OSU helps keep food bacteria-free as government emphasizes safety

**OSU food scientists increasingly receive requests for help from epicurean entrepreneurs**

Following on the heels of the federal Food Safety Modernization Act, the Oregon State University Extension Service has developed a training course for people who make specialty fruit and vegetable products. A growing industry, sales of specialty foods in 2011 totaled $75 billion and represented 14 percent of all retail food sales. It’s a business nearly twice the size of Costa Rica’s economy.

Additionally, Extension microbiologist Mark Daeschel fields calls and emails from people wanting to make and sell thermally processed acidified foods. He evaluated more than 300 products in 2012.

Extension also teaches classes for businesses that produce acidified and low-acid foods. The government requires these companies to have a supervisor on site who completed such a course. Nearly 200 people attended the trainings in 2011 and 2012, including employees from Ocean Spray and Starbucks.

Each year in the U.S., foodborne diseases sicken about one in six people (or 48 million) and kill 3,000. Salmonella alone racks up $365 million in direct medical costs each year.

**Sources:** National Association for the Specialty Food Trade; U.S. Centers for Disease Control and Prevention; The World Bank; Mark Daeschel, food safety specialist with the OSU Extension Service

Annual OSU conference offers how-to advice for small farmers

**An estimated 6,000 people have attended since its inception**

Oregon State University has been hosting an annual conference since 2001 that helps aspiring and established small farmers get ahead.

Attendees have included cattle ranchers, vegetable growers, suburbanites, homesteaders, greenhorns and seasoned farmers. A record 800 people attended in 2012, and 750 registered in 2013. Over the years, participants have learned how to harvest rainwater, market meat products, develop a business plan, sell products to schools, graft vegetables and lease land.

Caitlyn Menne, of Goat Song Farm and Dairy, attended in 2012 and wrote: “My pen was madly writing everything from slug control to greenhouse styles; kale varieties to planting dates to running a full-diet, year-around CSA. Totally inspiring! I was filled to the brim with ideas and schemes.”

Oregon was home to 38,553 farms in 2007, almost half of which reported sales of less than $2,500. Almost 14,000 were “residential/lifestyle” farms in which the main operator’s primary occupation was not farming. About 9,500 had less than 10 acres.

**Sources:** Garry Stephenson, the coordinator of OSU Extension’s small farms program; U.S. Department of Agriculture’s 2007 Census of Agriculture
Aspiring urban farmers gain practical skills with OSU program

43 students have completed the Portland training since 2011

The Oregon State University Extension Service is training aspiring farmers with its eight-month Beginning Urban Farmer Apprenticeship program in Portland.

Through classes, hands-on training, field trips, online learning, stints at farmers markets and apprenticeships, students learn to produce vegetables, fruits, grains and cut flowers using organic methods. They also learn to design landscapes and create a business and marketing plan for a farm. The curriculum is based on Extension’s “Growing Farms: Successful Whole Farm Management” workshop series.

Alumni of the program have contracted with OSU for small horticulture projects, landed a job at an organic farm, started a nonprofit farm at a high school, interned on farms and operated a small farm for restaurant sales.

OSU anticipated accepting about 30 students out of a pool of 58 in 2013, the program’s third year. Forty-eight applied in 2012, and 20 were accepted.

Weston Miller, a horticulturist with the OSU Extension Service, is one of the lead instructors. Multnomah County is a partner in the program.

Source: Weston Miller, horticulturist with the OSU Extension Service

Extension helps Oregon’s small woodland owners manage their land

Graduates of the Master Woodland Manager program share their knowledge with others

Through its Master Woodland Manager program, the Oregon State University Extension Service educates and informs Oregon’s 70,000 small woodland owners. They learn about topics like management planning, ecology and forest inventory methods. In return for 80 hours of instruction from professional foresters and forestry instructors, the trainees agree to volunteer 80 hours of service to help other small woodland owners.

More than 460 landowners have completed the program since its inception in 1983. In 2012, there were 85 volunteers who contributed 5,260 hours of their time and reported 17,067 contacts with the public, family forestland owners, youth, watershed councils and various other organizations. Their service was valued at nearly $100,000. On average, most Master Woodland Managers have volunteered for almost 10 years. Some have served for more than 20 years.

As a group, Oregon’s small woodland owners hold title to almost 5 million acres of prime Oregon forestland, 40 percent of total forestland in the state. Family forestland owners annually harvest about 425 million board feet of timber, or about 11 percent of the state’s total annual wood production output.

