Tennessee Ag Insider, A Guide the the State's Farms, Food, and Forestry, 2012 Edition

Tennessee. Department of Agriculture.
Picking Local
Finding Tennessee food products is easier than ever

Bovine Business
CATTLE INDUSTRY TOPS LIST OF TENNESSEE AGRICULTURAL COMMODITIES

Sponsored by the Tennessee Department of Agriculture // TNagriculture.com // 2012
If you believe “many hands make for light work” and

Living in the Country is fun

Then work with a lender who feels the exact same way.

When Kevin Snyder is perched on a utility pole, assuring power to folks in McMinn County, he’s hoping someone’s going to feed the cows back at home. Kevin’s a lineman and weekend farmer. And sure enough, his wife Michelle and their three daughters don’t mind feeding chores at all. It’s a shared family dream to live on the farm and raise and show beef cattle. Farm Credit Services of Mid-America helped them capture that dream with reliable financing. “We were attracted by their loan rates, and the chance to know and work with their people,” Kevin said. “It’s been great, because we can spend our free time on the farm with the kids. That’s what we want to do.” If farming and family are your ideas of fun, give us a call.

Loans for Land, Construction, Operating Expenses, Equipment, & Homes Leases • Crop Insurance
1-800-444-FARM • www.e-farmcredit.com

Farm Credit Services
OF MID-AMERICA
Farm Credit Services of Mid-America is an equal opportunity provider.
CELEBRATING THE INDIVIDUAL STRENGTH OF OUR COOPERATIVE SYSTEM.

I'M CO-OP.

TRADITION. SERVICE. EXPERTISE. TECHNOLOGY.
PRODUCT LINE. FAMILY. FELLOWSHIP.

THE REASONS FOR IDENTIFYING YOURSELF AS "CO-OP" ARE AS VARIED AS THE PEOPLE WHO PROUDLY WEAR THE MONIKER OF LIFELONG MEMBER OR DEVOTED CUSTOMER. CO-OP IS MORE THAN A HOMETOWN STORE OR EVEN A FARM SUPPLY COOPERATIVE. CO-OP IS A WAY OF LIFE INFUSED WITH THE PERSONALITIES, EXPERIENCES, AND MEMORIES OF A COLLECTIVE RURAL COMMUNITY OF THOUSANDS. TO BE CO-OP IS TO BE HOME.

THAT'S WHY IT'S EASY TO SAY: I'M CO-OP.
The Morrill Act of 1862 established land-grant colleges for education in agriculture and the mechanical arts and made higher education available to all, not just the privileged few. The term “people’s colleges” was adopted to reflect the new spirit of serving all citizens.

That spirit continues today through teaching, research and extension at the University of Tennessee Institute of Agriculture.

College of Agricultural Sciences and Natural Resources. Preparing undergraduate and graduate students for careers in agriculture, natural resources and other arenas. Annual average enrollment of more than 1,000.

College of Veterinary Medicine. One of only 28 veterinary colleges in the nation. 1,914 graduates since 1974. Nearly half of licensed veterinarians in Tennessee are CVM alumni.

UT AgResearch. Ensuring Tennesseans a safe, affordable and nutritious food supply, while returning $500 million to the state economy annually.

UT Extension. Delivering educational programs and research-based information to Tennesseans through 95 county offices, with nearly 5 million contacts annually. Returning to Tennesseans $6.59 for every dollar invested.

One of 100 land-grant institutions serving the nation and the world:
The University of Tennessee
...The People's University
A Look Inside

Tennessee Ag Insider Overview

Feeding the World
Tennessee looks to play a major role in the global food landscape

Crops, Plants & Forestry

The Modern Age of Ag
Farmers adopt new technologies

Classrooms of the Future
Universities prepare students for careers in new fields of agriculture

Nursery Times
Business is blooming in Tennessee

Raising the Roof
Nashville company grows green roofs

Standing Tall
Forestry industry boosts economy

More Trees, Please
Communities embrace urban forestry

Tennessee Food

Picking Local
Finding Tennessee food products is easier than ever

A Taste for Tennessee
State’s first family enjoys local cuisine

Fresh From the Farm
Farmers’ markets see huge growth

Going Whole Hog
Tennessee sausage companies reflect on humble beginnings
Your diesel engine works hard. Return the favor. Ask for the fuel that works harder for your engine all year round—ask for soy biodiesel.

Soy biodiesel, brought to you with the help of soybean farmers and their checkoff, isn’t just another biofuel. It’s fuel made better. Because soy biodiesel is made from a premium feedstock grown and refined right here in the United States, it is able to deliver a renewable, homegrown alternative to traditional diesel fuel while not sacrificing on performance. In fact, a B2 blend of soy biodiesel can actually improve fuel lubricity by up to 66 percent and extend engine life by preventing premature wear and tear.
TENNESSEE AG INSIDER 2012

Animals & Livestock
40 Beefy Business
Cattle industry ranks No. 1 in Tennessee agriculture

45 Farm Futures Flourish
Program improves farm profits, stimulates economy

46 Equipped for Equine
State is home to diverse equine industry

Environment & Conservation
50 Here Comes the Sun
Solar panels pop up on Tennessee farms

54 Deeply Rooted
Farmland Legacy Partnership works to keep state’s family farms in business

Consumer & Industry Services
58 Recipe for Success
State inspectors ensure food safety and quality

60 What’s Cooking?
Commercial kitchens provide a great resource for food entrepreneurs

61 Measuring Up
Tennessee inspectors test scales and gasoline pumps

63 Fighting On-Farm Crimes
Agricultural Crime Unit protects rural safety

International Trade
64 Tennessee Foods Go Global
From unique pasta to marinades to green beans, Tennessee’s food exports fill demand for niche products

68 Global Gains
Cates Landing connects Northwest Tennessee to Asian, South American markets

73 Seeing Green
Agribusiness and research find home in Memphis

Rural Economic Development
74 Small-Town Appeal
Main Street Program revitalizes town centers, links to ag heritage

79 Bakery Comes Back
Armstrong Pie Company boosts Perry County recovery
Growing a healthier world, one harvest at a time.

Our task is simple, yet monumental. To provide enough food for the world, while protecting it at the same time. We believe that with the right combination of innovative science, tenacious problem solving and unshakable passion, we can do it. We will meet the needs of today while laying a foundation for a better tomorrow. And in doing so, we will not only grow a healthier world, we will make sure that abundance endures for us all. Learn more at www.BayerCropScience.us.
Welcome to the
TENNESSEE AG INSIDER

This magazine is about telling a story –
the story of Tennessee agriculture and forestry and the impact they
have on the quality of life of every Tennessean, every day.

We are fortunate to have such diverse and prosperous industries
that not only give us sustenance but richness in all aspects of our lives
and economy. From our deepest connections with the land and culture
to international trade and value-added processing, Tennessee
agriculture and forestry are vibrant, growing industries that
permeate our economy, health, heritage and natural resources.

Telling the story of these dynamic and expanding industries is no
small task. We’re proud to join with Journal Communications, one of
the nation’s premier publishers, in sharing with you some of the
changes, challenges and opportunities within these industry sectors.

Through this story, we hope you’ll discover a connection to
agriculture and forestry you never knew before: how being “green”
starts with agriculture and forestry, why going “local” means so much
more than fresh, and how technology is shaping food, fiber and fuel
production.

Ultimately, we hope you’ll discover that those who farm and manage
forestlands are the starting point for a much larger and ever-unfolding
story of our future and our ability to produce for a hungry world.

This is your story!

Sincerely,

Julius Johnson
Commissioner
Tennessee Department of Agriculture
Tennessee Agriculture

A look at the state’s top industry

TENNESSEE’S AGRICULTURE industry can best be described in one word – diverse.

From corn and cotton fields in the west to tobacco and tomatoes in the east, more than 50 agricultural products are commercially grown in Tennessee. The state’s top agricultural commodities include cattle, soybeans, broilers (chickens raised for meat), greenhouse and nursery, and corn. Farm production alone accounts for more than $3 billion in farm receipts each year.

The state’s unique land areas contribute to its diversity. Differences in land type, soil characteristics, elevation and proximity to water help determine what crops and livestock will best grow in a particular region of the state. Row crops are largely grown in the flat, tillable land of West Tennessee, while the more rocky terrain of upper East Tennessee is better suited for meat goat production. The state’s top product, cattle and calves, are raised in all parts of the state, with more than 1 million cows grazing Tennessee pastures at any given time. In all, Tennessee is home to more than 77,300 farms and 10.8 million farmland acres, with an average farm size of 140 acres.

The state’s agricultural diversity relates to a growing trend among Tennesseans – buying local. Consumers interact with Tennessee producers at more than 105 farmers’ markets throughout the state or by visiting farms that focus on agritourism.

The industry represents more than just agricultural commodities. Tennessee agriculture also represents agribusinesses, food manufacturing and transportation, forestry and lumber products, greenhouse and nursery businesses, extension services, university and private industry research, and more. This creates an annual economic activity of $71 billion for agriculture and forestry combined.

The forestry industry is also big business for Tennessee. More than 80 percent of the wood material produced is hardwood, and Tennessee consistently ranks as a top hardwood lumber-producing state. Forestry exports totaled $744.6 million in 2009, with paper as the top product.

Both the forestry and agriculture industries support the creation of jobs across Tennessee. The two industries combined represent almost 15 percent of all jobs in the state, including work within agribusiness, food manufacturing and the secondary forestry industry.

Of the 2.8 million crop acres planted in Tennessee in 2010, more than 87 percent were planted with conservation tillage methods. Once known for its rapidly eroding farmland, the state is now recognized as a national leader in conservation tillage, especially no-till farming.

What’s Online
Access more agriculture facts at TNagriculture.com.
How does Tennessee’s geography affect agriculture?

The majority of the state’s row crops (corn, cotton, soybeans and wheat) are grown on the flat, tillable land of West Tennessee.

Middle Tennessee is known for its rolling hills and lush pastures, which are perfect conditions for raising beef cattle.

Tobacco, goats and dairy cows are primarily found in the more uneven and mountainous terrain in East Tennessee.

More than 700 Tennessee farms now offer agritourism attractions, such as corn mazes, pumpkin patches, farm tours and pick-your-own operations.

SOME SURPRISING TENNESSEE TOP AGRICULTURE PRODUCTS

TENNESSEE RANKS 2ND IN THE NATION IN MEAT GOATS, 3RD IN FRESH TOMATOES AND 5TH IN FRESH SNAP BEANS

Source: USDA National Agricultural Statistics Service

Tennessee Export Value

Agriculture: $925 million
Forestry: $744.6 million

Source: USDA Economic Resource Service
By 2050, the world’s population is expected to increase to 9 billion, leading experts to estimate that 100 percent more food will need to be produced in order to nourish that population.

That scenario, daunting though it may seem, presents agriculturally strong states such as Tennessee with a unique opportunity to vastly increase food exports.

“About 25 percent of our total agricultural production is exported,” says Julius Johnson, Commissioner of the Tennessee Department of Agriculture. “For our agricultural community to grow, we must work hard to grow that number.”

**DEMAND GROWS FOR ROW CROPS**

In this light, soybeans, already a firmly established crop in Tennessee, have the potential to be a game changer. And the
reason is simple: As developing nations continue to improve their standards of living, protein in the form of soybeans becomes a critical part of how those countries grow animal protein for food consumption.

“If we can continue to work on developing soybean varieties that are well-tuned to the climate in Tennessee, then I think we will be able to compete pretty well with other (soybean-producing) states in terms of yields,” says Dr. Daryll Ray, director of the Agricultural Policy Analysis Center at the University of Tennessee.

Although on a smaller scale, Dr. Ray says that cotton is another area of Tennessee agriculture that is ripe with opportunity for growth in exports.

“America’s cotton exports have experienced significant growth recently,” he says. “So there is a great opportunity for Tennessee farmers in the worldwide cotton arena as well.”

**BEEF EXPORTS BOOM**

Beef is another commodity for which Tennessee would benefit from a worldwide increase in demand, which will occur thanks to rising per capita incomes in many of the world’s expanding countries.

“We are part of the beef production chain,” Commissioner Johnson says. “So any increase in demand at the export level will filter down to the fairly sizable calf market in Tennessee.”

