A crop with a funny name could help small farmers produce more organic chickens, and make a fair profit when they do it.

Naked oats — or hull-less oats, named for their lack of an outer hull compared with conventional oats — are the focus of a new, nearly $900,000 U.S. Department of Agriculture grant to a team of OARDC scientists. Mike Lilburn and his colleagues will study incorporating naked oats into a four-year organic rotation, with the grain used either as part of the diet for organic broiler chickens, which will also be part of the yearly rotation, or sold in organic foods such as granola. The goal is to cut the cost of organic chicken feed by growing most of it on the farm — and make it more cost-effective to raise and sell organic chickens.

The key is naked oats’ unique protein and amino acid balance, which may enable the grain to compose up to 80 percent of the birds’ feed. (Corn and regular oats won’t allow for this,) Also a plus: Naked oats need less threshing — labor — than conventional oats.

“What I’m hoping is that in four years we can offer a cost-effective alternative to organic producers,” Lilburn said — “one
that produces a quality organic product but decreases the cost of production."

For now, the cost of organic chicken feed, which is typically bought off the farm, is a limiting factor in expanding organic poultry production. Organic farmers often sell their chickens only as “pasture-raised” rather than “certified organic” due to the high cost of organic feed; that cost can make the birds too expensive to produce, even if sold at a premium price. (“Pasture-raised” chickens don’t require organic feed but still get a premium price.)

The grant comes through the Organic Agriculture Research and Extension Initiative program of USDA’s National Institute of Food and Agriculture. This past fall, USDA announced this and 22 other grants, totaling $19 million, to research and extension programs at U.S. universities, all designed to advance organic farming. ■ KURT KNEBUSCH

People, Wildfires, and How the Twain Meet: What Do We Do and Why?

“ONLY YOU CAN PREVENT WILDFIRES,” Smokey Bear says. But what’s your motivation? An OARDC scientist wants to know. Eric Toman, an assistant professor in the School of Environment and Natural Resources, studies the social science of wildfires. What are people willing to do to reduce the risk of fire on their land? Why are they willing to do it? And what do they expect from government agencies on adjacent public lands?

“My research examines the human dimensions of natural resource management,” Toman said. “Using theory and methods from sociology and social psychology, I focus on the factors that influence adaptation to changing environmental conditions. Much of this work has looked at human behaviors relating to wildland fires.”

Substantial population growth in wildland areas has put more people at risk from fires, Toman said, and means fire managers have to work more closely with communities to achieve management objectives. Last year alone, wildland fires destroyed more than 5,000 structures in the U.S., he noted.

“Findings from my research can help agency managers better integrate fire planning efforts across property boundaries and develop more effective programs,” he said.

Toman has done his research in 15 states over more than a decade. Results show that “many homeowners are taking action on their properties and are supportive of active management to reduce the chance of fire on public lands,” he said. “These actions are influenced by their beliefs about fire and their trust in natural resource agencies.”

He’s part of a team finishing a synthesis of the state of social science knowledge of fire management. The same group recently produced a DVD and field guide on the lessons of this research to help agency managers more effectively engage their communities.

In addition to his fire research, Toman is a co-principal investigator on a recently funded $1.5 million National Science Foundation grant to examine human behaviors and water quality in the Maumee River watershed and western Lake Erie.

He joined OARDC in 2008 after completing an American Association for the Advancement of Science fellowship in the National Oceanic and Atmospheric Administration’s Climate Program Office. ■ KURT KNEBUSCH

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Li Receives Ohio State’s Innovator of the Year Award

