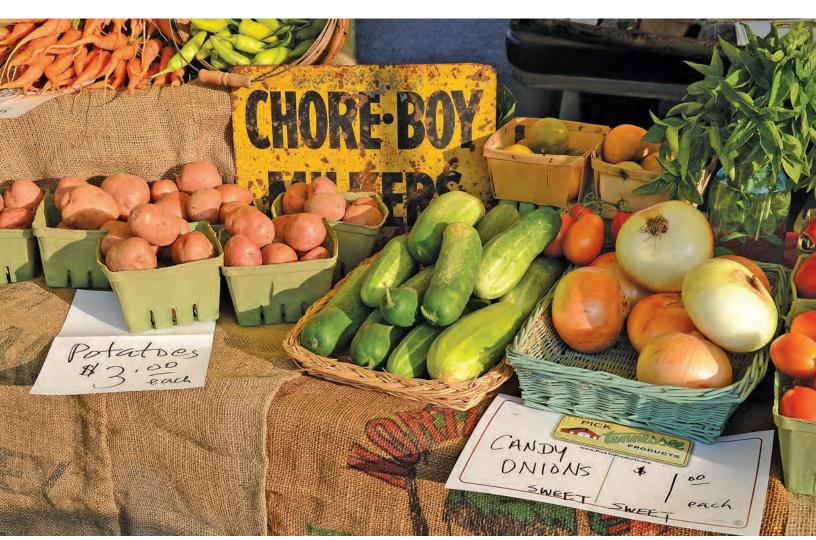
# Connecting Farmers with Local Markets and Resources

Headquartered in Abingdon,
Virginia, Appalachian Sustainable
Development (ASD) was founded
in 1995 by Anthony Flaccavento
and now headed by Kathlyn Terry.
ASD is a non-profit organization,
using a hands-on, entrepreneurial
approach to building a place-based,
ecologically sustainable food system
and economy in southwest Virginia
and the surrounding area.

organization in Chattanooga, reported that, "if Chattanoogans spent just 5 percent more of their food budget—about one meal a week—to buy food from local farmers, more than \$100 million would be injected back into the local economy every year."

An increasing part of the market peg of infrastructure is, in fact, schools, hospitals, colleges, universities, and grocery stores. A 2010 USDA study noted that "farm to school programs represent an important component of the institutional market for locally grown produce," with 41 states and close to 9,000 schools having some kind of farm to school program in 2009. The same study found that increasing numbers of grocers, including such large retailers as Wal-Mart and Safeway, have local food initiatives.

Farmers who must spend most of their time attending to soil, planting, and harvest have little time, and often little assistance, with tasks of aggregating, grading, and distributing what they grow to consumers, whether grocers, chefs, schools, or other markets for their goods. Several parts of the Appalachian Region, through strong local food systems, have addressed these needs with some success.



Boyd Barker, Tennessee Department of Agriculture.

Products from local farmers on sale at the Dandridge Farmers Market in downtown Dandridge, Tennessee offer residents and travelers a chance to support the local economy. The market is presented by the Dandridge Main Street Program in cooperation with the Town of Dandridge, and the University of Tennessee Jefferson County Extension.

One of the initiatives of Appalachian Sustainable Development is Appalachian Harvest, formed in 2000, which is an integrated field-to-table network, with over 60 farmers (many of whom are former tobacco farmers) that have the potential to grow and sell produce and free-range eggs to nearly 900 supermarkets within a 400-mile range. The network provides training for farmers and maintains a 15,000 square foot facility where produce is washed, packed, and shipped to consumers. A challenge for the network has been that demand exceeds the supply.

Flaccavento speaks enthusiastically about related efforts across the Appalachian Region: "The Appalachian Staple Food Collaborative in Southeast Ohio supports regional production of healthy heirloom grains, which it then processes, markets, and ships to regional buyers. And the Monroe County Farmers Market in West Virginia aggregates and distributes produce, meat, eggs, and prepared foods from nearly 20 small farmers to customers using an online marketplace."

A more recent success story is Pilot Mountain Pride, opened in Pilot Mountain, North Carolina in May of 2010. The facility operates within a converted hosiery mill, which also houses a branch of Surry County Community College. Pilot Mountain Pride is an aggregation center and a produce washing and grading facility for small to medium size farms, giving them access to retail, service, and institutional markets. When the center was dedicated, the mayor of Pilot Mountain, Earl Sheppard, said, "This is a new beginning. I'm excited because I am a farmer. This is going to be a new beginning for our young farmers." Bryan Cave, the Extension Director for Surry County who is responsible for farmer education and outreach at the center, added, "This project is about more than fruits and vegetables. It is also promoting family time and education about how food is grown. It's about the value of agriculture to the community and about preserving a way of life and rural character."