Along with the worldwide increase in demand for beef, ongoing research on everything from fertilization to fencing has tremendous potential for increasing the amount of beef produced in cow-calf operations. Higher beef yields make the exporting of beef to countries with growing middle classes even more cost efficient for Tennessee’s smaller farms, which make up the majority of the land that is farmed in the state. Furthermore, there is an opportunity to capitalize domestically on the growing popularity in grass-fed beef, a highly specialized commodity ideally produced on smaller farms.

“Protecting the quality of our product is critical,” Commissioner Johnson says, “because Tennessee is recognized as a producer of top-quality products. And that’s a reputation we owe to our small-scale farmers.”

**EXPORTING MADE EASY**

In addition to existing agricultural commodities, Tennessee also boasts certain geographical advantages that can be a boon for the export market.

“The Mississippi River allows us to reach the world,” Dr. Ray says. “China is a tremendous importer of soybeans, and the position of both the Mississippi and the Tennessee rivers allows us to compete with countries like Brazil in that capacity.”

Water, however, is not Tennessee’s only geographical advantage.

“If you look at the interstate system through Tennessee, we are sort of at the hub of the country’s transportation system,” Commissioner Johnson says. “We can connect to key parts of the population, and that means we can get our product to market better, both domestically and abroad.”

— Brandon Lowe
MTSU’s School of Agribusiness and Agriscience features hands-on, experiential learning opportunities paired with strong agri-industry partnerships.

- Our Horse Science program has nationally ranked Horse Judging/Equestrian teams
- Students in new Master of Science in Horse Science program choose from one of three interdisciplinary concentrations: Equine Physiology, Industry Management, or Equine Education.

Programs of Study:
- Agribusiness
- Plant & Soil Science
- Animal Science
- Animal Science (Horse Science Concentration)
- Animal Science (Pre-Vet)
- Agricultural Education Certification

Students at MTSU milk the cows in our dairy then process the milk for campus consumption. As a result, our students are already experienced in the dairy processing industry upon graduation.

www.mtsu.edu/abas

MTSU is an AA/EO employer.
The Modern Age of Ag

Tennessee farmers adopt latest technologies to maximize efficiency

In the 1960s, Tennessee had the highest rates of soil erosion in the country, with farmers losing an average of almost 50 tons of soil per acre per year. But a new technique and a commitment by the state’s farmers to use it changed all that.

“We solved that problem by promoting and employing no-till technology throughout the state,” says Blake Brown, director of the University of Tennessee’s AgResearch & Education Center at Milan. “Today, more than 70 percent of Tennessee’s acres are no-tilled,” he says. The no-tilling practice increases the water and nutrients in the soil by growing crops without disturbing, or tilling, the soil. The results include better production efficiency, cleaner water and air, and drastic improvements in
“I probably sit in front of a computer as much as I’m behind the wheel of a truck.”
— WILLIS JEPSON
Willis Jepson utilizes new technology on his Robertson County grain farm. Advances in precision agriculture such as auto steer and yield monitors increase efficiency and help farmers be good environmental stewards.

soil conditions.

Willis Jepson, a Robertson County farmer whose operation includes corn, wheat, soybeans and tobacco, knows firsthand the benefits of no-till practices. “We embraced the no-till system in the 1980s and now are 100 percent no-till. Beyond the obvious soil conservation advantages, it also allows us to do more with less horsepower, which improves efficiency.”

SOFTWARE TO SMARTPHONES

That’s just one technological advance that Jepson, a seventh-generation farmer, has adopted. “I’ve been working these fields all my life and have seen technology continue to provide our operation with opportunities to manage our inputs, to be good stewards of the environment, and to monitor and improve our yields.”

He points to advancements in auto steer equipment, yield monitors and accompanying software, and even smartphones and iPads as being responsible for creating efficiencies that improve the farmer’s bottom line. Of course, costs are associated with adopting the technology, but there can be big payoffs.

“Equipment advances allow us to better manage all the zones of our operation independently,” Jepson says. “We can create a specific prescription and target yield for each zone, which means we’re not buying more fertilizer than we need. We also gain time and precision each time we use auto steer in our operation.”

Jepson also credits his desktop computer and mobile technology for making it simpler to run his family farm. “My iPhone and iPad make it easy to check the weather and the markets all day long. Accessibility to that information as well as the data on our own operation and farming research and trends help us make sound decisions based on the most current information. I probably sit in front of a computer as much as I’m behind the wheel of a truck.”

BIOTECHNOLOGY AND BEYOND

According to Brown, agriculture biotechnology is also responsible for providing efficiencies for today’s farmer. Products such as RoundUp ReadyR for soybeans and insect control biotechnology for corn and cotton lower the number of passes farmers have to make in a field, which saves time and fuel. Of course, they have to continuously monitor for resistance. And that’s why research is so important.

“Farmers really believe in research,” says Parks Wells, executive director of the Tennessee Soybean Promotion Council. “It has a tremendous return for them,” he says, because the advances that result from the research drive cost, time, and production efficiencies and even open up new markets.

Wells points to the success of biodiesel as one such technological advance. Not only can it be used to power agriculture, but it’s also made from soybeans, so it pays double the dividends. In addition, Wells says, it “helps provide protein for the world” through the creation of soybean meal in the biodiesel production process.

While there is no shortage of challenges for today’s farmers, there is no shortage of ingenuity or tenacity in the Tennessee agriculture community either, Brown says. “Our goal is to help farmers be successful. Technology is one important way to ensure that success.”

– Cathy Lockman
Tennessee’s Top Crops

**SOYBEANS**
Soybean production ranks first among all crops in Tennessee, with 43.7 million bushels harvested in 2010. Most are grown in West Tennessee, with Dyer, Obion and Gibson as the top counties. Soybeans are also the state’s top agricultural export.

**CORN**
In Tennessee, corn is mostly grown for grain, but also a small amount for silage (livestock feed). In 2010, the state’s corn farmers harvested a combined 685,000 acres, with an average yield of 117 bushels per acre (for grain) and 45 tons per acre (for silage).

**COTTON**
Tennessee ranks eighth nationally for cotton production, with 387,000 acres harvested in 2010. Top cotton counties are Haywood, Crockett, Gibson and Madison, all located in the western part of the state.

**TOBACCO**
The state’s tobacco producers yielded 45.7 million pounds of tobacco in 2010, including burley, dark fired-cured and dark aired-cured varieties. Tennessee ranks third for tobacco production, and top counties are Robertson, Macon, Montgomery and Sumner.

**WHEAT**
Some 180,000 acres of wheat were harvested in 2010, with average yields of 53 bushels per acre. Seeded in the fall and harvested in the spring, winter wheat is grown across the state, but primarily in Robertson, Gibson, Haywood, Weakley and Henry counties.

---

**Creating and Sustaining Positive Youth Development Opportunities**

Tennessee 4-H has more than 300,000 participants every year.

4,550 4-H All Stars contributed 57,846 hours of community service, valued at $1,235,591

To learn more or to donate visit [http://4h.tennessee.edu](http://4h.tennessee.edu).
It might seem far-fetched, but the sight of a farmer remotely operating two tractors at once, each without a driver, is a technology that is more than just an idea – it’s actually in development.

Advances like these are just part of what the future holds for the agriculture industry in Tennessee. That’s why universities across the state are taking steps to ensure that their students are prepared to be tomorrow’s industry leaders.

At Middle Tennessee State University, for example, alternative fuel expert and agriscience professor Cliff Ricketts uses his 35 years of research in the field to give students hands-on opportunities to build vehicles that run on power other than gasoline.

“The goal of my work is to come up with a process whereby the American farmer and American consumers would be energy independent in the event of a crisis in the Persian Gulf,” Ricketts says. “My students have built engines that run on ethanol, cow manure, soybean oil, solar power, and now my passion is to build an engine that runs on water. Our program has many students who are gifted engineers and mechanics, and I just guide them and then get out of the way and let them use their talents to build cars.”

Such innovation is also a part of the Tennessee Tech University curriculum. The school’s new degree concentration in agritourism is the first such program in the state. It provides students with an understanding of how tourism can enhance the revenue opportunities of working farms through the addition of petting zoos, festivals, bed-and-breakfasts, concerts, camping, hiking and wineries.

At the University of Tennessee Institute of Agriculture, two new facilities prepare students for careers in the ever-changing agriculture industry. The Center for Athletic Field Safety conducts research on the safety of natural and synthetic turf, and the Little River Animal and Environmental Unit includes a state-of-the-art dairy. Other initiatives include Tennessee State University’s goat research program and the vet tech program at the University of Tennessee at Martin.

Such opportunities have implications for the agriculture industry and beyond. For instance, Ricketts says that “MTSU has a model for the country to follow in the event of a national energy crisis,” and preparing students for such an eventuality through the development of alternative fuels “will have implications for peace, national security, the economy and the environment.”

– Cathy Lockman
With more than 700 nurseries, 300 greenhouses, 2,500 plant dealers, and 400 landscapers certified across the state, the horticulture industry is a booming and blooming business in Tennessee. Together, those businesses translate into 21.7 million containers of plants, 48,000 acres of growing area, and $300 million in sales each year.

Add to those numbers the fact that the state is the world’s largest supplier of dogwood and peach tree liners (young plants ready for field transplanting), and it’s no wonder Middle Tennessee – specifically, Tom Gallagher, middle, and sons Tim, left, and Terry, right, grow 1,150 acres of trees and shrubs at the family-owned Heather Farms Nursery in Morrison. They export about 20 percent of their plants.
McMinnville – is called the “Nursery Capital of the World.” But what is it that makes the area such fertile ground for growing so many species of perennials, annuals, ground cover, shrubs, and shade, fruit and flowering trees? According to Kyle Holmberg, international marketing specialist for the Tennessee Department of Agriculture (TDA), it’s a combination of ideal climate and soil, history and Tennessee know-how.

“We have a great reputation around the world for growing quality nursery stock,” Holmberg says. He also credits the industry’s strong partnership with Tennessee State University’s Nursery Research Center, “which supports the nurseries and promotes innovation” in variety development.

But, he says, success begins with optimum growing conditions, which Tennessee’s location ensures. With an average annual temperature of 59 degrees and 70 percent humidity, the climate offers mild winters and warm summers that are ideal for producing quality nursery stock that will thrive across the country – from areas as different in climate as Minneapolis to Austin, Texas. In addition, the silt-loam soil in Middle Tennessee is ideal for nursery stock because it retains nutrients and water and clings together to establish a strong root ball.

Factor in that Tennessee is strategically located within 1,000 miles of 46 percent of the U.S. population and has easy shipping access through a convenient network of interstates, and you have all the seeds for success.

**TAKING ROOT OUTSIDE THE U.S.**

Tennessee’s trees and plants aren’t just a domestic product.

Terry Gallagher, one of the owners of Heather Farms Nursery in Morrison near McMinnville, says exports account for nearly 20 percent of his business. The family-owned nursery, which was established in 1976 with 50 acres and has grown to 1,150 acres today, has long exported trees and shrubs to Canada and more recently has made inroads in the European market.

---

**TENNESSEE IS HOME TO NEARLY 1,700 NURSERY OPERATORS, AND McMINTNIVILLE IS CONSIDERED THE “NURSERY CAPITAL OF THE WORLD.”**

Tennessee nursery products represent **$285 million** in cash receipts each year.

**$2.7 million** worth of Tennessee-grown live plants and trees were exported around the world in 2010.
They did it by traveling to international horticulture trade shows and developing new relationships and products as a result. One product, a soft-sided container produced in Australia that Heather Farms customized to meet their standards, has opened up doors to the export market.

“The EZ container promotes a more fibrous root system while restricting circling roots, using natural sunlight and air, which means better livability for the plant,” Gallagher says. And because the containers are soft-sided, “you don’t get damage to the plants when the containers are packed tightly together.”

This commitment to innovation is earning Heather Farms an international reputation as a reliable supplier of hard-to-ship plants. “We made a significant investment of time and money to develop a soil and growing facility [for this container production] that meets the U.S. Department of Agriculture and European Union criteria and now have 10 acres of our operation dedicated to producing plants in these containers.”

Gallagher has also spent considerable time visiting Europe to see how potential customers do business and has hosted many international producers at his operation. “It’s important for them to see for themselves the differences in growing methods, how our product line can fit into their production, and the support of our nearby nursery research center,” Gallagher says. “It gives the Tennessee industry a significant competitive advantage.”

The initiative of Gallagher and other producers like him to think creatively, take risks and build relationships with international growers is the key to developing the export market, says Holmberg, who works with the Tennessee horticulture industry to promote their products.