His efforts to develop and commercialize biobased energy and industrial products have earned Yebo Li, an Ohio Agricultural Research and Development Center biosystems engineer, Ohio State University’s 2011 Early Career Innovator of the Year Award. The award was presented last November. “We are very pleased that the excellence of Yebo Li’s research and its impact on the state of Ohio was recognized by the Office of Research,” said OARDC Director Steve Slack. “We take great pride in the contributions of our scientists and the fact that many of their contributions impact the economic future of Ohio.” Li is also an assistant professor in the Department of Food, Agricultural and Biological Engineering and a specialist with OSU Extension. His lab focuses on the creation of novel sources of bioenergy, biofuels, and bioproducts from waste. One of those technologies — whose patent was approved last September — is a biopolyol made from crude glycerin (a byproduct of biodiesel production) and crop residue. This biopolyol can be turned into “green” polyurethane foam for use in automobile parts, sealants, and thermal insulation systems for refrigerators, insulation boards, and packaging materials. Li’s technology has been licensed to Poly-Green Technologies, an Ohio start-up company, for commercial production. Li also works with Cleveland-based quasar energy group in the development of a patent-pending integrated anaerobic digestion system, which can cost-effectively produce clean energy from both solid and liquid organic wastes through anaerobic digestion. He also collaborates with West Virginia’s Touchstone Energy Laboratory in the optimization of an open-pond system for growing algae for a variety of biofuel and bioproduct applications. “I am very humbled and honored to have received this award. I get credit for the tremendous work of my students and postdoctoral researchers,” Li said. “This award will encourage me and my lab to have more creative research discoveries geared toward commercialization.” More information at http://oardc.osu.edu/bioenergy.

How Bad Fungi Can Help Make Good Biofuel

Producing biofuels from lignocellulosic biomass — things like crop residue, fast-growing trees, and perennial grasses such as switchgrass — instead of corn holds great promise for both economic and environmental reasons. But unlike corn, lignocellulosic feedstocks contain high amounts of lignin — hard tissues that make plants stronger, but which need to be destroyed during a pretreatment process to better access the cellulose inside. Cellulose is mixed with water and enzymes, fermented, and then distilled into ethanol.

“Currently, the industry standard is to pretreat lignocellulosic biomass with harsh substances, such as acids, which makes the process expensive, generates chemical waste, and affects the microbial fermentation process that leads to fuel production,” said Tom Mitchell, a plant pathologist with the Ohio Agricultural Research and Development Center. Mitchell has devised a different way to deal with lignin — one that would eliminate the need for pretreatment or require only a light pretreatment, allowing this industry to be more competitive and have less of an environmental impact.

“Regardless of the feedstock being used to produce lignocellulosic ethanol, the main tough nut to crack is the same: how to get rid of the lignin,” Mitchell explained. “My approach is to develop plant varieties that have very low lignin content to begin with. In other words, let the plants break down their own lignin.”

Here’s where Mitchell’s expertise as a fungal biologist comes into play. He identified genes in fungi whose role is to chew up lignin in plants. These fungi cause devastating diseases in crops such as wheat and rice, since they are very adept at attacking plant tissue. Mitchell then took these genes and put them into Arabidopsis, a lab model plant. The result: 50–60% less lignin in the stems of modified plants.

“Now we are working on refining the model, finding the best gene to use, and later we’ll try it on agricultural plants, including rice and switchgrass, which can be used to produce lignocellulosic ethanol,” Mitchell said.
Materials Aim to Help Pregnant Women Prevent Foodborne Illness

Pregnant women can learn how to protect themselves and their babies from the risks of foodborne illness, thanks to a joint effort between The Ohio State University and Colorado State University. “Most pregnant women don’t think of themselves as being at greater risk for foodborne illness during pregnancy. But, because they are naturally immune-suppressed, they are more at risk than other adults,” said Lydia Medeiros. Medeiros and Pat Kendall, Extension specialist and associate dean for research at Colorado State, have worked on the “Healthy Baby, Healthy Me” project since 2006 with $1.5 million in funding from the National Integrated Food Safety Initiative within the U.S. Department of Agriculture. Lessons are available in both English and Spanish. “In our research, we found that most pregnant women never made the connection between food safety and the health of the baby,” Kendall said. Healthy Baby, Healthy Me focuses on four pathogens of special concern for pregnant women: Listeria monocytogenes, Toxoplasma gondii, Salmonella, and Campylobacter. These pathogens can infect not only the women, but can affect their unborn child, causing possible miscarriage, stillbirth, or physical or mental health issues at birth. The researchers envision the lessons being used in doctors’ offices; prenatal classes; Women, Infant, Children — or WIC — classes; and, of course, Extension programs. More information at http://foodsafety.osu.edu/curriculum/hbhm/.