One often-cited problem in local food distribution is how to get fresh, local food to the most rural communities or urban neighborhoods that may have little access to markets or grocery stores—so-called "food deserts." One creative solution has been mobile farmers markets and the growth of community gardening. In Spartanburg, South Carolina, a Mobile Market Truck, sponsored by the Hub City Farmers Market, brings fresh produce weekly to underserved Spartanburg communities. Similarly, Rural Resources in East Tennessee, operates the Mobile Farmers Market to deliver orders of fresh, locally grown food to several rural pick-up locations. Headquartered in Berea College's Appalachian Center in Kentucky, "Grow Appalachia" is a program designed to help Appalachian families grow more of their own food to enhance food security and improve public health. Community Food Initiatives in Appalachian, Ohio, has a community garden program and offers food and gardening education.

Centers for produce aggregation and distribution are not the only infrastructure requirements for food processing in a local food system. Farmers who raise pastured animals to produce beef, lamb, pork, and poultry are largely restricted by government regulations from slaughtering and dressing animals on their own farms. Abattoirs and other meat processing facilities have been few and far between in the mountains until only recently, adding fuel costs and time to the farmer's financial outlays and higher cost to consumers of local food. Recently, this gap in the local food chain has begun to be filled by Appalachian communities and partnerships. In Highland County, Virginia, a regional partnership has been the driving force behind development of the Alleghany Highlands Agricultural Center. The facility is creating jobs and solving the challenge local farmers have of the

"This project [Pilot Mountain Pride] is about more than fruits and vegetables. It is also promoting family time and education about how food is grown. It's about the value of agriculture to the community and about preserving a way of life and rural character."

Bryan Cave, Program Director,
 Surry County North Carolina
 Cooperative Extension Service



Woody Crenshaw, Photographer

One of the oldest methods for preserving food throughout Appalachia has been home canning of produce practiced and sold by many of the Region's residents.

great distances to get livestock to processing facilities. One local farmer said the new facility "gives producers and individuals some options, and gets things closer. I hate going across the mountain for everything."

South of Highland County, Virginia, farmers and community members formed Grayson Landcare, Inc., a non-profit organization to help improve the economic circumstances of farmers and preserve land, native biodiversity, and water quality and quantity. The group assisted development of a farmer-owned business raising pastured beef and lamb for sale to upscale restaurants, nearby universities, and other regional buyers. Plans are underway for an abattoir that will serve not only Grayson County but several neighboring counties in the region. The abattoir has been called "a key element of a local food system."

In 2012, McDowell County, North Carolina, opened the doors of the first community-administered, non-profit meat processing plant in the United States that is also USDA inspected and plans to become certified as "Animal Welfare Approved," for low-stress, humane handling of animals there. The Foothills Pilot Plant serves primarily poultry farmers in Southern Appalachia, processing chickens, turkeys, rabbits, and specialty fowl. Already working with about 40 farms in western North Carolina, they have received interest from growers in South Carolina, Tennessee, and Virginia. The Foothills Pilot Plant is a collaboration of state and local governments, small-scale meat producers, and grant-making agencies.

Food processing also involves preserving food and converting it into value-added products. One of the oldest methods for preserving food throughout Appalachia has been home canning of vegetables, fruits and even meat, and is still widely practiced throughout Appalachia. But making jarred foods for others to consume now is heavily regulated with

stringent requirements for commercial kitchens. The result has been the revival of community canneries that meet new regulatory requirements and the development of shared-use commercial kitchens and kitchen incubators in many parts of the mountains.

Washington County, Tennessee, revived its old community cannery and nearby Greene County, through the non-profit Rural Resources organization, offers a mobile kitchen to complement its mobile farmers market, taking foods and facilities to the most rural communities. One of the longest-running and most successful food manufacturing facilities is operated by the Appalachian Center for Economic Networks (ACEnet) in southern Ohio. For over twenty-five years, ACEnet's shared-use Food Manufacturing and Commercial Kitchen Facility has been hosting businesses (now over 150 per year) and they offer training



Entrepreneur from Imladris Farm, a seventh-generation family-owned sustainable farm outside Asheville, North Carolina, utilizes shared kitchen space at Blue Ridge Food Ventures to make jams sold to regional markets, including farmers markets, restaurants and grocery stores.