“There are added costs to engaging in such efforts,” he says. “But there is a potential for substantial payoff in the long term for the grower, the industry and the state of Tennessee.”

– Cathy Lockman

Photography by Jeff Askew
Q: Why did the soybean farmer cross the road?

☐ To get some exercise.
☐ It’s “Take Your Chicken to Work” Day.
☒ To help his most important customer to the other side.

Your soybeans travel a lot farther than just the local grain elevator. Go to www.BeyondTheElevator.com to learn more about your number one customers AND your operation’s profitability.
While many in horticulture are looking to the export market as a way to boost sales, others are cultivating new markets in Tennessee to generate more green for green businesses.

Andy Sudbrock, owner of Nashville Natives Nursery and Southeast Green Roofs, is one such horticultural entrepreneur. He has created his own niche by growing and marketing an innovative rooftop module system made of native plants. Public and private developers who are committed to sustainable architecture work with Sudbrock’s company to custom design their green roof project, such as the 2,000-square-foot LiveRoof recently installed at the McCabe Community Center for Nashville Metro Parks.

“The green roof industry has very tangible environmental and financial benefits,” says Sudbrock, who operates both businesses from his 15-acre farm in Fairview. “They produce savings in winter heating and summer cooling costs, and they have a significant impact on storm water runoff because a successful green roof can capture 90 percent of a 1-inch rainfall. With many cities struggling with antiquated storm sewer systems and increased storm flows, green roofs can help to prevent existing infrastructure from getting overly stressed. Green roofs are very functional building components that also happen to be very beautiful.”

That beauty comes in the form of a variety of drought-tolerant plants, such as sedum, native wildflowers, and other low-growing, low-maintenance species that add visual interest, improve property value and boost pride in ownership.

Each rooftop is custom grown, Sudbrock explains, with plants chosen based on the climate and any challenges of the project’s location. Each 2-square-foot module is pre-grown at the nursery, and the complete roof is assembled on site. “You have a functioning green roof from the very first day,” he says.

For an industry that has felt the pinch of reduced landscape business due to fewer new houses and overall belt tightening by consumers, sustainable architecture provides a way to boost the bottom line while providing environmental benefits.

G. Dodd Galbreath, executive director of Lipscomb University’s Institute for Sustainable Practice, encourages the industry to embrace the economic opportunity that sustainable products provide.

“If I were in the nursery industry, I would be positioning my products as an answer for storm water runoff problems,” Galbreath says. “Plant material causes storm water to soak into the ground more quickly, to be stored more safely, to be consumed, and to evaporate into the air completely. If every roof and public space could be made into a kind of linear sponge by using plant material, you’re talking about substantially increasing the need for plant material and the sales for Tennessee growers.”

— Cathy Lockman

Nashville Natives grows plants specifically for use on green roofs and other living agricultural projects.
Many Americans want to preserve the opportunity to walk down a busy sidewalk and visit a store, bakery and farmer’s market, or buy a locally grown product all the while taking the time to enjoy a conversation with a neighbor.
Main Street... Celebrating our history... Downtown revitalization... Caring about where you live... Growing your economy locally!

A vibrant downtown gives the whole community and region a sense of pride and positive self-image. It also serves as an anchor that holds the community together and provides the stability necessary for economic growth.

Tennessee Main Street and Tennessee Downtowns communities are part of a national movement to keep downtowns vibrant and a great place to live, work, and play!

2007-2010 Tennessee Main Street Community Cumulative Reinvestment Statistics

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net new jobs</td>
<td>1,744</td>
</tr>
<tr>
<td>Net new businesses</td>
<td>407</td>
</tr>
<tr>
<td>Building rehabilitation projects</td>
<td>806</td>
</tr>
<tr>
<td>Public improvement projects</td>
<td>637</td>
</tr>
<tr>
<td>New construction projects</td>
<td>139</td>
</tr>
<tr>
<td>Housing units created</td>
<td>213</td>
</tr>
<tr>
<td>Volunteer hours</td>
<td>356,696</td>
</tr>
<tr>
<td>Private investment in downtown</td>
<td>$140,268,444</td>
</tr>
<tr>
<td>Public investment in downtown</td>
<td>$206,220,435</td>
</tr>
<tr>
<td>Total public/private investment</td>
<td>$346,438,880</td>
</tr>
</tbody>
</table>

www.tennesseemainstreet.org/ag

scan with smart phone
Forests cover more than half of the land in Tennessee, and those 14 million acres grow a lot more than just trees. They grow the state and local economy, too, creating jobs, products and exports, all of which make the forest industry a nearly $13 billion business in Tennessee.

While the recent recession and the resulting decrease in new home construction has impacted those numbers, the industry continues to stand tall – maintaining the necessary infrastructure to support a strong recovery.

According to Tim Phelps, public outreach specialist for the Division of Forestry in the Tennessee Department of Agriculture (TDA), that’s because the state “has an abundant supply of a sustainable and valuable forest resource, a skilled workforce, and a strong commitment to the forestry industry.”

In addition, the major highway and railway systems in Tennessee as well as nearby port access means lumber and other products can easily be made available for a national and global market.

What are those products and the businesses that make them? The vast majority of Tennessee’s forests are made up of hardwood species, and the timber processed by the state’s more than 200 sawmills is mostly oak, yellow poplar, and hickory. In fact, Tennessee produces more than 800 million board feet of hardwood
A dawn redwood tree towers over Bruce Webster, urban forest leader for the Tennessee Division of Forestry. A lightning rod, attached to the tree trunk, protects it from storms. Webster says it’s a common management practice for high-valued trees.
lumber each year, making it one of the top hardwood-producing states. Although much less softwood is produced, about 15 million board feet annually, pine and other softwoods are economically valuable commodities as well.

Wood products manufacturing is among the state’s largest basic industries. Secondary products, such as flooring, cabinetry, manufactured homes and paperboard, add to the economic impact of the forestry industry, as does the $2.5 billion in wages paid to the nearly 42,000 Tennesseans who work in the industry.

**BRANCHING OUT**

Although Tennessee is one of the nation’s top five hardwood-producing states, only about 5 percent of the dried hardwood lumber it manufactures remains in the state. In fact, more than $740 million worth of products are exported outside the state and the country each year.

While that export market represents additional economic opportunities for the forestry industry, other initiatives also hold promise as a way for the industry to grow in both reputation and bottom line. For instance, Sustainable Forestry Initiative, Forest Stewardship Council and the American Tree Farm System offer voluntary certification programs that set standards for achieving their specific sustainability designation. Though each program has different requirements, the goal is to ensure consumers that the wood and paper products they buy have come from a forest that has been responsibly managed.

“There is a growing interest by today’s consumers and businesses to support industries with records of strong environmental stewardship,” Phelps says. “As Tennessee forest landowners, forestry industries, builders, architects and other suppliers in the chain pursue sustainability certifications, they will have the ability to meet this growing demand. Tennessee’s forest and human resources are well positioned to supply it.”

– Cathy Lockman

---

**The NUMBERS:**

<table>
<thead>
<tr>
<th>$288</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>million was generated in timber sales in 2010</td>
<td>Tennessee’s national rank for hardwood production</td>
</tr>
</tbody>
</table>

Webster takes a core sample from a sugar maple tree on the Ellington Agricultural Center campus in Nashville.
More Trees, Please

Tennessee communities embrace urban forestry movement

You don’t have to own a sawmill or a paper mill to appreciate the value of Tennessee’s trees. You don’t have to be a logger, a furniture maker or a forest landowner either. The only thing you have to do, says Bruce Webster, an urban forest leader for the Tennessee Department of Agriculture (TDA), is be sure your city has plenty of them.

“In forestry, the goal is to produce a wood product, but in urban forestry the goal is to produce a canopy of trees,” Webster says. “A good tree canopy can reduce energy costs, increase property values, reduce storm water issues and mitigate air pollution.”

The Tennessee Forest Resource Assessment and Strategy report published in 2010 by TDA supports those claims. The report cites research that credits the shade produced by urban forests with providing more than $60 billion in energy cost savings each year for Tennesseans. It points to infrastructure benefits that tree-lined streets provide by intercepting rainfall, which lessens the stress on urban storm sewers, and how streets don’t need to be repaved as often because of the shade. And it estimates the value of the state’s urban forests for naturally managing carbon and removing air pollutants at more than $203 million annually.

But trees provide many intangible benefits as well, Webster says, including an improved quality of life. Some studies find that the addition of trees to the urban landscape may slow traffic, reduce crime in public housing and provide a sense of well-being. “It’s harder to quantify these benefits, but they certainly are there,” Webster says.

The TDA Urban Forestry Program works with cities to help them take advantage of the many benefits trees provide. Through services that assist communities in planting and managing their trees, the program encourages Tennessee cities to develop their own self-sustaining urban forestry plan. Forty-one communities have implemented such a plan and earned the Tree City USA designation for efforts in establishing tree care and protection ordinances, budgeting for and planting trees, and supporting Arbor Day.

Webster says such cities understand that “trees are valuable biological components of a city’s infrastructure and that planning for longer-lived trees is important for realizing the many benefits that trees add to a community.”

— Cathy Lockman
The thought of eating locally might conjure images of cozy mom-and-pop diners where the owners are always present and the menu is laden with comfort food. However, recent years have seen the dramatic rise in a different kind of local eating.

The local food movement is an emerging trend in consumer demand and relates not only to the distance between producers and consumers but also to the manufacturing characteristics of the producer. Food produced locally is not only grown on smaller farms but also marketed within 400 miles of where it was harvested.

The demand for locally grown foods is driven by an increase in conscientious consumers who are in search of more than just a product. Waynesboro resident Gayle Tanner, along with her husband, Jim, owns and operates Bonnie Blue Farm, a goat dairy. The Tanners, licensed farmstead goat-cheese producers since 2006, know consumers have high expectations for their food dollars.

“Many consumers want to be sure they are spending their money in the local community, supporting local farmers and getting fresher, healthier food,” Tanner says. “As more shoppers want local food, farmers are finding ways to extend the growing season, and farmers markets are starting earlier in the spring or go year round. Many people have moved to Tennessee bringing their food traditions and customs, thus expanding the variety and ethnic diversity for all consumers.

Chefs have added to the movement by seeking out local products, visiting farms and making farmers their friends.”

Two avenues for locally grown foods are farmers markets and agritourism venues. Whereas producers

Picking Local
Finding Tennessee foods is easy, thanks to PickTnProducts.org
1. TENNESSEE GOURMET
Based in Mt. Juliet, this company specializes in gourmet sauces, pepper jellies and salad dressings.

2. WHITE LILY
Considered by many as the best flour for biscuits, White Lily was continuously milled in Knoxville for 125 years. Today, its headquarters is in Memphis.

3. BONNIE BLUE GOAT CHEESE
Located in Waynesboro, Bonnie Blue Farm uses only the milk from its Nubian and Saanen dairy goats to make hand-crafted goat cheese.

4. NASHVILLE TOFFEE COMPANY
This Nashville-based toffee treat was first produced in 2003, using a grandmother’s famous recipe.

5. ALLEGRO MARINADE
These marinades were created in 1955 by a Paris, Tenn., family who wanted to make inexpensive meats more desirable.

6. NONNA’S GOURMET FOODS
These are the same delicious Italian sauces served in the Cafe Nonna restaurant in Nashville.

7. TENNESSEE CHOW-CHOW
A Southern staple, this relish is made in small batches by Sugar Plum Foods in White House, Tenn. The company also sells pickles and apple butter.
A Taste for Tennessee
State’s first family enjoys local cuisine

Chef Matt Gallaher saw the power of home cookin’ firsthand while traveling the globe as personal chef to the rock band Kings of Leon. “When you’re away from home for months at a time, people just want to sit down to familiar comfort food,” Gallaher says. The Knoxville native believes meals can be even more meaningful when they are made with homegrown ingredients.

“I like being connected to the food I’m serving,” says Gallaher, who returned to his Tennessee roots to serve as personal chef to Gov. Bill Haslam and his family at the Tennessee Governor’s Mansion. These days, the chef happily indulges his passion for farm-to-table cooking – a passion shared by Tennessee’s first family.

“Pick Tennessee Products was around before eating local became the trend, so we’ve been, and continue to be, a great source for consumers,” says Pamela Bartholomew, agritourism and farmers markets marketing specialist with TDA.