Food safety specialist leaves a legacy as she retires

Lydia Medeiros, food safety researcher and specialist for OSU Extension and the Ohio Agricultural Research and Development Center since 1989, retired at the end of 2011. Over the course of her career, Medeiros’s research on how high-risk consumers learn about proper food safety practices has transformed the way public health and nutrition educators do business. Medeiros’s 2001 study that advocated focusing messages to fight the pathogens that cause the biggest risks was a turning point in how food safety messages are framed and taught. In addition, she is highly respected for her food safety programming targeting low-income families; her work is used nationally by Extension professionals to develop and evaluate community nutrition education programs. Much of her research-based insight manifests itself in the website she helped design: http://foodsafety.osu.edu.

“Lydia is the consummate researcher and practitioner in the area of food safety education,” said Patricia Kendall, a longtime collaborator at Colorado State University. “She questions the status quo, seeks research-based answers to tough food safety questions, and works to frame guidance for consumers in terms they can understand, accept, and implement.”

Healthy Baby, Healthy Me

Most pregnant women don’t realize they are at greater risk from foodborne illness. Free, downloadable “Healthy Baby, Healthy Me” materials from Extension can help protect both mothers and their babies.
‘They Have the Ability to Make a Great Difference’

Master Gardener Volunteers Serve 60 Ohio Counties

PAM BENNETT LOVES HER JOB. As coordinator of OSU Extension’s Master Gardener Volunteer Program, she works with what she loves — people and plants. She loves, she says, to see them both grow. • Master Gardener Volunteers receive 50 hours of training from OSU Extension horticulture experts. In return, they give 50 hours of service back to their county Extension office. They stay certified through continuing education and by continuing to volunteer. Today, more than 3,000 Master Gardener Volunteers work in 60 of Ohio’s 88 counties. • “I love the volunteers’ enthusiasm and dedication and their desire to teach and share their knowledge,” said Bennett, who doubles as a Clark County Extension educator. “Their diverse backgrounds and stories and their hunger for knowledge keep me grounded and constantly looking for ways to improve the program.” • Elsewhere, Master Gardener Volunteers staff a gardening hotline in Cuyahoga County; grow vegetables for Cincinnati’s Freestore/Foodbank; and revamped the Fort Ancient State Memorial Prehistoric Gardens in Warren County. Read more at http://mastergardener.osu.edu/ (click on “Projects”). • “One of the best benefits to OSU Extension and Ohio State is that the volunteers are totally connected to the projects and programs in their county, spreading the word about Extension and gardening,” Bennett said. • “They have the ability to make a great difference and have an impact on Ohioans.” ■ KURT KNEBUSCH

Ohio 4-H Alum Makes His Mark Internationally

David O’Brock grew up at the edge of North Benton in northeast Ohio. His mother was a 4-H advisor, and he tagged along to meetings with older siblings even before he was old enough to join. Little did he know where 4-H would lead him.

O’Brock, 41, is CEO for the Estonia-based Molycorp Silmet AS (http://www.silmet.ee/). Featured on CNN and NPR’s Marketplace, the company is a division of U.S. Molycorp, the largest U.S. producer of rare earth metals. O’Brock and his wife, Triin Kaljuvee-O’Brock, and two children live in Rakvere, Estonia, in the same home where O’Brock and Kaljuvee met.

While studying at Ohio State (BA, International Studies, 1994), O’Brock traveled to Estonia with Ohio 4-H’s International 4-H Youth Exchange (IFYE) program, which at that time accepted adults up to age 25. Mary Lynn Thalheimer, who has been with the Ohio 4-H international exchange program for 22 years, recalls when O’Brock returned in December 1994. “He told me he had fallen in love with an Estonian girl, a host-sister in one of the families he stayed with,” Thalheimer said. The couple married in 1996 and returned to Estonia in 1998.

“David has led an amazing life,” Thalheimer said. “He always emphasizes that but for Ohio State, he would never have had the chance to live overseas, learn about other cultures and languages, and thrive in the creative, burgeoning business environment of Estonia as it emerged from under Soviet rule.”

O’Brock, who recalls that his all-time favorite 4-H project was rocketry, thought during college that he would end up in a career in diplomacy. “I had hoped that my exchange would give me more of that ‘worldly’ experience which I thought would be needed to be a successful diplomat,” he said. “I have to say that today I do more diplomatic work than I could have ever imagined — only I do it for private entities rather than governments.”