# **Shared-Use Food Processing Center Fosters Entrepreneurship**

A successful food-based enterprise is Blue Ridge Food Ventures in Candler, North Carolina, an 11,000 sq. ft. shared-use food incubator and commercial kitchen that offers services for Western North Carolina and the surrounding area. They offer product development, "guidance through the regulatory maze," advice on packaging and labeling, and more. They have fostered over 170 businesses with reported sales exceeding \$3.5 million. Blue **Ridge Food Ventures also operates** its own Winter Sun Farms, a community-supported agriculture program that offers frozen fruits and vegetables from local farms engaged in sustainable agriculture. Ricardo Fernandez, owner of Chef Ricardo's Authentic Appalachian Tomato Sauces, testified that "using Blue Ridge Food Ventures, I was able to move quickly to get my award-winning product from testing to full production in just a year." Mary Lou Surgi, Executive Director of Blue Ridge Food Ventures, believes the help they provide financing, packaging, marketing, product distribution, "whatever it takes to get an idea from the drawing board into consumers' hands," is essential: "If we just offered the kitchens and not that assistance, I think a lot of our clients would run away screaming."

Our State Magazine, 2011



Intermediary organizations such as Appalachian Sustainable Development in Abingdon, Virginia help local farmers aggregate and distribute their farm products to regional markets including restaurants and grocery stores, and institutions such as schools and hospitals.

"If Chattanoogans spent just 5 percent more of their food budget—about one meal a week—to buy food from local farmers, more than \$100 million would be injected back into the local economy every year."

Jeff Pfitzer, Program Director,
 Gaining Ground

for those wanting to start or expand specialty food businesses. For their entrepreneurs, they offer assistance with every aspect of product development and product marketing, such as their "Food We Love" marketing and branding campaign for regional foods.

The Shoals Entrepreneurial Center in Florence, Alabama, realized there was a need in their area for a shared commercial kitchen. In 2001 they opened the Shoals Culinary Complex, the first community kitchen in Alabama. Their clients get to share the equipment and facilities of a professional kitchen, expertise of food processing and small business professionals, and access to a website and e-commerce shopping site.

A recent effort, a commercial kitchen for Unicoi County and surrounding areas in northeast Tennessee is part of a larger community effort to expand their farming and tourism industries.

One key part of the infrastructure puzzle is the regulatory climate within which farmers and local food product marketers have to work. There is often a dizzying array of state, county, and local policies, plus federal mandates, and a great deal of uncertainty about who is responsible for developing and enforcing regulations. However, the USDA 2010 study of local food concluded that federal, state, and local government programs increasingly support local food systems.

While Appalachia's local food infrastructure continues to grow in strength, the needs are still great. Strengthened aggregation and distribution facilities are needed to move products to consumers in a more efficient and cost-effective manner, but in many parts of Appalachia, a lack of investment capital makes starting these businesses difficult. Uncertainty and confusion in the regulatory environment may weaken the local food system, especially when rules for local food production and processing are unclear and jurisdictions for enforcement overlap or conflict. On a positive note, the very weaknesses in the infrastructure for local food systems may become strengths in entrepreneurship as local businesses arise to fill the gaps.



Culinary arts programs across Appalachia are educating the next generation of chefs and food entrepreneurs. Students such as this one from Hocking College in Nelsonville, Ohio learn valuable skills in the fundamentals of cooking, nutrition, food safety and sanitation, and business management.

## IV. Education and Training

he emphasis in recent years on local or community food systems has encouraged changes in agriculture education and workforce training. College and university agriculture programs are adapting their approaches to focus on sustainable farming methods, and training farmers for the next generation of agriculture. This has been true in the Appalachian Region as well. In addition, other higher education institutions are developing a variety of new technical curricula, responding to regional workforce development needs, researching issues related to food and farming, and fostering a stronger sense of regional agricultural identity.

The Appalachian Region is fortunate to be home to many of the country's leading land-grant universities, including Clemson University in South Carolina, Virginia Tech, University of Tennessee, Pennsylvania State University, West Virginia University, North Georgia College and State University, Mississippi State University, and Cornell University in New York. Although technically outside the geographic boundaries of Appalachia, Kentucky State University, University of Kentucky, Ohio State University, and North Carolina State University also contribute to agricultural and food work in Appalachia. Much cutting edge research and teaching is being conducted at all these schools.