Twenty-five years ago, the Pick Tennessee Products program was created to promote farmers and grocery stores. Today, with the same mission in mind, the program offers free marketing for farmers through its website (www.pickTnProducts.org).

More than 1,600 individual farmers use the website and program to sell some 6,000 items, including fruits and vegetables, grains and organic options. Specialty products, such as farm-direct beef – grass-fed beef produced without the use of antibiotics – are also marketed through the program. The program also includes many value-added products, which are the result of taking a raw product grown by the farmer and modifying it, such as flour, preserves or honey.

The Pick Tennessee Products program bridges the gap between production and consumption and advocates eating locally by borrowing from the mom-and-pop diner philosophy, which Gayle Tanner sums up: “Personal relationships lead to an understanding of the time, effort and expense required to produce our cheese.”

-- Kirby Smith

The NUMBERS:

1,500
More than 1,500 individual farmers and farm-direct businesses list nearly 6,000 farm products on the Pick TN Products website.

700
Tennessee is home to more than 700 agritourism locations, spread all over the state.

To satisfy the gubernatorial sweet tooth, Gallaher turns to the Nashville-based bean-to-bar chocolate produced by Olive & Sinclair. And for a cheese to please any palate, who needs Wisconsin?

“Some great Tennessee cheeses are gaining in popularity, says Gallaher, who notes Blackberry Farm’s sheep’s milk cheeses, goat cheese from Noble Springs Dairy and Sequatchie Cove Farm’s cow’s milk creations.

“Tennessee wines are also developing by leaps and bounds,” says Gallaher. He favors Beach Haven Winery’s dry Riesling and sparkling wine, as well as the offerings of Arrington Vineyards.

“People are really starting to care where their food comes from. Buying locally is a fairly easy thing you can do to make a difference economically and culturally,” Gallaher says. “I’m really glad to be a piece of that puzzle.”

-- Celeste Huttes
The demand for locally grown food has fueled extraordinary growth in farmers’ markets across Tennessee. The state has 115 farmers’ markets listed through its Pick Tennessee Products online directory to tempt consumers with farm-fresh fruits and vegetables, as well as meats, cheeses and artisan items. That’s about double the 58 markets listed with the directory just five years ago, according to the Tennessee Department of Agriculture (TDA).

“We are having tremendous growth in farmers’ markets,” says Pamela Bartholomew, TDA marketing specialist for agritourism and farmers’ markets. “It is unbelievable how many markets are popping up in small and large communities.”

Athens, population 14,000, has been overwhelmed by the response to its 2011 debut of Market Park, a downtown property the city acquired and redesigned to shelter farm vendors selling seasonal items from a five-county region of southeastern Tennessee.

“To say it was successful is a major understatement,” says Austin Fesmire, the city’s director of parks and recreation. A one-day-a-week market idea turned into a daily event.

With 69 farmers registered for its 2011 opening, the city had a near 50 percent year-over-year growth in vendors, Fesmire says.

TDA has supported the growth of farmers’ markets through grant programs, marketing assistance and educational sessions.

Farmers offer fruits, vegetables, meats, honey, cheeses, canned goods, breads and pastas, as well as candles, soaps, and wood and fiber products. Some markets are open year round. Others follow the growing season, starting with spring asparagus and ending near Halloween with pumpkins and squash that double as fall decor.

Visit www.PickTnProducts.org for a list of all Tennessee farmers’ markets.

– Joanie Stiers
When Harold Williams, founder of the West Tennessee-based Williams Sausage Company, first began selling sausage in 1958, he boasted a modest operation through which he sold small amounts of sausage to a handful of individuals and families. In fact, the operation was so small that Harold’s wife Hazel actually hand-sewed the cloth bags in which the sausage was sold.

Flash forward more than half a century, though, and Williams Sausage has become a multi-million dollar company whose products are consumed in nearly 40 states spanning across the country. In fact, the company just finished a two-year, $16 million project in which 40,000 square feet was added to its existing processing facility in Union City, Tenn. The recent success of Williams Sausage demonstrates just how viable sausage processing is as an industry in Tennessee.

“I guess you could say we’ve managed to stay up with the times,” says Roger Williams, Harold and Hazel’s son, and currently the president of the Williams Sausage Company. Williams Sausage produces whole-hog country sausage in chubs, links, patties and in breakfast sandwiches, a line of products that is similar to those produced by a handful of other Tennessee-based sausage companies, the majority of which have a similar homegrown history to that of Williams.

“There were dozens of companies that started as small family operations,” says Harry Womack, who served as vice president of quality assurance and product development for Sara Lee until his 1995 retirement. Womack began his career with Rudy’s Farm Sausage, a Nashville-based sausage company with a history that mirrors that of Williams Sausage.

“When most of these companies started, raising hogs was an everyday thing for Tennessee farmers,” he says. “People in Tennessee have grown up eating and producing sausage.”

The workforce’s familiarity with the industry, plus the state’s central location in what Roger Williams calls “the sausage belt,” are among the other important factors that have kept sausage processing a stable industry in Tennessee despite the fact that swine production has almost
Breakfast sandwiches are among the items produced by Williams Sausage. The company is still run by the family, which includes the founders’ son Roger Williams and his daughter, son-in-law and brother, David.

exclusively migrated to Midwestern states such as Iowa.

In turn, Tennessee’s position as a hub for sausage processing has helped to create a tight-knit community of sausage companies, all of which provide much-needed rural manufacturing jobs.

The completed expansion at Williams Sausage, for example, added 75 new jobs to the company, taking the total number of employees to 375, a number Williams hopes to continue to build on over the next three years.

“It seems like America is becoming more and more concentrated in the cities,” Williams says. “But we think it is important to provide jobs in rural areas. That approach has been good for our company because we get a ton of support from the local community.”

Historically, many pork-related companies have been headquartered in Tennessee, including both sausage and country ham processors, most of which have gone from small-scale family operations like the ones described by Womack, to full-sized manufacturing businesses that produce convenience sausage items for supermarkets and restaurant chains.

“These companies started here and grew here,” Womack says. “And I see no reason why they won’t stay here and be profitable for years to come.”

– Brandon Lowe

Williams Sausage, based in Union City, is sold in close to 40 states across the U.S.
TFA is proud that our Forest Industry and Landowners contribute to a total industrial output in Tennessee of $21 Billion representing 101,891 jobs. Our members grow twice as many trees as are harvested, as well as provide clean water, habitat for abundant wildlife and breathtaking scenic vistas across our state.

Tennessee Paper Council

Tennessee’s paper industry contributes over $5 Billion annually to Tennessee’s economy, employing thousands of Tennesseans directly, and tens of thousands more indirectly in East, Middle and West Tennessee. Our paper industry provides a market for wood grown by Tennessee's farmers and forest landowners and makes paper products for consumers throughout the United States and the world. Tennessee's paper industry is also the largest consumer of recycled material in the state.

www.tnforestry.com . info@tnforestry.com . 615-883-3832
Other Prominent Tennessee Sausage Companies Include:

**ODOM’S TENNESSEE PRIDE**

Tennessee Pride was started in 1943 by Douglas Odom Sr., who had been in the meat business his whole life. Odom experimented with spice formulas to create the sausage recipe that is still used today. The Madison-based company is now run by Odom’s grandson, Larry D. Odom, and has 700 employees.

**JIMMY DEAN**

Country music singer, television host and actor Jimmy Dean founded his sausage brand in 1969 with his brother Don. Today, the company, located in Newbern, is owned by the Sara Lee Corporation and produces bacon, breakfast bowls, sandwiches and omelets along with its line of sausage products.

**GOOLSBY SAUSAGE**

James Goolsby grew up on a farm in Viola, Tenn., where he cured country hams and shoulders and made sausage with his family. He founded Goolsby Sausage Company in 1981 and worked to develop a recipe that tasted like the country sausage his family once made. Goolsby Country Sausage, now a product of James Meat Company, is manufactured in Cookeville.

**WAMPLER’S FARM SAUSAGE COMPANY**

Wampler’s Farm Sausage has been a family operation since its beginnings in Riley Wampler’s kitchen back in 1937. The wholesale meat company incorporated in 1953 and was officially named Wampler’s Farm Sausage Company in 1981. Today, the company’s sausage is sold under the Wampler name as well as many private label brands. Its plant is located in the Eaton Crossroads community of Lenoir City.

**SWAGGERTY’S SAUSAGE COMPANY**

The recipe for Swaggerty’s Sausage Company’s product began more than 80 years ago on a Sevier County farm in Kodak, where Lonas Swaggerty developed his sausage recipe using hams and tenderloins. Three generations later, the modern processing facility remains in Kodak, and the original sausage recipe is still one of the company’s most popular products.
TENNESSEE CATTLE PRODUCER
Mel Maxwell knows the value of working together with other producers. “One of the strong traits of farmers is we’re independent folks, but we’ve laid that aside, and we’ve banded together, establishing rules, so several small producers like myself can put together a nice truckload of cattle,” says Maxwell of Cookeville, Tenn.

Those truckloads of look-alike cattle mean bigger profits for producers and make cattle production big business in the state.

Maxwell, who used to travel the 100 miles from Knoxville to Cookeville every weekend to help his father with the family operation, eventually decided he loved raising cattle more than any other job. He’s now a retired farmer, but still helps with the cattle operation and serves as president-elect of the Tennessee Cattlemen’s Association.

AN ALLIANCE FORMED

Back in 2004, Maxwell was one of the charter members of the Tennessee Beef Alliance, a group of forward-thinking farmers who realized if they produced similar cattle, they could attract more buyers for their beef. They call it the Process Verified Program.

“We put together some bylaws, some rules that we all had to follow and published those,” Maxwell says. “We started with the basics of genetics – only certain bulls could be used – Angus, Hereford and Charolais – in the beginning. We were trying to get uniformity to make all the cattle in a load cookie-cutter same – same size, same color, same sex. By putting together a truckload, it allowed a small producer to leverage himself so he could act like a big producer.”

And get prices a bigger producer could command. The concept was to get a better price for cattle grouped together in a load than if three or four calves were sold alone and the buyer had to put a load together.

“I can say I definitely feel like I get the most value for my calves possible,” Maxwell says. “We get a better price because we band together.”

The rules include when and how often a calf should be vaccinated, when it can be weaned from its mother and started on feed, and what weight it should be sent to market.

“That’s why buyers like our calves so much,” Maxwell says. “We’ll have 50 or 60 bidding on them by phone, Internet, at the auction. When we started, we went to the feedlots – 15 or more – and got them to tell us
Mel Maxwell, who raises cattle at his Cookeville farm, is one of about 77,000 beef cattle farmers in the state.
what kind of calves they wanted. We got input from our customers.”

The Alliance has transformed the state’s beef industry.

“We are a fairly big cattle state – not as big as Texas – but our cow-calf industry is the No. 1 business for the state,” says Jim Neel, University of Tennessee professor of animal science and beef cattle specialist.

GREENER PASTURES

Tennessee’s affinity for cattle comes from the environment and a new Process Verified Program that helps farmers get more money for their cattle by adding value.

“We don’t have a harsh climate, and of the 5 million acres in agricultural land, 3.5 of that is in forage,” Neel says. “Our terrain is rolling and subject to erosion, which makes it perfect to keep in grass. Most of our cattle are grass fed.”

More than 1 million cows, produced by 45,000 cattle farmers, are raised on that grass.

Most of the state’s 77,000 farmers are classified as small. “Our average herd size is 23 to 24 head of cattle,” says Charles Hord, executive vice president of the Tennessee Cattlemen’s Association.

“Tennessee used to raise a lot of tobacco,” Hord says. “When we got the tobacco settlement money, we used it in our Tennessee Ag Enhancement Program to help farmers find something else to grow. Most of them turned to cattle.”

Namely, beef cattle.

“Years ago, in the ’40s and ’50s, we had a lot of dairies,” Neel says. “After World War II, veterans came home and saw they couldn’t have the income they needed from dairy cattle and switched to beef cattle. Families went to town to get jobs but maintained their cattle herd. That’s how we ended up with so many small farms – they kept a cow-calf operation and another job off the farm.”

Livestock accounts for half of all total agriculture income, says Neel, adding that the dollars spent in livestock gives the state a multiplier effect. In 2010, cattle and calves ranked No. 1 in the state over beans and broilers with $545 million in receipts for cow-calf operations.
“For every dollar made in livestock, it turns over 2.5 to 3 times,” he says. “Beef cattle is big business.”