More information at http://go.osu.edu/obrock. ■ MARTHA FILIPC

The O’Brock family: Toomas, David, Triin, and Teele.
Ohio MarketMaker Recognized for Innovative ‘Get Connected’ Campaign

NUMBER OF BUSINESSES REGISTERED WITH PROGRAM DOUBLES

Key partnerships and a strong network: that’s what’s behind the success of Ohio MarketMaker. • That success was recognized in 2011 when Ohio was one of two states recognized with the first National Food MarketMaker Innovation Awards, sponsored by Farm Credit. (The other: South Carolina.) • “Without our partnering organizations, we couldn’t have MarketMaker in Ohio,” said Julie Fox, direct marketing specialist for Ohio State University Extension. Partners include Ohio Farm Bureau/Our Ohio, Ohio Department of Agriculture (ODA), Ohio Proud, the Center for Innovative Food Technology, and the Ohio Grape Industries Committee (OGIC). “We are also fortunate to have a strong national network.” • MarketMaker is a free online database connecting food producers with buyers and equipping them with tools to expand their markets. Ohio was recognized for “Get Connected with MarketMaker,” which more than doubled the number of businesses registered with the program. • “We developed materials customized to address each group’s unique needs,” Fox said (see below). Other states are requesting the materials to adapt for local use. • More recently, MarketMaker developed MarketReady, which helps producers understand how buyers operate, allowing them to make the most of the connections made through MarketMaker. In addition, this year the program is bringing back face-to-face “Meet the Buyers” summits. When MarketMaker joined ODA on such summits in 2010, every participant found new buyers or suppliers, Fox said. • “More businesses can benefit from Ohio MarketMaker, and we will collaborate with more local and state organizations to spread the word,” Fox said. “For example, Ohio has numerous local food directories. By using Ohio MarketMaker, these organizations and the businesses they list could gain additional visibility.” • By December 2011, Ohio MarketMaker had 1,475 registered businesses (up from 601 in 2009), plus 7,000 users. • More information at http://www.ohiomarketmaker.com. ■ MARTHA FILIPC

OSU EXTENSION ADDS POSITIONS

Ohio State University Extension has created new field specialist positions as a way to allow for specialization and continue Extension’s reach during a time of budget constraints.

“These field specialists will work closely with county educators and state-based faculty to deliver programs and conduct applied research across the state in their identified area of focus,” said Keith Smith, associate vice president and director of OSU Extension.

Each specialist will work collaboratively with a team of Ohio State University professionals within OSU Extension as well as with cross-disciplinary departments and colleges.

A Family Wellness position has recently been posted, and other positions will be added as funds are available.

In addition, the 4-H Youth Development program took responsibilities from two state positions that were vacant and established a state 4-H position that will focus on older youth and 4-H camping.

“4-H older youth programming and 4-H camping are two of our most important youth development areas,” said Tom Archer, assistant director of OSU Extension and state leader for 4-H Youth Development. “When 4-H’ers mature into teens, we believe in developing leadership and citizenship qualities that will make them successful not only in their high schools and counties, but for the rest of their lives. Through both overnight and day camps,

The following field specialists have been named:

MANURE NUTRIENT MANAGEMENT SYSTEMS
• Glen Arnold
AGRICULTURAL AND RESOURCE LAW
• Peggy Kirk Hall
AGRONOMIC CROPS–NORTHWEST
• Greg LaBarge
AGRONOMIC CROPS–WEST CENTRAL
• Harold Watters
AGRONOMIC CROPS–CENTRAL
• Steve Prochaska
DAIRY PRODUCTION ECONOMICS
• Dianne Shoemaker
COMMUNITY ECONOMICS
• Nancy Bowen-Ellzy
COMMUNITY ECONOMICS
• David Civittolo
ENERGY DEVELOPMENT
• Eric Romich
VOLUNTEERISM AND 4-H COMMUNITY CLUBS
• Jeff Dick
FOOD SAFETY, SELECTION, AND MANAGEMENT
• Linnette Board
FOOD, NUTRITION, AND WELLNESS
• Dan Remley

4-H camping provides almost 24,000 youth direct group experience with living and learning in environmental, leadership, and citizenship education. Camping is one of our most intense programming efforts.”