The College of Agriculture and Life Sciences at Virginia Tech in Blacksburg has been reaching out beyond the campus into area high schools and communities to boost the development of local food systems. Several high schools in the region are learning how to grow and market alternative crops through an innovative grant program offered by Virginia Tech. A professor of agriculture and extension education at Tech said, "We anticipate that students who participate in the local entrepreneurial projects will become more aware of the constantly changing food production opportunities that can exist or be developed in local communities." She added that it can show students the diversity of career opportunities in the agriculture industry and showcase business opportunities. Projects have included building high-tunnel greenhouses, producing potatoes in raised beds, and installing a fillet station next to an existing tilapia operation in a county school.

The University of Kentucky, through its Agricultural Economics department, has offered a training program called "A Common Field: A Whole Farm Management Education Program for Beginning Farmers," designed to offer education in production, marketing, and networking skills for new farmers. Cornell University in Ithaca, New York, offers a Small Farms Program that includes an undergraduate course called Exploring the Small Farm Dream with topics such as diversified farming, grass-based farming, community-supported agriculture, farm business planning, and more. Their Beginning Farmer Project strives to enhance the likelihood of success of new agricultural enterprises by offering resources and training through a website, a guide to farming, an online class, and regional farmer trainings.

The Pennsylvania State University offers a Start Farming program to help educate a new generation of farmers. They received a grant for a project specifically for beginning women farmers that offers "pot-luck learning circles" to develop on-farm and business skills. West Virginia University has an active Small Farm Center that focuses on fruit and vegetable production, value adding, beginning farmers, farmers market management, agritourism, and animal production and marketing.

Researchers Address Food Security in Appalachia to Improve Economic Vitality and Health

A major research project, funded by a \$2 million grant from the U. S. Department of Agriculture's **National Institute of Food and** Agriculture, began in 2011 with faculty researchers from West Virginia University, Virginia Tech, and North Carolina State University. The goal of the project is to improve individual health and the health of the regional economy by strengthening local communities. Methods include surveying where food is grown in Southern Appalachia, assessing farmland and gauging the distance between food and residents, and identifying areas of need with a view to establishing sustainable community food systems. Susan Clark, project director and Associate **Professor, Human Nutrition and** Foods from Virginia Tech, noted that "the Southern Appalachian region has historically struggled with high levels of food insecurity and economic instability. We aim to enhance knowledge of barriers and opportunities for improving food security and economic viability through local and regional food system development in this region."



#### Community Colleges Across Appalachia Increasing Support for Sustainable Agriculture

The Ford Foundation in 2009 funded the Alliance for Sustainability, a network of community colleges to work collaboratively on new and better ways to educate, train, promote, and support sustainable rural development, particularly where associated with industry clusters. One of their areas of emphasis has been Central Appalachia and they have held meetings in Charleston, West Virginia, Knoxville, Tennessee, and Rome, Georgia. Their most recent meeting in 2011 was titled, "Growth from the Ground Up: Community **Colleges and Sustainable Food** Systems." Educating students for sustainable agriculture is one of their key areas of development.

Land-grant schools have a mandate to work with farming and provide community service, but other colleges and universities in the Appalachian Region have also become part of community food efforts. East Tennessee State University in Johnson City and Milligan College in Milligan, Tennessee partnered to host the first East Tennessee Local Food Summit in 2011. In addition to bringing together consumers, producers, educators, elected officials, and local "foodies," they engaged students with a targeted reading and video list and involved them in planning and discussions. Tuskegee University in Alabama has partnered with the Alabama Sustainable Agriculture Network to provide programs for beginning farmers and ranchers and to offer organic agriculture training for extension workers.

Community organizations often provide short courses and workshops to help educate local citizens about gardening, cooking, food preservation, and other topics. Community Food Initiatives in Appalachian Ohio held a series of Appalachian Food Workshops in 2011 that explored organic gardening, wild foraging for nettles and using garden weeds medicinally, home brewing, canning, making jams and jellies, making compost, running a sustainable food business, and permaculture. Gaining Ground, the Sustainability Institute of Mississippi, located in Appalachian Mississippi, offers a year-long class to help people learn to grow food on one square meter of land, such as their front yards, to take the intimidation factor out of home gardening. They also offer student internships with their organization.