One of the other ways that beef is marketed is direct to consumers. Neola Farms near Memphis raises Black Angus cattle and sells the meat through its local farmers’ market and direct from the farm to consumers and restaurants.

Indeed, Tennessee ranks fourth in the nation behind Texas, Oklahoma and Missouri for number of cow-calf producers.

“We still have a long ways to go with getting producers to buy into the Process Verified Program,” Neel says. “It hasn’t been easy. We had a lot of resistance early on getting people to understand marketing, but we’re making headway.”

Hord agrees. “I am optimistic for the future of cattle in Tennessee,” he says. “Given our geography and our grass, we can add extra weight to cattle cheaply. We are well positioned. We have a lot of land and a lot of people who enjoy raising cattle. A new generation is stepping up and may be better at responding to what the consumer wants.” — Charlyn Fargo

More than 1 million cows graze on Tennessee’s lush, green grass each year. The state’s rolling terrain and some 3.5 million acres of forage-friendly agricultural land makes beef cattle its most lucrative commodity.
EXPLORE BEEF
The People. The Land. The Legacy.

- Tennessee beef farmers take pride in feeding your family.
- Learn about how your Tennessee neighbors raise cattle at ExploreBeef.com
- For lean beef recipes visit BeefItsWhatsForDinner.com

Visit us at: www.beefup.org • www.tncattle.org

Funded by The Beef Checkoff
It may seem ironic that funds from tobacco, a crop that Tennessee farmers used to produce but now typically don’t, are helping farmers prosper. Since its start in 2005, the Tennessee Agricultural Enhancement Program (TAEP), funded with $5 million in tobacco settlement funds, has benefited farmers across the state, many of whom are beef producers.

“After the tobacco buyout, all the money went back into the budget to help the state,” says Justin Bryant, director of TAEP. “In 2005, it was time to do something with the extra revenue. They decided to use some of that money to start TAEP – to make a long-term investment in farming.”

Five different producer programs were set up, ranging from livestock to crop farming.

“We faced some cutbacks, but our new governor worked to get it funded to $21 million,” Bryant says.

For every dollar that the Tennessee Department of Agriculture spends through TAEP, another $3.89 is generated in the state’s economy, according to a University of Tennessee study. By mid-2012, TAEP is expected to have invested $115 million through agricultural grant and cost-share opportunities. That calculates to an estimated $447 million pumped into the state’s economy, in addition to the creation of an estimated 4,654 jobs, the study finds.

TAEP’s primary function provides cost-share funds for long-term investments on farms with livestock or crops. An estimated $83 million will have helped fund nearly 29,000 farm projects from 2005 through mid-2012, Bryant says. Meanwhile, farmers have used their own money to pay for 50 percent to 65 percent of these projects. Farmers who commit to an education program, often through the University of Tennessee Extension, become eligible for 50 percent funding.

Farmers can qualify for $1,200 to $15,000 in cost-share, depending on the program area.

The funding helps all types of farms: cattle, poultry, pigs, sheep, goats, corn, soybeans, small grains, fruits, vegetables, horticulture, viticulture or agritourism.

Projects range from buying access to higher quality bulls to constructing a grain storage bin. In between, farmers have built greenhouses, added special animal handling equipment and purchased feed systems.

Bryant says the program is meeting its intended purposes: increase farm profits, improve efficiency and make farms safer. Meanwhile, improved practices, income and education on farms throughout the state enhance the reputation of Tennessee agriculture.

In a recent program survey, more than 86 percent of farmers said TAEP helped them improve their farm’s efficiency, and more than 67 percent said it had increased farm profits. About 21 percent responded that they were not sure they would still be farming or indicated they would not be farming without TAEP’s help.

– Joanie Stiers and Charlyn Fargo

86 percent

of Tennessee farmers say TAEP has helped them improve farm efficiencies.

TAEP has helped fund nearly 29,000 on-farm projects for Tennessee producers.

$ $$$$ Every $1 investment by TAEP generates $3.89 for rural economies.
Sargeant James (J.D.) Harber had no idea he’d one day be able to combine his love for horses and his police uniform.

“I was in the Tennessee Walking Horse industry in the ’70s and ’80s,” says Harber, founder of the Nashville Horse Mounted Patrol Unit. “I lived in Wisconsin for a while and trained horses, and at the same time, studied law enforcement. When I finished, the Nashville Metro Police hired me. That was 1981. In 1996, my life came full circle.”

**Horses’ Gaits Are City’s Gain**

After being hired, he wrote a proposal for establishing a Mounted Patrol, but it sat in a drawer until 1998. Then everything came together – a new mayor familiar with a Mounted Patrol, and the Titans football franchise coming to Nashville where police on horseback could be helpful in crowd control.

“Someone remembered my proposal and asked me if I was still interested,” Harber says. “I went to D.C. to talk to the Capitol police who used horses, then spent time in Lexington learning about their Mounted Patrol, and I came back and put it together. I had a lot of help.”

He chose Tennessee Walking Horses for their gait – they are more sure-footed and faster on the asphalt streets.

Nashville Metro Police Mounted Patrol Officers Karen Krause and Rita Harden ride Tennessee Walking Horses while on duty at Green Hills Mall. The Mounted Patrol uses Walkers because the breed is sure-footed and fast on asphalt streets.
While Tennessee is probably best known for its namesake Tennessee Walking Horses, the state is also well-known within the equine industry for mules. In fact, Maury County is considered the “Mule Capital of the World,” and is the site of Mule Day, a 170-year tradition.

Top Five Equine Breeds in Tennessee

1. Tennessee Walking Horse
2. Quarter Horse
3. Donkey
4. Mule
5. Spotted Saddle Horse

TENNESSEE IS HOME TO MORE THAN 135 EQUINE DESTINATIONS.

WHAT’S ONLINE
Visit PickTnProducts.org and click on Equine Resources for a free Tennessee Trail Guide.

How Tennessee Ranks

6th for horses and ponies on farms
2nd for mules, burros and donkeys on farms

Top Equine Counties

Bedford: highest number of horses and ponies
Wilson: highest number of mules, burros and donkeys

3.2 Million Acres of the State’s 10 Million Farm Acres are used for equine.
“We started with six horses, donated by the Tennessee Walking Horse Association – some of those horses are still with us,” Harber says. “I like a gaited horse. There’s so much you can do with it. They have an even temperament, and you can take a rider without experience and get him confident in his seat. He doesn’t have to learn to post. A Walking Horse slides along the pavement, while a typical trotting horse breaks contact with the ground.”

Each year, the Mounted Patrol puts on a school for other police departments. “A bigger draft horse will be sweating to keep up with our Walkers,” Harber says proudly. “The advantage of any Mounted Patrol is that people can find us easily in a crowd, and we can see what’s going on in a crowd. The Mounted Patrol is part of our homeland security.”

His No. 1 horse is a Walker named Joey.

“He’s a big sorrel, and we’ve been together for 13 years,” Harber says. “We have a relationship – and that’s what it takes to deal with crowds and fireworks. You have to know your horse, and your horse knows you.”

NOT JUST HORSEING AROUND

Named for the state, the Walking Horse has been one of the most popular horses in the abundant equine industry. Tennessee has more than 200,000 horses, and 3.2 million acres of the state’s 10 billion farm acres are devoted to the horse industry, according to Bridgett McIntosh, a horse specialist with the University of Tennessee Extension.

“That’s 30 percent of our land for horses – a huge tax base, but it’s also a great number of people involved in the horse industry,” McIntosh says.

The last U.S. Department of Agriculture National Ag Statistics Survey ranked Tennessee sixth in the nation for numbers of horses, behind Texas, California, Kentucky, Oklahoma and Missouri. The state ranks second in the nation for numbers of donkeys and mules (behind Texas), and second in the country for numbers of quarter horses.

Mules raised by the Reese Brothers in Maury County in Tennessee are in demand as Grand Canyon guides and for downtown buggies in Charleston, S.C.

“Back in the 2004 survey, there were over 60,000 head of Tennessee Walking Horses and about 45,000 quarter horses,” McIntosh says. “Those numbers have shifted now. The Tennessee Walking Horse is our most well-known breed, but quarter horses are equal to or exceeding their numbers because they are so popular to show and use on trails.”

The state has more than 50 equine trails, which have become huge tourism draws, and has one of the best rodeo programs at the University of Tennessee at Martin, and one of the largest high school rodeo associations.

Horses are also used for harness racing in Lincoln County, and a Steeplechase in Nashville. But the biggest demand is for pleasure horses and trail riding.

“We’re unique – we can grow warm-season grasses and cold-season grasses,” McIntosh says. “That provides an extended grazing season for our horses.

“I can’t imagine Tennessee without horses,” she says. “Back in 2004, we had 41,000 horse operations, most with less than five horses. A lot of my work now is in sustainable horse management. As the state is increasingly urban, we have more and more horse farmettes – 5 acres with a couple of horses. People want to know how to provide the nutrition for those horses and still protect the environment.”

– Charlyn Fargo
Here Comes the Sun

Solar panels pop up on Tennessee farms

The Tennessee Solar Institute’s mission is to promote energy independence and provide a more sustainable future through solar power. However, the reasons for choosing solar power are a little different for agriculture producer Tim Hitchcock of Day Lily Nursery in Rock Island.

“I had always been interested in solar power from the standpoint of energy self-sufficiency and environmental responsibility, plus it just seemed cool,” Hitchcock says.

As a growing industry that offers small agricultural entities clean and efficient results without drastically disturbing the landscape, solar farms are sprouting up all over Tennessee.

The solar farms across the state exist on as little as one acre of land and use ground-mounted photovoltaic (PV) panels, generating 1 megawatt of electricity on around 5,000 panels. The sun’s rays hit the PV panels and are converted from direct current energy to alternating current energy and useable electricity. According to the U.S. Energy Information Administration, the monthly average electricity consumed by a Tennessee home in 2010 was 1,393 kilowatt-hours. One megawatt equals 1,000 kilowatts, so even a one-acre farm can make a big impact on the state’s energy needs.

“We are seeing small ag entities putting solar rays on their dairy barns or in fields to supplement their income,” says Chris Davis, communications manager for the Tennessee Solar Institute at the University of
Tim Hitchcock uses solar panels to supplement the power at Day Lily Nursery in Rock Island.
Meet Danny Morris, a UT Martin graduate
who earned his **undergraduate degree in Agribusiness**, completed three internships
as a student and is now working as a commodities broker with one of the world’s
largest grain processors. Currently, Danny
is pursuing his Master’s in Agribusiness and Risk Management at UT Martin. With his
advanced education, Danny can excel in his
career and contribute to vital research necessary
to the agricultural industry.

**A Master of Science in Agriculture and Natural Resources degree from UT Martin can lead you in many directions.**
From operations and business strategy to risk management and resources systems, you will be
prepared for the challenges that lie ahead. And since the entire program is online, you can grow
your education from anywhere.

Whether you’re looking to build the foundation for a career in agriculture or expand your
reach in the industry, **UT Martin provides everything you need from the ground up: education, experience, and opportunity.**

For more information on our undergraduate and graduate programs in agriculture, please visit
our website at [www.utm.edu/ag](http://www.utm.edu/ag).
in Knoxville. “The Tennessee Valley Authority pays the producer for all the electricity generated, and the producer buys the energy back at a lower rate.”

Thanks to government grants, Day Lily Nursery is one agribusiness that has added a solar farm.

“The process of applying for the grants was the most time consuming,” Hitchcock says. “The construction went rather smoothly. The income it generates is paying for it in a timely manner, and I have many visitors who love to hear about solar energy.”

Wampler’s Farm Sausage installed two solar systems at its facility in Lenoir City. The systems are topping 500 kilowatts in energy generation, which is saving money that can then be reinvested back into the business.

“The cost of solar electricity is rapidly approaching the cost of electricity produced through traditional means,” says Dr. John Sanseverino, director of programs for the Tennessee Solar Institute. “For many states, Tennessee in particular, that’s an economic driver.”

In addition to comparable prices, solar energy offers many other benefits.

“In contrast to other alternative fuels, solar energy provides clean air, is renewable and decreases dependency on imported oil and coal,” Dr. Sanseverino says.

Not only does solar energy help the environment, it also helps Tennessee’s economy.

“The nation’s solar industry grew 69 percent last year, one of the only industries that is seeing growth and job creation during tough economic times,” Dr. Sanseverino says.