Joshua Kirby started in this new position in February. “Dr. Kirby brings a wealth of experience in youth development and outdoor education. We welcome his experience and enthusiasm to develop and grow programming in teen leadership and 4-H camping,” Archer said.

If you have thoughts on this, the new field specialist approach, or other areas, e-mail OSUE-structure2011@cfaes.osu.edu. ■ SUZANNE STEEL

The “Get Connected” campaign worked with new partners to produce customized promotional and educational materials for:

“The loan of this tractor upgrades our teaching capabilities substantially.”
—SCOTT SHEAER

IT’S NOT OFTEN THAT a new $320,000 teaching tool lands in a classroom. But that’s what happened on a bright January morning when Wellington Implement, Inc., delivered a new Case IH Magnum 340 tractor with auto guidance to the Department of Food, Agricultural and Biological Engineering. The tractor will be used for research and teaching, primarily with students in the Agricultural Systems Management program (http://fabe.osu.edu/fabe/asm.html). It’s on loan for a year from Wellington, thanks in part to a special program through Case IH. In addition, the company, based in Wellington, Ohio, plans to loan a second tractor with delivery anticipated this spring.

“The loan of this tractor upgrades our teaching capabilities substantially,” said Scott Shearer, department chair. Previously, instructors arranged for students to travel to the Molly Caren Agricultural Center, home to Farm Science Review near London, Ohio, to get hands-on experience on tractors with auto guidance. Having such tractors on the Columbus campus will greatly expand student opportunities, Shearer said. Dewey Mann, lecturer, research assistant and adviser to the Agricultural Systems Management Club, agrees.

“From the lab we will be able to analyze electrical, hydraulic, and engine components, such as Tier 4 emissions technology,” Mann said. “Using a laptop and some simple cabling, we will be able to record CAN (Controller Area Network) data from the tractor. Also from the lab setting, with our current air exhaust system and a few equipment upgrades, we’ll be able to test engine performance.”

The donation was arranged by Tom Stannard, sales manager and co-owner of Wellington Implement and a 2000 alumnus of the department.

“It was a no-brainer,” Stannard said. “Case IH has a special educational program that offers additional discounts and helps with the depreciation costs when we get the tractor back. When I heard about the program and the interest of the department, it was an immediate ‘yes’ as far as I was concerned.”

—MARTHA FILIPIC
People, Planet, Profits
COLLEGE OFFERS NEW SUSTAINABILITY MAJOR: ‘THESE SKILLS ARE IN GROWING DEMAND’

The Ohio State University will soon offer a new major in sustainability, and CFAES is behind it. Called Environment, Economy, Development and Sustainability, the program starts in fall 2012. Teaming up to plan it were two units in the college — the Department of Agricultural, Environmental and Development Economics and the School of Environment and Natural Resources.

The new major “gives students the opportunity to take their passion for helping people, communities, and the environment to a new level by providing them with the knowledge and skills that are needed to implement sustainable development practices,” said AEDE professor Elena Irwin, a leader of the planning.

“These skills are in growing demand among private businesses, cooperatives, public agencies, and non-profits,” said SENR associate professor Jeff Sharp, also a leader of the planning.

Jill Clark, also of AEDE and a part of the planning, said the new program represents “a direct pathway for students interested in working in the field of sustainability.”

“Sustainability is about managing for the triple bottom line — balancing people, planet, and profits,” Irwin noted, and students in this program will learn how to do just that. “They’ll graduate with a bachelor’s degree in Environment and Natural Resources.

For details go to http://go.osu.edu/Hn7 or e-mail aede@osu.edu.

Ohio State’s and CFAES’s commitment to sustainability goes to the top. President E. Gordon Gee signed the American College and University Presidents’ Climate Commitment in 2008, aimed at achieving greenhouse gas neutrality, and afterward, created the President and Provost’s Council on Sustainability to help Ohio State meet that objective.

Earlier, in 2000, CFAES Dean Bobby Moser established the sustainability-based “ecological paradigm” as a model for guiding the college. Irwin’s “triple bottom line,” for example, parallels that framework’s foundations — social responsibility, environmental compatibility, production efficiency, and economic viability.