In Berea, Kentucky, the Sustainable Mountain Agriculture Center, established by one of the region's most well-known heirloom seed savers, Bill Best, takes agricultural education and training of people of all ages very seriously. Not only does the center collect family and heirloom seeds and help heirloom growers, but they train young people during the growing season to value, grow, and market heirloom fruits and vegetables. They also train folks of all ages in traditional techniques of food preservation, train owners of woodlots in less intrusive logging practices, experiment with Appalachian medicinal herbs and mushroom production, and assist Appalachian counties in becoming more self-sufficient in food production.

The federal government, through the USDA Agricultural Research Service, operates the Appalachian Farming Systems Research Center near Beckley, West Virginia. This laboratory serves the agricultural community of the Appalachian Region by developing knowledge and technology to make small farms in the region more profitable while protecting the environment. They work to identify and target products to meet niche market demands and help farmers with problems of climate, steep terrain, and eroded soil.

# V. Building Regional Capacity

he Center for Rural Entrepreneurship defines community capacity as the knowledge, skills, and attitudes necessary to improve and sustain your community. They identify several principles important to sustainable community development: (1) Local people willing to solve local problems; (2) Leadership; (3) A development process that is both local and regional; (4) Broad-based participation; (5) Building on local and regional assets.

Growth in community food systems in Appalachia has occurred because the Region has been engaged in just this kind of capacity building. Individuals who are passionate about the idea of local food (the "noisy new champions of local food," says one writer) have also had the foresight and persistence to team with others toward a common vision.

In addition to leaders in the Region who can articulate the vision of successful local food systems and what they mean for Appalachia, numerous organizations have been created to link community members and, increasingly, to link communities to one another across the mountains. People in the Appalachian Region—extension agents and university researchers, planners and policymakers, farmers and food producers, economic developers and community activists—are all playing a critical role in local food system development.

Some have helped organize food policy councils, such as ones in Knoxville-Knox County, Athens, Ohio, the Pittsburgh region, and Asheville/Buncombe County. Faith-based groups also contribute to capacity building through education and advocacy, plus often do the practical work of food distribution. The Society of St. Andrews operates gleaning programs across Appalachia, the Appalachian Nutrition Network feeds at-risk children in Ohio and West Virginia, and an interfaith conference in Roanoke, Virginia in 2011 examined "How Being a Locavore Feeds Your Body, Soul, Community, and the Earth."

Many of the Region's successful non-profit local food organizations have brought together stakeholders from many parts of the region and gotten them to work in concert with one another on food issues. With members in Kentucky, Ohio, Tennessee, Virginia, and West Virginia, the Central Appalachian Network (CAN) has done much to strengthen local food value chains in central Appalachia and to offer models for other parts of the Region. CAN, organized in 1993, works on many fronts to advance the Region's economic transition to a more sustainable future.

CAN's member organizations—ACEnet, Appalachian Sustainable Development, Center for Economic Options, Mountain Association for Community Economic Development, Natural Capital Investment Fund, Inc., and Rural Action—are involved in various ways in supporting local food system development in their own work. However, they have increased the power of their reach and of their vision through capacity-building collaboration.

# Multi-State Group Promotes Culinary Tourism And Community Development

The Collaborative for the Twenty-First Century Appalachia, headquartered in Charleston, West Virginia, has published a toolkit to help communities turn their culinary heritage into economic strategies, including ways to hold community cook-offs based on local food traditions and to create cookbooks of local fare. The Collaborative also sponsors the Cast Iron Cook-Off, an annual event growing in attention and acclaim, in which regional chefs use local ingredients and the heritage of cast iron cookware to transform traditional dishes into haute Appalachian cuisine.



# **Building Regional Capacity** in Food Systems

In 2009, the Central Appalachian Network (CAN), a multi-state coalition working on sustainable economic development in Appalachia, hosted a regional convening, "Growing Healthy Food Systems from the Ground Up," and awarded \$100,000 to eight local food projects. In 2011, CAN hosted a groundbreaking meeting in West Virginia with the Appalachia Funders Network to address the most critical issues facing local food systems in Central Appalachia. They held in-depth conversations on four critical topics: growing season extension; aggregation, distribution and rural/ urban connections; institutional buying; and statewide organizing and policy work. In their final report, "Local Food Value Chains: A Collaborative Conversation," they concluded that education and outreach are critical to the success of food value chains, that intermediary organizations are key to enabling local food work to move forward at a regional scale and to crossing political boundaries to give local food a voice and impact nationwide, and that it is crucial to foster serious and productive collaboration among all parts of the local food value chain.