Source: Nicole Strong, coordinator of the Master Woodland Manager program
Oregon’s artisan cheese industry is aging nicely with OSU’s help

Extension specialist teaches entrepreneurs to make gourmet cheese

The Oregon State University Extension Service helped launch and sustain the development of an Oregon artisan cheese industry that has grown from just two operations in 1999 to 24 in 2013. The state’s artisan cheese producers earned $16 million in farmgate sales in 2009.

Artisan cheese is produced largely by hand in small batches, with particular attention paid to the cheese-maker’s art, using as little mechanization as possible. Some examples of artisan cheeses are Gorgonzola, Camembert and Gouda. In the past most artisan cheeses consumed in the U.S. have been imported.

Lisbeth Goddik, the dairy processing specialist with OSU Extension, provides training for all levels of artisan cheese makers including, assistance with improvements in product quality, shelf-life and safety. She consults closely with them to solve specific challenges, and she serves as a technical adviser for the Oregon Department of Agriculture’s Food Safety Division. Establishment of an artisan cheese industry gives dairy producers the opportunity to earn greater returns for specialty products they make on their farms.

Source: Lisbeth Goddik, the dairy processing specialist with OSU Extension

Extension provides research, education in support of Oregon direct farm marketing

Small farms see bigger profits by selling direct to consumers

Direct farm marketing is becoming a big part of Oregon agriculture. According to the 2007 USDA Census of Agricultural, 6,274 Oregon farms sold products directly to consumers, with total sales of $56 million. This is a 144 percent increase over the $21 million in farm direct sales reported in the 2002 Census. It’s a trend that OSU Extension is supporting with direct marketing research and education.

“Farmers’ markets are a great success story for Oregon agriculture,” said Larry Lev, OSU Extension economist. “They create a direct way that communities can support agriculture in the local area, which contributes to the vitality of communities and Oregon agriculture.” Lev works with the OSU Extension small farms program to conduct direct marketing research and deliver outreach education to help Oregon farmers learn how to market directly to consumers more effectively.

Source: Larry Lev
OSU helps organic berry and vegetable farms stay competitive

Research focuses on controlling weeds, increasing yields and using fertilizer wisely

Oregon’s 353 certified organic farms earned $233 million in revenue in 2011. Blueberries accounted for $5.5 million of that. Since 2007, Oregon State University has been conducting experiments to help blueberry growers improve their bottom line. Its research has concluded that plants grown on raised beds have higher yields than those on flat ground; plants mulched with compost and sawdust or with weed mats produce greater yields than those mulched with just sawdust; and weed management costs are less when weed mats are used and highest when compost and sawdust are combined as a mulch. OSU found that the highest yielding management combinations improved cumulative net returns by $7,825 per acre over three years compared with the poorest performing treatments. As a result, Oregon’s blueberry growers rolled out weed mats on more than 80 percent of their acreage that they planted in 2011 compared with less than 10 percent in 2006.

OSU has also turned its attention to organic blackberries, which accounted for nearly $400,000 of Oregon’s organic sales in 2011. OSU scientists are looking at the fertilizer and irrigation requirements of the plants, the best way to organically manage weeds without reducing yield and quality, and how to keep harvesting machines from also picking up insects. Additionally, they’re examining how the cultivar, harvest methods, storage and processing conditions affect nutritional properties. Although focused on organic production, findings from the study will also benefit conventional growers. So far, OSU has found that machine-harvested yields of organic blackberries are similar to those of well-managed conventional fields. They also found that weedy plots have half the yield of plots covered with weed mats. Other OSU faculty are developing new varieties of fruits and vegetables that lend themselves to organic methods. They’ve also studied ways to help organic potato growers combat pests without chemicals. Oregon farmers sold $17 million of organic spuds in 2011.

OSU researchers have also developed an online calculator to help small farmers use cover crops and organic fertilizers efficiently. More than 2,400 people have registered to use the tool, more than 450 of whom are from Oregon. Users hail from at least 60 countries and manage more than 160,000 acres. If they save or earn $50 per acre through reduced fertilizer costs or increased quality and yields on just a quarter of the 160,000 acres, that would mean an extra $2 million in their pockets.

Sources: USDA National Agricultural Statistics Service’s 2011 Certified Organic Production Survey; Bernadine Strik, berry crops specialist with the OSU Extension Service; Nick Andrews, small farms expert with OSU Extension