KURT KNEBUSCH

Ag-Lympics Torch Remains Lit

There’s an opening ceremony. A closing ceremony. Awarding of medals. And lots of energy.

That’s just about where comparisons between the Olympics and the Ag-Lympics end. But ask anyone in the College of Food, Agricultural, and Environmental Sciences and you’ll know one thing for sure: The Ag-Lympics are a lot more fun.

Ag-Lympics have been an on-again, off-again, on-again tradition in the college for decades, and were brought back in 2009 by CFAES Student Council members Ryan Conklin (BS, Agribusiness and Applied Economics and Animal Sciences, 2010) and Callie Wells (BS, Animal Sciences and Agricultural and Extension Education, 2010).

“Last year, we probably had 300 people there,” said junior Lauren Eisemann. As the student council’s social chair last year, she was in charge of the 2011 event.

“It’s the one thing in the college that brings everyone together.”

The college’s 33 student clubs and organizations send teams to participate, and the dean’s office (Room 100) also joins in. In recent years, the Undergraduate Student Government has sent a team to join the competition, but nothing compares to the Delta Theta Sigma team, which has taken top honors since the games were brought back in 2009.

Kelly Koren (BS, Agricultural Education, 1994), the college’s study abroad coordinator and student council adviser, recalls the Ag-Lympic games when she was a student.

“One of the honorary societies had a team and brought in a ringer — Katie Smith,” Koren said, smiling at the memory. Basketball star Smith still plays in the WNBA.

But Koren isn’t sure how Smith fared in the traditional contests, including the Corn Cob Relay, the Extreme Egg Toss, the CFAES 500—which Eisemann calls “the tractor pedal relay.”

“That one’s always a favorite,” Eisemann said. “It’s pretty comical to see these big guys pedaling around Plumb Hall on those toy tractors.”

The 2012 Ag-Lympics begin at 3 p.m. on Friday, May 4.

Martha Filipic
What can an animal sciences major at The Ohio State University help you achieve in the 21st century? If you are graduating senior Drew Enigk, a combination of research and international travel experience hard to find anywhere else.

• A native of Cincinnati, Enigk initially chose animal sciences as a way to fulfill his pre-vet requirements. Soon, however, he discovered a world (literally) of possibilities within his major that he hadn’t anticipated when he became a Buckeye.

• “I’ve always loved traveling, and my experience at Ohio State has allowed me to mesh my love of travel and my interest in research,” said Enigk, who participated in College of Food, Agricultural, and Environmental Sciences-sponsored study abroad programs in Mexico, Costa Rica, and Australia.

• In Autumn 2011, Enigk was one of five university-wide students selected to participate in the Brazil Research Exchange, a partnership between Ohio State’s Honors and Scholars Program and the University of São Paulo. There, Enigk presented his study on the behavior of Grevy’s zebras and Somali wild asses— which he conducted as an intern at the St. Louis Zoo during the summer of 2010.

• Enigk’s other research experiences include collaborating with animal welfare program specialist Naomi Botheras on a project involving the impact of human-animal interactions on the behavior and productivity of commercially reared turkeys; and working at the Columbus Zoo with bonobos, a type of great ape.

• “I realized how broad the animal sciences major really is, got interested in neuroscience, and became fascinated by how the brain works and its impact on behavior,” recalled Enigk, who has minors in neuroscience, life sciences, and physical anthropology and credits the wealth of academic disciplines and resources available at Ohio State with fueling his new interests and career path. “My plan now is to go to graduate school and specialize in biological anthropology and primatology, and work in the field of ape behavior and conservation.”

“Internships at various zoos helped Enigk discover his passion for wild animal behavior and conservation.”

Animal Sciences Welcomes New Chair

Ronald S. Kensinger began as chair of Animal Sciences on Jan. 1. Kensinger most recently served as professor and head of the Department of Animal Science at Oklahoma State University, where he helped raise $1.6 million in new endowed student scholarships. He also helped raise funds for six endowed chairs or professorships for the department during his four-year tenure.

Kensinger’s plans for the department include creating new partnerships, boosting the department’s fundraising efforts, and increasing the amount of access to hands-on research opportunities for students.