Another partnership group, the Eastern Kentucky Food Systems Collaborative brings together several organizations, institutions, and individuals, including farmers, health professionals, academics, extension agents, and local food advocates to support, strengthen and connect the local food system in Eastern Kentucky. Their projects have included a local food system inventory of Eastern Kentucky and a sustainable farmer training program. The Brushy Fork Institute, also in Kentucky, works with the Appalachian Rural Development Philanthropy Initiative to offer mini-grants to build capacity in the region "through prudent stewardship of resources, thus supporting the growth of local wealth through permanent community endowments."

An even more multi-faceted capacity building program comes from the Mountain Association for Community Development (MACED), one of the members of the Central Appalachian Network. MACED works to create economic options in eastern Kentucky and Central Appalachia that offer meaningful work, stronger communities, respected natural resources, and a higher quality of life. As they say, "Welcome to our vision of Appalachia." Their Agricultural Diversification Lending Program helps family farmers diversify their agricultural income. One family assisted by MACED, for example, began cultivating shiitake and oyster mushrooms on their 200-acre Sheltowee Farm in Salt Lick, Kentucky, in 2001 and harvesting wild mushrooms growing in their forest. When demand rose beyond supply, the family needed to construct a building to have year-round production and MACED helped with funding and technical assistance.

In Virginia, the Blue Ridge Plateau Project is a collaboration among Grayson LandCare, Sustain Floyd, Virginia Tech, the Virginia Farm Bureau, Virginia Departments of Agriculture and Consumer Services and Recreation and Forestry, USDA Natural Resource Conservation Service, several county governments, civic organizations, and concerned individuals. Jerry Moles, one of the leaders of the collaboration, says, "We need not be in an age of heavy equipment and massive investments. Instead, we can choose to be in an information/collaboration arena. If people decide to work together to achieve shared goals, their degree of involvement and the capital accumulated to create new relationships among themselves



Local food hubs or aggregation facilities provide the critical link between local growers and regional markets.

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Local food entrepreneurs use shared-use kitchen facility to incubate their business.

and the Earth are bound only by a lack of imagination." He adds, "as a consequence, the people's capacities to change the economy and practices of agriculture are enhanced."

In Pennsylvania, the Pennsylvania Association for Sustainable Agriculture (PASA) believes "success is defined as achieving our mission now while also building capacity to impact the future for many generations to come." They offer sustainable agriculture education, regional marketing and business support, consumer outreach, advocacy for local food systems, and community building. As David Eason, PASA's director of Western Pennsylvania programs says, "local seems to be the old idea that's new again."

Appalachian Sustainable Agriculture Project (ASAP) in Asheville, North Carolina, prepared a toolkit, "Farm Promotion and Support," for authorities in economic development and tourism to help them work more effectively with the farm and food aspects of their local economies. The organization also has a Local Food Research Center that examines the social, economic, and environmental impacts of localizing food systems. ASAP Farm to School and Farm to Institution programs bring together educators, extension agents, health care professionals, and others to learn about the values of local food and how to support the local food system.

The West Virginia Farm and Food Coalition, an initiative of the West Virginia Community Development HUB, encourages a state-wide and region-wide dialogue about local food systems with the goal of providing healthy, locally produced food to all citizens, especially low income families and other vulnerable groups. Their concerns are for health and food justice, food security, cultural heritage, and ways to build community capacity.

The 2009 Annual Report of the Claude Worthington Benedum Foundation focused on local food system efforts in their service areas of West Virginia and Southwestern Pennsylvania. Titled "From Farm to Table: Growing the Local Food Economy," the report noted that "the local foods movement is not just about economic development, but also, and increasingly, about *community* development."

#### Network of Philanthropies Supporting Local Food System Development in Appalachia

Recently, numerous federal, state and local philanthropic organizations have organized their efforts to strengthen regional capacity in Appalachia through the Appalachia Funders Network. This dynamic network of public and private grant-makers "envisions an entrepreneurial-based Appalachian economy that provides opportunity for all while sustaining the environmental and cultural assets of our region." One of the focus areas for the Appalachia Funders Network centers on local food systems in Appalachia, examining the potential of local food systems to create self-sustaining economic and community development.