Tennessee is out in front in terms of solar energy developed and also solar education. The West Solar Farm of Haywood County has been constructed adjacent to Interstate 40. The solar farm is complete, but the owners plan to build an interactive welcome center to help travelers understand the role of solar energy in lessening energy dependence.

– Kirby Smith
Deeply Rooted

Farmland Legacy Partnership works to keep state’s family farms in business

Rolling Acres Farm has been in Lucille Ryan’s family for seven generations. At 84, she is turning it over to her son, who will manage the beef cattle operation. And she hopes her grandson will one day be the ninth generation on that land in Hawkins County.

So does the Tennessee Farmland Legacy Partnership, a group of a dozen government, university and nonprofit agencies working to raise awareness about the state’s agricultural history and the importance of farmland to its future. Tennessee has 77,300 farms, according to the National Agricultural Statistics Service, but between 2000 and 2010, the state lost an average of 1,000 family farms and 95,000 acres to other uses each year.

The costs are real – less land for food production, fewer rural jobs and diminished scenic beauty, says Joe Gaines, assistant commissioner for the Tennessee Department of Agriculture.
“I would like it to be passed down like this, as a farm. It is important to me.”

— Lucille Ryan

The family of Lucille Ryan, her son Timothy and his children, Collin and Leah, has owned Rolling Acres Farm in Rogersville since 1789.
“People like to be able to drive 20 minutes and see the country. We have green fields and trees and cows and barns. It is part of our heritage,” Gaines says. “Farmland has a value that should be considered within the development process.”

MAKING IT WORK

Five state departments and two federal agencies, plus Cumberland Region Tomorrow, the MTSU Center for Historic Preservation, The Land Trust for Tennessee, the Tennessee Farm Bureau Federation and UT’s Institute of Agriculture came together as the Farmland Legacy Partnership in February 2010. The Land Trust acquires easements on farms to permanently protect the land.

The MTSU center runs the Century Farms program, which certifies and recognizes Tennessee farms that are 100, 150 and 200 years old. As of December 2011, Tennessee had more than 1,400 Century Farms, says Caneta Hankins, director of the program.

Recognition helps boost awareness and agricultural tourism, but a key to farmland preservation is making farming itself profitable, Gaines says.

To that end, the Tennessee Agricultural Enhancement Program offers grants to help farmers pay for hoop houses, irrigation and hay barns. More than 4,000 hay barns were built in the last five years, generating 4,500 jobs in rural Tennessee, Gaines says. Farmers had to match the grant amount with their own funds.

He cites an October 2011 study by the University of Tennessee that found every $1 invested in agriculture generates $3.89 in additional economic impact.

GOING LOCAL

Efforts to preserve Tennessee’s farmlands dovetail with increased interest in locally sourced food.

“I do think more people appreciate local foods and local farms,” Gaines says.

The Century Farms program sees a rush of new applications early in the year from early 20th century farms hitting their centennial year, Hankins says.

To qualify, farms must have at least 10 acres of the original founders’ land, been in the family continuously for at least 100 years, produce at least $1,000 a year in farm income and have at least one owner who is a Tennessee resident.

Rolling Acres meets those requirements quite easily. The farming operation began in Rogersville in 1789 and through generations produced traditional East Tennessee crops as well as honey, lye soap, chicken, turkey and eggs. For much of the 20th century, the farm was a large-scale dairy operation run by Ryan’s father, the founders’ great-great grandson. Lucille Ryan’s late husband switched to beef cattle in 1989. Rolling Acres also produces corn, wheat and hay for its cattle.

“We tried everything like most farmers do,” she says. The sense of family heritage has been one constant.

“I would like it to be passed down like this, as a farm,” Ryan says. “It is important to me.”

– Pamela Coyle

FROM 2000 TO 2010, TENNESSEE LOST ABOUT 1,000 FAMILY FARMS AND 95,000 ACRES OF FARMLAND EACH YEAR.
Recipe for Success

State inspectors ensure food safety and quality

Whether it’s a jar of jam, a bottle of barbecue sauce or a piece of pie, if it’s made in Tennessee, it’s going to be more than just tasty. It’s also going to be made with care. The Tennessee Department of Agriculture (TDA) makes sure of it through the efforts of its Food Safety section of the Regulatory Services Division.

“I like to say that we address everything from the stable to the table, from the gate to the plate, from the farm to the fork, from the grass to the glass, from the boat to the throat, and from the deli to the belly,” says John Sanford, TDA food manufacturing administrator.

What do they do to ensure the integrity of the food chain? Sanford, a 35-year TDA employee, explains that it’s a recipe that requires equal parts diligent inspection efforts, strong collaboration and responsiveness.

From inspecting dairy farms, food manufacturing facilities and commercial kitchens to sampling finished food products for laboratory testing, Sanford’s team works to protect the consumer and maintain a fair marketplace.

HOME SWEET HOME

Achieving those goals may seem straightforward – send out inspectors, evaluate the facility and manufacturing process, and test the product.

Many of the state’s food inspection team also work in the state-of-the-art L.H. “Cotton” Ivy Laboratory, located at Ellington Agricultural Center in Nashville.

However, ensuring that food is safe sometimes requires a little creativity on the part of the TDA inspectors, especially when faced with a growing industry of home-based food businesses.

“We saw that there were more and more people looking to build a business by preparing products from their own recipes in their own homes and selling them to the public,” Sanford says. “This isn’t a fad, it’s a trend, and we wanted to be responsive to the interests of the entrepreneurs while protecting the health of the public.”

To accomplish that, the TDA initiated a program in January 2007 for domestic kitchens that allows the in-home preparation of food for retail sale as long as the food does not require refrigeration. For instance, you can make candies and breads in...
your home, but not cheesecakes. Also, entrepreneurs must successfully complete a six-hour course on food safety taught by University of Tennessee food science faculty and must have a kitchen that meets an established set of safety, equipment and architectural guidelines.

“Safety of food prepared in a home and sold at a farmers market is of no less significance than foods prepared commercially and offered for sale,” Sanford says.

**KEEPING IT LOCAL**

Since the program began, more than 800 people have taken the course and more than 125 domestic kitchens have been established. For Tennessee entrepreneurs and consumers, it’s good business.

“The domestic kitchen rule allows an entrepreneur to test the marketplace without incurring the costs of a separate processing facility, which can mean thousands of dollars saved in start-up costs,” Sanford explains.

It also encourages the idea of “buying local.” Not only do consumers support area businesses at farmers markets and other such venues, but the entrepreneurs support local farmers through the purchase of their ingredients.

Such responsiveness and collaboration creates a favorable business climate and ensures consumer confidence.

“We’re very proud of where we are in food safety in Tennessee,” Sanford says.

—Cathy Lockman
Mike Weeks has turned a weekend barbecue sauce competition into a business, and a partnership with the Cumberland Culinary Center is making the entrepreneur’s life a little bit easier. Weeks, the owner of Southern City Flavors, had gotten used to the eight-hour roundtrip drive from his home in Tennessee to the Indiana facility that met the production requirements for his sauce and jelly-making business. But now that he’s found a kitchen close to home, his business is really cooking.

“It’s well-suited for my operation of bottling jams and jellies,” explains Weeks. “And it has labeling and date coding machines that help me create a more professional-looking product while keeping me compliant with all food safety regulations.”

The 2,400-square-foot facility in Lebanon is a joint project of the Tennessee Department of Agriculture (TDA), the U.S. Department of Agriculture, Cumberland University and the Wilson County school system. Opened in 2010, it is a licensed commercial kitchen that can be rented by Tennessee food entrepreneurs for their own food-processing operations.

“The center is a great asset to the middle Tennessee area,” says Linda Shelton, agricultural marketing specialist for TDA. “Companies are able to spend time and funds on growing and marketing their Tennessee brand products rather than incurring the expense of having their own production kitchen.”

Or in Weeks’ case, driving to another state to use one.

STIRRING UP MORE BUSINESS
Sue Sykes is the volunteer kitchen manager of the Cumberland Culinary Center. As president of her own company, Tennessee Gourmet, she knows firsthand what entrepreneurs need and works to provide it.

“We offer training for the businesses in food sanitation, equipment operation and kitchen protocols,” she says. “We’re also available to supervise their operation until they’re comfortable with the process.”

Sykes, and her husband, Gary Dummer, are also responsible for opening, closing and maintaining the kitchen each day, for ensuring that the food safety program is in full compliance and for calibrating the machines – more tasks that the entrepreneur doesn’t have to worry about. They also organize bulk purchasing for glass containers to create additional savings for the businesses that use the center.

And it’s not just businesses that benefit. The Lebanon community does, too, through access to locally made products and through opportunities for local students to explore food production processes by visiting the center.

It’s a concept that’s catching on across the state, with similar facilities operating in Cannon, Montgomery and Hamilton counties and with several other communities expressing interest in providing such a service.

“It’s an opportunity for small-scale producers to use commercial-scale facilities to build their businesses,” Sykes says. “That’s a benefit for everyone.”

– Cathy Lockman
Have you ever wondered what would happen if you drove away from a gas station with the fuel nozzle still in your tank? Would there be damage to your vehicle and gasoline pouring out onto the pavement?

While the Tennessee Department of Agriculture can’t fix your car or cure your embarrassment, the inspectors in its Weights and Measures division do work to prevent a gas spill hazard. That’s because they’re responsible for inspecting every gas pump every year to be sure that every pump is equipped with a shear valve that is designed to shut off the fuel flow if a pump is dislodged.

The inspectors take samples from each location in the state that conveys motor fuels and heating oils – testing more than 8,000 samples per year for tests such as octane, water and sediment, and other parameters to ensure that the fuel meets compliance standards. The inspectors also check the actual fuel dispensers to be sure they are properly labeled and calibrated, so that consumers can rely on the accuracy of what they see on the pump.

Gas pumps aren’t the only devices the inspectors test. From grocery store scales to truck and livestock scales, the inspector’s job is to verify the accuracy of the nearly 19,000 scales in businesses across the state.

“We’re a third party that works to protect the consumer and educate the business,” says Bob Williams, administrator of Weights and Measures. He explains that although 99 percent of their inspections are unannounced, their job isn’t adversarial.

“Our inspectors work with management to help them understand the rules,” he says. “We visit retail stores to do check weighing and to verify that scanned UPC codes match prices on the shelf.” If discrepancies are found, Williams says, the inspectors provide guidance, allow a short time for the retailer to fix the problem, and then come back to reinspect.

Another important function of the unit is the testing of liquid propane gas and bulk fuel meters.

Such behind-the-scenes work means that the inspectors don’t interface with the public very often. “However, if consumers are concerned about the accuracy of a fuel pump, for instance, and they’ve talked to the station without satisfaction, they can contact us at 1-800-OCTANE1 and we’ll look into it,” Williams says.

– Cathy Lockman
Enhancing Academic Opportunity

- **Full scholarships** for Tennessee residents through the Dean’s Scholars Program
- Flexible **online** and distance education options available
- Internships and co-ops to further enhance hands-on learning at TSU
- Graduate assistantships that **pay** you to complete Master's and Ph.D. programs
- Exposure to global agriculture through study abroad programs

**Transferring Knowledge to Farmers**

- Additional agents in more counties statewide
- Increased educational opportunities for small farmers from virtual coffee shops to on-site training
- Joint extension education with the University of Tennessee

**Advancing Agriculture through Research**

- Multiple research stations in McMinnville, Nashville and Cheatham County
- Solving **relevant** grassroots problems for Tennessee farmers and farm families
- Student engagement and participation in research
- Multiple **new facilities** supporting research programs.

“Rapidly advancing agriculture through land-grant leadership for Tennessee small farmers and their families.”

To learn more visit [www.tnstate.edu/agriculture](http://www.tnstate.edu/agriculture)
As chief investigator for the Agricultural Crime Unit, Max Thomas leads a team that covers a lot of territory. With responsibilities for investigating everything from livestock theft to wildfire arson in 95 counties and 15 state forests in Tennessee, the nine investigators in his unit are on the front lines of ensuring the safety and security of rural communities in the state.

“We’re a small group with a large job to do,” Thomas says. “We collaborate with local law enforcement to help solve farm animal and farm equipment theft. We handle all crimes that occur in the state forests, and we inspect trucks carrying livestock to be sure they’re in compliance with state health regulations. Our unit also is responsible for investigating wildfire arson.”