“We have an extremely strong animal sciences program here at Ohio State,” Kensinger said, “and I’m looking forward to finding ways to make it even stronger.”

More information at http://go.osu.edu/kensinger.
Winter’s Bounty on Display

ATI Floral Students and Secrest Arboretum Team Up for Winter Gathering Décor

OARDC director Steven Slack’s annual Winter Gathering is, in addition to being a social gathering, an opportunity to showcase the charm of the Barnhard Rice Homestead, the restored 1820s historic landmark also known as the Stone House. This year, the surroundings were enhanced by floral displays featuring plant materials from Secrest Arboretum, designed and installed by ATI floral design and marketing majors.

Ten student designers from Teresa Lanker’s Flowers for Celebrations II course worked in pairs to create room-specific designs. “The course focuses on large-scale custom designs for events,” Lanker explained, “so this opportunity was a good fit for the class.”

Designers met with Shelley Whitworth from the director’s office to learn about the event and the limitations of working in the space (for example, nails could not be driven into walls or woodwork) and took extensive measurements.

Three days prior to the Winter Gathering, Secrest staff delivered to ATI a collection of plant material. “We received absolutely beautiful needled and broadleaf evergreens like magnolia and juniper with berries — materials you just can’t buy on the flower market,” said Lanker. Dogwood stems and winterberry provided the basis for five different color palettes Lanker designed to complement the Stone House décor.

The class used Wednesday to prepare the large containers that would eventually support each custom arrangement. “The foam and the other structural elements needed to support large-scale arrangements is a very important part of the prep work,” Lanker said. Then on Friday, the whirlwind began.

Plant materials, flowers, and containers were transported to the Stone House, where the back porch did double duty as a walk-in cooler. Tarps were spread, card tables set up, and the designers set to work, with a mere three hours in which to design, install, and clean up. The result, Whitworth said, was spectacular. “I heard so many positive comments about the floral designs,” she said.

Lanker was pleased with not only the students’ work but with the entire experience. “It was perfect for teaching students about the trials and tribulations of designing on site,” said Lanker. “From meeting client needs to the planning and organization that has to take place beforehand to the tight timeframe and clean-up, it was exactly what graduates will be dealing with if they go into large-scale event work.” — FRANCES WHITED
ATI Couple Establishes Ashland County Dairy

START-UP DAIRY OPERATIONS are none too common these days, but ATI graduates Jenny (Westrick) and Kyle Bernhard have embraced this challenge with both enthusiasm and success. They are owners and operators of J-Lynn Jerseys in Shiloh, Ohio, where they manage a herd of approximately 200 cows and 190 replacement heifers.

The couple met in 2007 at ATI, where Jenny was enrolled in the dairy science Associate of Science program and Kyle in the dairy production and management Associate of Applied Science program. Jenny went on to complete a bachelor’s degree in animal sciences and agricultural business from CFAES. They married in April 2009. Jenny takes care of herd health and the breeding program on their 500-acre farm. Kyle manages the crops (corn, soybeans, wheat, and Sorghum-Sudan grass raised for forage), feeding, and manure management.

The Bernhards purchased their farm from Kyle’s grandparents in 2008. The last cattle housed on the farm had been moved out in 1987, so the younger Bernhards essentially started their operation from scratch. They recently expanded the freestall barn they constructed when they acquired the property. They milk twice a day in a double-six parallel parlor. The herd currently includes a few Holsteins and crossbreds, but their goal is a 100% Jersey herd. Kyle prefers Jerseys for their feed and reproductive efficiency.

Jenny got her introduction to the dairy industry through FFA and, after high school, worked on a 600-cow farm. Kyle says he always wanted to milk cows. Their experience at ATI “had a tremendous influence on both of us,” stated Jenny. The hands-on experience, she said, was extremely valuable.

ATI dairy majors are required to complete a paid internship. Jenny completed her internship with a Dutch-owned dairy in Adrian, Mich., while Kyle interned closer to home with Falling Star Farms. They currently serve as an internship employer. One recent ATI student completed her internship last summer and is employed by the Bernhards part-time. A second student completed his internship in March.