### VI. Conclusion

he time is ripe for local food system development in Appalachia. But, as local food advocate Anthony Flaccavento, warns, "it is a very exciting and promising time, but also critical, because if we don't enable farmers to plug into good markets and follow the sustainability approach very soon and very quickly, then this will pass. The desire for local food will become a fad."

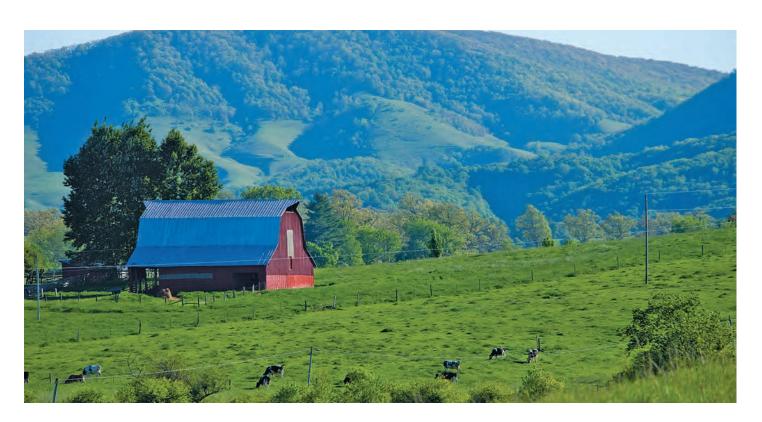
What needs to happen to strengthen local food systems was outlined clearly in findings from a study by Appalachian Sustainable Agriculture Project: (1) Develop trusted local food labels; (2) Target larger-scale markets; (3) Support farmer efforts to satisfy local demands; (3) Create more favorable state and local policies; (4) Improve public education about local food; (5) Expand direct marketing channels; (6) Expand local food activities across the Region; (7) Foster collaboration; (8) Adapt infrastructure for distribution and processing; (9) Develop and support farmland preservation; (10) Align tourism and agriculture.

In Appalachia, growing the local food economy is a major opportunity to create positive, lasting community and economic change based on already existing assets. Appalachia's agricultural and food-related assets provide a foundation on which local communities can build sustainable economic development. Reflecting regional and national trends, sustainable food system development matches many of Appalachia's strengths with the growing demand for local, healthful, safe food that also supports the economies of those who produce it.

As discussed in this guide, many communities in the Appalachian Region are already utilizing local food and sustainable agriculture as a strategic resource to increase job opportunities, revitalize local economies, spark entrepreneurial ventures, and strengthen local capacity. Local leaders can continue these efforts by supporting and maximizing local food and farm assets, helping provide self-sustaining economic opportunities for Appalachia.

"A significant part of the pleasure of eating is in one's accurate consciousness of the lives and the world from which food comes."

—Wendell Berry, "The Pleasures of Eating," 1989



# Suggested Reading

Appalachian Sustainable Agriculture Project. Farm Promotion and Support: Ideas and Tools for Economic Development and Tourism Development Authorities. Asheville: ASAP, 2009.

Benedum Foundation. *From Farm to Table: Growing the Local Food Economy*. Pittsburgh: Claude Worthington Benedum Foundation, 2009.

Berry, Wendell. Bringing It to the Table: On Farming and Food. Berkeley: Counterpoint, 2009.

Central Appalachian Network. *Growing Healthy Food Systems from the Ground Up.* Cannetwork, 2010.

Cobb, Tanya Denckla. *Reclaiming Our Food: How the Grassroots Food Movement Is Changing the Way We Eat*. North Adams, MA: Storey Publishing, 2011.

Farm2U Collaborative. *Cultural Heritage and Community Development: A Toolkit of Resources*. Charleston, WV: Collaborative for the 21st Century Appalachia, 2011.

Flaccavento, Anthony. *Healthy Food Systems: A Toolkit for Building Value Chains*. Abingdon: Appalachian Sustainable Development, 2010.

Hewitt, Ben. *The Town That Food Saved: How One Community Found Vitality in Local Food.* Rodale, 2009.

Kingsolver, Barbara. *Animal, Vegetable, Miracle: A Year of Food Life*. New York: Harper Perennial, 2007.

Lundy, Ronni, ed. *Cornbread Nation 3: Foods of the Mountain South.* Chapel Hill: University of North Carolina Press, 2005.