In fact, the wildfire arson cases represent the bulk of the investigators’ work. Thomas says that of the 600 crimes the unit investigated in 2010, nearly 65 percent of them were arson related. The team’s expertise and specialized training, primarily from training at the FBI academy in Georgia, have paid off for the people of Tennessee.

“We have reduced the number of arson cases almost in half over the past 10 years,” Thomas says. He attributes that success to “diligent investigations, making arrests and publicizing the cases and the results,” which deter would-be arsonists. In fact, the Ag Crime Unit has been recognized nationwide for its expertise and innovation in wildfire arson investigation, having received the National Smokey Bear Award and recognition from the International Association of Arson Investigators.

**EXPECT THE UNEXPECTED**

Although the unit considers no crimes routine, there are some that can make even the most seasoned investigators shake their heads, explains Thomas, himself a 28-year veteran of the state’s Department of Agriculture. For instance, the state’s forests have been the scenes of crimes against unexpected victims.

“There are forgotten cemeteries in the state forests where people from the mid to late 1800s are buried,” Thomas says. “We’ve had to investigate cases where criminals using metal detectors have vandalized these cemeteries searching for the swords and belt buckles of the Civil War veterans buried there.”

That’s why the Ag Crime Unit is trained to expect the unexpected. “Our training and experience, plus our focus on building relationships in the communities, help keep the rural areas safer,” Thomas says.

— Cathy Lockman
From unique pasta to marinades and green beans, Tennessee’s food exports fill demand for niche products.
Tennessee FOODS
Go Global
WHEN MOST PEOPLE OUTSIDE the United States think about what products come from Tennessee, their first response is typically Jack Daniels and Elvis Presley.

As an international marketing specialist with the Tennessee Department of Agriculture (TDA), Kyle Holmberg hears it all the time. But in truth, the state has quite a diverse and growing range of exports, especially food products. Major brands with roots in Tennessee include some well-known brands like Bush’s Beans, YoPlait and Pringles, but the list also includes surprising brands like Tasti D-Lite yogurt, which in 2011 expanded with shops in Australia.

The yogurt company, along with other Tennessee companies that produce value-added foods, are tapping into big North American markets such as Canada and Mexico and also see growing interest from other parts of the globe, including Asia, South America and Europe.

The most successful companies produce a niche product and don’t try to be everything to everyone, says Holmberg, who is Tennessee’s representative with the Southern United States Trade Association, or SUSTA. He coordinates the region’s marketing for six international food and agriculture events each year as well as helps companies find potential new markets for their products.

“It can be difficult to compete with the big names,” he says. “Niche products, quality products – that’s what makes the sell.”

SNOOPY SELLS – IN JAPAN

The Pasta Shoppe, based in Nashville, makes pasta with unique, fun shapes and has avid customers in Japan, where a taste for Americana translates into nearly half a million bags of pasta annually, says John Aron, president and CEO.


The Pasta Shoppe even makes a Snoopy pasta for the Japanese market. Disney switched production of its licensed shapes and characters from a manufacturer in Italy to The Pasta Shoppe when the recession hit.

Seventy-five percent of the company’s sales start online, including a deal that landed novelty pasta in Guatemala, Aron says.

“This is a female-targeted business, and variety is the differentiator,” he says.

Other Tennessee-specialty foods do well abroad, too. Lynchburg Cake and Candy, a Jack Daniels’ neighbor, makes whiskey-tinged cakes, candies and pralines. Allegro Fine Foods, based in Paris, Tenn., produces popular marinades and sauces that include specialty items such as Raspberry & Chipotle Marinade, Soy & Lime Marinade and a marinade formulated for game meat.

GREEN BEANS DIRECT TO CANADA

The state’s fresh products also see opportunities on a grand scale. Tennessee Vegetable Packers, a family-owned business in its fourth generation, specializes in green beans but also cultivates butter beans, peas, green and yellow squash, eggplant, cucumbers, corn, bell pepper and cabbage on nearly 5,000 acres in three states. Based in Crossville, the company owns much of the acreage itself but also represents farmers with their own land.

Canada, especially the Toronto area, is a growing market, says Lewis Walker, president of Tennessee Vegetable Packers.

“We are growing a darker green bean specifically for the Toronto market and also ship wax beans, which is not something people in the South buy,” he says. “Canadians have always eaten more vegetables per capita than in the U.S., and it’s a good market for us.”

Tennessee also is a strong exporter of commodities, a position expected to strengthen with the opening of the Port of Cates Landing later in 2012. This will be a busy year – SUSTA is bringing Tennessee products and producers to trade shows in Germany, Argentina, Spain, India, Japan, China, Taiwan, Singapore, the Netherlands, New Zealand, Australia and France – as well as hosting multiple inbound delegations from abroad.

– Pamela Coyle

TENNESSEE’S TOP VALUE-ADDED AGRICULTURAL EXPORTS

BEVERAGES

Top markets: United Kingdom, France, Germany
2011 value: $584 million

FATS AND OILS

Top markets: Canada, Djibouti
2011 value: $84.4 million

CHOCOLATE

Top markets: Canada, Mexico
2011 value: $29.86 million

FLOUR PRODUCTS

Top markets: Canada, Bahamas
2011 value: $2.4 million

PREPARED VEGETABLES

Top markets: Canada, Japan
2011 value: $2.6 million
Q: Why does your #1 soybean customer eat like a pig?

☐ The diner’s got the best apple pie in five counties.
☐ He knows you’re picking up the check.
☑ Because a lot of your customers are pigs.

Your soybeans travel a lot farther than just the local grain elevator. Go to www.BeyondTheElevator.com to learn more about your number one customers AND your operation’s profitability.
Global Gains

Cates Landing connects Northwest Tennessee to Asian, South American markets

TENNESSEE’S NEWEST PORT SITS IN THE CENTER OF A MULTISTATE agricultural region and opens up opportunities with China and other growing Asian markets that demand cotton, grain and meat.

The Port of Cates Landing, located on the Mississippi River near the northwest Tennessee town of Tiptonville, boasts a proximity to interstates 55, 155, 40, 24 and 69, plus major air and rail freight centers of Memphis and the Canadian National Railway line.

Its location was strategic, but not without challenge. The port is built on the only developable site on the Mississippi River above the 100-year flood plain between Memphis and Cairo, Ill. And its surrounding areas are highly agricultural.

These factors give Cates Landing an edge in international trade, says Ed Harlan, Tennessee Department of Agriculture Director of Agriculture and Forestry Development.
The FACTS:

- Only developable site on the Mississippi River above the 100-year flood plain between Memphis, Tenn., and Cairo, Ill.
- Close proximity to five major interstates
- Midpoint along corridor connecting Canada and Mexico
- Near world’s largest freight airport and rail center, Memphis
- Located in Tennessee Valley Authority service area
GRAIN, COTTON ARE TOP PICKS

“We see huge potential for grain to come out of the port,” Harlan says. “Countries such as China and Japan have developed a taste for a higher-protein diet but they don’t have the land mass to produce grain to feed chicken and beef. We’ve also had a group from China looking at our efficient, modern cotton pickers. In China, much of the cotton is still handpicked.

“In West Tennessee, big fields go on for miles,” Harlan says. “The economies of scale will make this an extremely good spot.”

PRIME LOCATION

The Port facility sits on 150 acres with 350 adjacent acres in the Lake County Industrial Park. The levee-protected area includes sites designed to withstand 100-year and 500-year floods. When the Mississippi flooded in May 2011, a helicopter fly-over showed the port site was fine, Harlan says.

“It was very, very good news,” he says.

TENNESSEE A MAJOR EXPORTER

Tennessee already ranks 8th among U.S. states as an exporter of cotton and linters, according to 2010 data from the U.S. Department of Agriculture. It is in the Top 25 for exports of three other major commodities: soybeans, wheat and poultry. In the last decade, Tennessee’s agriculture exports have increased nearly 50 percent, and exports of its three main products have more than tripled.

Growers and producers have the capacity to do more, and Cates Landing will give many a closer, more economical way of getting their goods on the move. The optimal maximum distance from a port or rail hub for raw commodities is about 60 miles, Harlan says. The Lake County site not only will benefit Tennessee farmers but also give their peers in Arkansas, Missouri and Kentucky another option.

The expansion of the Panama Canal by 2014 also opens up more South American markets for Tennessee commodities, and Cates Landing is part of a planned new free-trade zone.

The port will be accessible to barge traffic year round and the harbor’s southern end will have a 300-foot turnaround for tugboats. A working dock is in place, and the first cell pilings were placed in November 2011.

“After many years of trial and error and fits and starts, the funding is in place and machinery and people are on the ground,” Harlan says. “Finally all the pieces of the puzzle have come together.”

– Pamela Coyle
The Center for Profitable Agriculture is a partnership program of UT Extension and the Tennessee Farm Bureau.

http://cpa.utk.edu
(931) 486-2777

DOING WHAT’S RIGHT, EVERY DAY

No one cares more than pork producers about...

- The environment
- Animal health and safety
- Employees and neighbors
- Food safety
- A vibrant industry for future generations
- Advancing the industry through continuous improvement
- Upholding the highest ethical principles
- Implementing production-oriented best practices
- Honoring our commitment to our customers and our communities

©2011-12, We Care Initiative. This message funded in part by America’s Pork Checkoff Program.

HELPING TENNESSEE FARMERS develop value-added enterprises.

The Center for Profitable Agriculture is a partnership program of UT Extension and the Tennessee Farm Bureau.

http://cpa.utk.edu
(931) 486-2777

The University of Tennessee
Institute of Agriculture

Game changers.

Challenger wheel and track tractors - with revolutionary designs and groundbreaking technology.

LEXION 700 Series combine harvesters - innovative, intelligent, and inspired.

The total product support of Thompson Machinery - our job is to minimize your downtime and operating costs.

We know agriculture.

THOMPSON MACHINERY
LaVergne • Memphis • Camden • Clarksville
Cookeville • Jackson • Manchester  800.228.3644 • www.thompsonmachinery.com

Thompson CAT

TNAGRICULTURE.COM // 71
PAST
Hon. Ned R. McWherter
Governor of Tennessee, 1987-95
President, Dresden FFA, 1947-48

PRESENT
Harvey Burniston, Jr.
Johnson County High School
Ag Teacher/FFA Advisor

FUTURE
Katelan Shartzer
Portland FFA
Agricultural Processing 2011 National Finalist

FFA MAKES A DIFFERENCE!
Agricultural education and FFA … developing Tennesseans’ potential for premier leadership, personal growth and career success since 1928.

Tennessee Department of Education, Career and Technical Education (CTE), data shows:

- 90% of high school students are enrolled in a CTE course or 285,415 students with 35,676 enrolled in ag education.
- Ag education students graduate at higher rate than general population of high school students (92.3% vs. 85.5%).
- TN FFA has 13,523 members, 204 active chapters in schools, 343 teachers in 94 counties and 57 active alumni affiliates.

For more information or to support Tennessee FFA, please contact:
Tennessee FFA Foundation Inc.
Box 5034 • Cookeville, TN 38505
Call (931) 372-6050 or visit www.tnffa.org.

EDUCATING THE AGRITOURISM INDUSTRY
Agritourism spans the entire state and is a vital support system for farming incomes and expanding tourism.

TTU offers a new, innovative degree program supporting this important growing industry. Agritourism combines the skills and science from all of our agricultural programs in preparing students entering this field.

Agribusiness Bachelor Degrees at Tennessee Tech

- Agritourism
- Agribusiness Management
- Agricultural Communications
- Agricultural Education
- Agricultural Engineering Technology
- Agronomy and Soils
- Animal Science
- Pre-Veterinary Science
- Environmental Agriscience
- Horticulture
- Nursery & Landscape Management
- Turfgrass Management
Memphis is known for the blues, but the greens are a huge sector of the region’s economy.

In this longtime Mississippi River cotton town, agribusiness is a powerhouse. Area farmers still grow cotton, along with soybeans and corn, but high-tech research and farming methods have transformed Memphis into a hub of cutting-edge diversity that includes hardwoods, chemicals, meats, paper products and biofuels, as well as producers of packaged foods.

**AGRICENTER IN THE CITY**

Agricenter International, located in a park in the midst of Memphis, is one major catalyst. The non-profit industry organization started in the 1970s aiming to perfect hydroponics and grow lettuce without soil. That generation of farmers and research companies would likely not even recognize the place – or nearby farms – today, says John Charles Wilson, president of Agricenter International.