Martinez, Steve, et al. *Local Food Systems: Concepts, Impacts, and Issues*, ERR 97, U. S. Department of Agriculture, Economic Research Service, 2010.

Minick, Jim. *The Blueberry Years: A Memoir of Farm and Family*. New York: Thomas Dunne Books, 2010.

National Sustainable Agriculture Coalition. *Guide to Federal Funding for Local and Regional Food Systems*. NSAC, 2010.

O'Hara, Jeffrey K. *Market Forces: Creating Jobs Through Public Investment in Local and Regional Food Systems*. Cambridge, MA: Union of Concerned Scientists, 2011.

Salatin, Joel. Folks, This Ain't Normal: A Farmer's Advice for Happier Hens, Healthier People, and a Better World. New York: Center Street, 2011.

Sohn, Mark F. Appalachian Home Cooking: History, Culture, & Recipes. Lexington: University Press of Kentucky, 2005.

Veteto, James R., Gary Paul Nabhan, Regina Fitzsimmons, Kanin Routson, DeJa Walker, eds. *Place-based Foods of Appalachia: From Rarity to Community Restoration and Market Recovery*. Renewing America's Food Traditions Alliance (www.raftalliance.org), 2011.

Wulf, Andrea. Founding Gardeners: The Revolutionary Generation, Nature, and the Shaping of the American Nation. New York: Alfred Knopf: 2011.

### Resources on the Web

Appalachian Center for Economic Networks (www.acenetworks.org)

Appalachian Center for Ethnobotanical Studies (www.frostburg.edu/aces/)

Appalachia Funders Network (www.appalachiafunders.org)

Appalachian Farmers Market Association (www.appfma.org)

Appalachian Foods Storybank
(www.slowfoodasheville.org/heritage-foods-committee/)

Appalachian Grown (www.AppalachianGrown.org)

Appalachian Regional Commission (www.arc.gov)

Appalachian Sustainable Agriculture Project (www.asapconnections.org)

Appalachian Sustainable Development (www.asdevelop.org)

Blue Ridge Food Ventures (www.blueridgefoodventures.org)

Central Appalachian Network (www.cannetwork.org)

Carolina Farm Stewardship Association (www.carolinafarmstewards.org)

Center for Economic Options (www.centerforeconomicoptions.org)

Central Appalachian Food Heritage Project (www.vafoodheritage.wordpress.com)

Collaborative for the 21st Century Appalachia (www.wvfarm2u.org)

Community Farm Alliance (www.communityfarmalliance.org)

Community Food Initiatives (www.communityfoodinitiatives.org)

Eastern Kentucky Food Systems Collaborative (www.appalfoods.org)

Edible Finger Lakes (www.ediblefingerlakes.com)

Gaining Ground, Benwood Foundation (www.growchattanooga.org)

Gaining Ground Sustainability Institute of Mississippi (www.ggsim.org)

Georgia Mountains Foodways Alliance (www.georgiafoodways.org)

Georgia Organics (www.georgiaorganics.org)

Grow Appalachia

(www.berea.edu/appalachiancenter/growappalachia)

Grayson LandCare (www.graysonlandcare.org)

Jubilee Project (www.jubileeproject.holston.org)

Local Harvest (www.localharvest.org)

Mountain Association for Community Economic Development (www.maced.org)

New Appalachian Farm and Research Center (www.newappalachian.org)

Pennsylvania Association for Sustainable Agriculture (www.pasafarming.org)

Renewing America's Food Traditions Alliance/RAFT (www.raftalliance.org)

Rural Action (www.ruralaction.org)

Rural Resources (www.ruralresources.net)

Saving Appalachian Gardens and Stories (www.northgeorgia.edu/GASC)

Seasonal School of Culinary Arts (www.schoolofculinaryarts.org)

Shi Center for Sustainability (www.furman.edu/sustain)

Shoals Entrepreneurial Center (www.shoalssec.com)

Southern Foodways Alliance (www.southernfoodways.com)

Sustainable Agriculture Research and Education (www.sare.org)

Sustainable Mountain Agriculture Center (www.heirlooms.org)

Sustain Floyd (www.sustainfloyd.org)

West Virginia Food & Farm Coalition (www.wvhub.org/foodandfarmcoalition)

West Virginia Small Farm Center (www.smallfarmcenter.ext.wvu.edu)

# The Appalachian Region



Appalachian Regional Commission, 2012