Today, more than 10,000 test plots and 30 companies are located on site, including Bayer CropScience, Case IH Agriculture and Helena Chemical Company. These companies utilize the facility to develop and showcase both the latest equipment and newest growing methods.

Tractors operated by sophisticated global positioning systems are used on the test plots, with a “driver” monitoring the onboard computer. More and more companies, many in residence at the Agricenter, are investing in research, from bioenergy production to new seed technology and plant species. Big industry names are working on everything from improved farm chemicals to growing rice with irrigation rather than field flooding. The Agricenter is also installing a solar farm.

**OTHER MEMPHIS AGRIBUSINESSES**

Informa Economics, a global agribusiness analysis firm, is based in Memphis. BioDimensions is based here, too. It is a global agribusiness development and consulting firm that works with farmers, seed companies, processors, manufacturers, university researchers, nonprofits and economic development agencies. The city is home to three of the world’s largest cotton dealers.

With the port and a FedEx headquarters, Memphis also has geography in its corner, allowing easy movement of raw product, processed goods and agribusiness equipment.

“Memphis has a lot of diverse businesses, with big companies, regional companies and also agricultural farm producers in this county. We have some very strong producers here. Everything is combining, and small producers are finding a niche to stay in the market,” Wilson says.

“We can ship to any place in the world. They produce food in India and Africa and Costa Rica, and we can move technology from Memphis to other parts of the world.

“We are going to continue to be important in the ag industry,” he says.

— Pamela Coyle
Long before the term “Locavore” entered common conversation and even before shoppers asked where their produce was grown, the city of Columbia, Tenn., saw the potential of a farmers’ market to generate downtown traffic. Vendors set up shop in the town’s historic square, and the market was born.

These days, the farmers’ market, held four days a week from May through October, draws scores of shoppers to downtown Columbia. And in spring 2012, the market will move to its new home, a pavilion on the riverfront that will connect the park and its greenways with the city center.

Its success is due, in part, to the Tennessee Main Street program. The program takes a comprehensive approach to downtown revitalization, through managing the rebuilding of traditional business districts, promoting community self-reliance and encouraging local empowerment.
The success of the farmers’ market in Columbia, which now has more than 25 vendors, resulted in part thanks to help from the Tennessee Main Street program.

**The Numbers:**

<table>
<thead>
<tr>
<th></th>
<th>The Tennessee Main Street program’s impact in 2011 included:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>617</strong></td>
<td>new jobs</td>
</tr>
<tr>
<td><strong>135</strong></td>
<td>new businesses</td>
</tr>
<tr>
<td><strong>25</strong></td>
<td>new construction projects</td>
</tr>
<tr>
<td><strong>28</strong></td>
<td>new housing units created</td>
</tr>
</tbody>
</table>
AG TRENDS GROW DOWNTOWNS

Columbia’s success is an example of how to integrate agriculture with downtown revitalization efforts, and at least half of the nearly 50 communities in the Tennessee Main Street and Tennessee Downtowns programs are running farmers’ markets or closely involved with their operation, says Kimberly Nyberg, director of the Tennessee Main Street program. The program includes 24 designated Main Street communities, plus additional towns and cities ramping up for the revitalization program that uses federal grants and local matches.

“Downtowns traditionally were the gathering place of commerce and living, and markets are giving people an interesting way to get folks back downtown,” Nyberg says. “We are coming full circle. Many of our communities were founded with a downtown being the center of commerce and community.”

Columbia Main Street has been ahead of the curve. When Kristi Martin became director more than 13 years ago, the organization used grants to hire a graphic designer, brand the event, and promote it with billboards, direct mail and traditional advertising.

Today, vendors must apply and receive assigned spaces. “We are not limited to produce,” Martin says. “We have honey, and fresh eggs are big now. One vendor brings in beef and pork, and we’re in conversation with a vendor for lamb and chicken.”

The Tennessee Department of Economic and Community Development is the coordinating partner for the National Trust for Historic Preservation's Main Street Center. The Tennessee Department of Agriculture, with its rural economic development programs, is also working with the program to help communities capitalize on their agricultural heritage.

Gallatin, another of the Main Street Communities, has a new program in partnership with the U.S. Department of Agriculture’s rural development division.

Dyersburg, in West Tennessee, reinvented its market, which is adjacent to recreation options such as canoe rentals. Nyberg also cites Dandridge, Murfreesboro, Franklin and Bristol as communities using everything from social media to local musicians to promote their farmers’ markets.

COLUMBIA MARKET PAVILION TO OPEN

Federal and state grants help both local farmers and the markets they serve take it to the next level. In Maury County, farmers have used grants to build hoop houses and install irrigation systems, boosting efficiency and production.

When the farmers’ market is not in session, the new pavilion will provide a multi-use space for other open-air events, Martin says.

“Our stage is set very well,” she says. “We are completing the riverwalk project to connect the downtown district to where the pavilion is. The riverwalk trail goes through the center of the pavilion.”

Downtown is active, with two major properties selling in one week in December 2011 and ongoing renovations to other properties, Martin says. Seasonal concerts, holiday events and house tours are under consideration to help keep downtown Columbia a destination.

– Pamela Coyle

Volunteers donated more than 100,000 hours of their time in 2011 toward revitalizing the Tennessee Main Street communities.

Downtowns play an important role in a community’s economic development strategy. They often account for 30 percent of a community’s jobs and 40 percent of its tax base.

24 TENNESSEE COMMUNITIES CURRENTLY PARTICIPATE IN THE MAIN STREET PROGRAM.
We’ve HATCHED a success story in Tennessee …

- Poultry accounts for 16.9% of all Tennessee farm income
- Family farms in 63 counties grow and sell broilers for Tyson Foods, Koch Foods, Pilgrim’s Pride and Equity Group (Keystone Foods)
- Premier broiler breeders and global leaders in poultry genetics include Aviagen, Hubbard and Cobb-Vantress

TENNESSEE POULTRY ASSOCIATION
P.O. Box 1525
Shelbyville, TN 37162
(931) 225-1123
dbarnett@tnpoultry.org
www.tnpoultry.org

Visit Our advertisers

Bayer CropScience
www.bayercropscience.us

Center for Profitable Agriculture
http://cpa.utk.edu

Farm Credit Services of Mid-America
www.e-farmcredit.com

Middle Tennessee State University
School of Agribusiness and Agriscience
www.mtsu.edu/abas

Pick Tennessee Products
www.picktnproducts.org

Tennessee 4-H Foundation Inc.
www.4h.tennessee.edu

Tennessee Beef Council
www. beefup.org

Tennessee Department of Agriculture
www.tn.gov/agriculture

Tennessee Economic & Community Development
www.tennesseeeconomicdevelopment.org

Tennessee Farm Bureau Federation
www.tnfarmbureau.org

Tennessee Farm Fresh
www.tnfarmfresh.com

Tennessee Farmers Cooperative
www.ourcoop.com

Tennessee FFA Foundation Inc.
www.tnffa.org

Tennessee Forestry Association
www.tnforestry.com

Tennessee Municipal Electric Power Association
www.tmempa.org

Tennessee Pork Producers Association
www.porkbeinspired.com

Tennessee Poultry Association
www.tnpoultry.org

Tennessee Soybean Promotion Council
www.tnsoybeans.org

Tennessee State University
www.tnstate.edu

Tennessee Tech University
School of Agriculture
www.tntech.edu/agriculture

Thompson Tractor
www.thompsonmachinery.com

University of Tennessee
www.tennessee.edu

University of Tennessee Martin
www.utm.edu

Vietti Foods Company Inc.
www.viettichili.com

Still Dolphin Safe.*
*No dolphins were harmed in the production of these chilies.
Food is a powerful force that connects families, unites friends and builds communities. In rural Perry County, for example, fried fruit turnovers have proven recession-proof and helped create and retain much-needed jobs.

More jobs—and more pies—may be on the way. Armstrong Pie Company, a Tennessee classic that started in a Hohenwald kitchen in 1946, will add individual chocolate chess pies to its lineup in 2012. The company added small pecan and chess pies in 2011 and has been contacted by a London-based importer who wants to distribute the tasty treats in the United Kingdom.

A dozen people work at Armstrong Pie, and owners Bert and Dalyn Patterson hired a bakery worker in December 2011 and a new driver in January 2012. They expect to add at least one more employee—and if the export deal works out, potentially more.

“We are growing a little bit,” Dalyn Patterson says. Bert Patterson was born and raised in Linden and had eaten Armstrong pies since he was a child. The couple happened to be in the office of their real estate agent, selling one property, when the listing for Armstrong landed. Today, the business is located in Linden.

Twelve jobs may not sound like much, but when the Pattersons started, they were the only two employees. Their timing coincided with the state’s plan to jump-start an economic recovery in Perry County by using federal stimulus money to pay wages of up to $15.85 an hour for 300 government and private-sector workers.

A small company or two can have a big impact in a county with the highest unemployment rate in the state—27 percent at one point in 2009. The stimulus hiring that year brought unemployment down to 19 percent, and the economic benefits rippled through the community.

They still do. Armstrong Pie is an active member of Pick Tennessee Products, the state initiative that promotes locally grown and made foods. The company bought a building downtown and spent money on renovations and commercial-grade equipment. The wage subsidy lasted only a year, but Armstrong employees who were willing to accept unsubsidized wages stayed. All of the employees did.

“It does help stimulate our economy,” Dalyn Patterson says. “Those people are able to buy groceries, buy insurance, make a car payment, or make a house payment where before they were unable to.”

—Pamela Coyle
AD INDEX

6 BAYER CROPSCIENCE
71 CENTER FOR PROFITABLE AGRICULTURE
C2 FARM CREDIT SERVICES OF MID-AMERICA
13 MIDDLE TENNESSEE STATE UNIVERSITY SCHOOL OF AGRIBUSINESS AND AGRICIENCE
18 TENNESSEE 4-H FOUNDATION INC.
44 TENNESSEE BEEF COUNCIL
C3 TENNESSEE DEPARTMENT OF AGRICULTURE
27 TENNESSEE ECONOMIC & COMMUNITY DEVELOPMENT
C4 TENNESSEE FARM BUREAU FEDERATION
70 TENNESSEE FARM FRESH
1 TENNESSEE FARMERS COOPERATIVE
72 TENNESSEE FFA FOUNDATION INC.
38 TENNESSEE FORESTRY ASSOCIATION
73 TENNESSEE MUNICIPAL ELECTRIC POWER ASSOCIATION
71 TENNESSEE PORK PRODUCERS ASSOCIATION
78 TENNESSEE POULTRY ASSOCIATION
Ginger-Soy Flank Steak

Spice up your steak with a sweet ginger soy sauce.

**INGREDIENTS**

- ½ cup soy sauce
- 2 tablespoons vegetable oil
- 1 teaspoon toasted sesame oil
- 2 tablespoons firmly packed brown sugar
- 2 cloves garlic, finely chopped
- 1 teaspoon ginger, peeled and grated
- 1 (1 ½-pound) flank steak

**INSTRUCTIONS**

1. Combine the soy sauce, vegetable oil, sesame oil, brown sugar, garlic and ginger in a shallow, nonreactive dish and stir until the sugar dissolves.
2. Put the steak in the dish and turn to coat both sides. Marinate the steak at room temperature, turning occasionally, for 20-30 minutes.
3. Preheat a charcoal or gas grill on high heat and oil the rack. Remove the steak from the marinade.
4. Grill the steak for 5 minutes with the lid down. Turn and grill for 6 minutes with the lid open for medium rare. Remove from the grill and let the steak rest for about 5 minutes.
5. Thinly slice across the grain and at an angle to the cutting board. Spoon the hot juices over the steak to serve.

For more recipes, visit FarmFlavor.com
Tennessee Farmers work hard to bring good things to you...

PICK Tennessee PRODUCTS

...and the Ag Tag is hard at work for Tennessee Farmers.

Find YOUR farmers—and your Ag Tag—at www.PickTnProducts.org!

Tennessee Department of Agriculture Market Development Division
P.O. Box 40627, Nashville, Tennessee, 37204 • 615-837-5160
Membership **Matters**

The Tennessee Farm Bureau is the collective voice of Tennessee’s farmers – and so much more. Through its affiliated service companies, Farm Bureau enhances and protects the lives of nearly one in three Tennesseans.

[Image of people and logos for Farm Bureau Insurance and TRH Health Plans]

Farm Bureau

Tennessee

Auto • Home • Life

tnfarmandbureau.org

TRH

Health Plans

Live better. Save more.