“There’s no way we’d be as involved in the dairy industry as we are now without our ATI experience.” —JENNY BERNHARD

Khloe, Jenny, and Kyle Bernhard

Ohio Jersey News editor Susan Mykranz contributed to this article. She holds a BS in agriculture from The Ohio State University, where she majored in dairy science.
Ohio Corn Marketing Program Supports Livestock Judging Team

The Ohio Corn Marketing Program has pledged to establish an endowment honoring Michael L. Wagner. Wagner (BS, Agricultural Economics and Animal Science, 1963) has earned local, state, national, and international recognition for advocacy in agriculture, especially for the corn industry. He began his career as an organization director for the Ohio Farm Bureau Federation and later worked for the Illinois Farm Bureau where he managed the dairy marketing program and helped develop the Illinois Corn Growers Association from a small area to a statewide organization with a corn marketing checkoff program.

After a brief time with the Florida Farm Bureau, Wagner returned to Ohio to manage the Ohio Corn Growers Association. Before he retired in 2005, he had grown the organization to more than 2,000 members.

Under his leadership, the corn growers planned and directed the successful creation of the corn checkoff in 1989, resulting in the Ohio Corn Marketing Program. With Wagner’s guidance, the program has invested more than $20 million in projects and programs for education, market development, promotion, and research to increase corn usage in Ohio and nationally.

“Mike Wagner is a longtime supporter of The Ohio State University, the OSU Livestock Judging Team, and student achievement in academics and leadership. Honoring Mike with this fund ties these passions together and provides financial assistance to students during a difficult economic time,” said Tadd Nicholson, interim executive director of the Ohio Corn Marketing Program.

The fund will provide scholarships to students who are members of the current year’s Intercollegiate Livestock Judging Team who demonstrate financial need and leadership roles in student organizations.

The Livestock Judging Team is one of several co-curricular teams in the College of Food, Agricultural, and Environmental Sciences. Being a member of a co-curricular team is a unique experience, as participation requires completion of at least one academic course. This allows students to apply knowledge gained in coursework through hands-on experiences. Members need not be Animal Sciences majors, and the team has consisted of students from various colleges all over campus.

Spotlight on Ja’Marcus Hampton

Ja’Marcus Hampton joined the CFAES development team in December 2010 as Director of Development. He serves as the liaison to the Department of Agricultural, Environmental, and Development Economics; Department of Animal Sciences; and the Department of Food, Agricultural and Biological Engineering. Prior to joining the college, Hampton worked for three years as the Assistant Director of Development for the College of Veterinary Medicine. He is a graduate and former member of the University of Findlay Oilers basketball team.

“I am thrilled to be part of CFAES,” Hampton said. “The work that is being conducted is relevant and significant to the success of Ohio State and our communities. I look forward to the opportunity of learning more about our college, meeting and working with both our alumni and industry partners.”
Thanks to $50,000 in grants from State Farm Insurance, teens around the state will have access to new tools to learn about the dangers of distracted driving and the damage caused by traumatic brain injuries.

In Ohio, 48 counties offer the 4-H CARTEENS program, a safe-driving intervention program coordinated by Ohio State University Extension’s 4-H Youth Development Program in partnership with County Juvenile Court Systems, the Ohio Highway Patrol and other law enforcement agencies, and local community partners. More than 8,400 Ohio teens participate each year in 4-H CARTEENS, which is taught by teenage volunteers primarily to first-time juvenile traffic offenders. Most of the teen instructors have gone through the 4-H CARTEENS program themselves; they’re mentored by juvenile court judges, Ohio State Highway Patrol officers, and 4-H Youth Development educators.

James L. Jordan, an Extension educator based in Butler County, examined the effectiveness of 4-H CARTEENS last year as part of his PhD program. In his research, Jordan found that teens who complete the 4-H CARTEENS program improve their driving significantly: Their risky driving behaviors decline by more than a third. Some parents of those mandated to attend are so impressed with their teen’s response to the program that they pay for younger siblings who may have just received their learner’s permit to participate, Jordan said.

The driving simulators, purchased through a $25,000 grant in August 2011, consist of software that connects a computer screen with the simulator’s steering wheel, accelerator, and stick shift, and offers 28 different distracted-driving scenarios in both urban and rural settings.

Butler County, 4-H CARTEENS instructor Chelsea Smith, 19, helped install the simulator software. “I think it will do a lot of good for our program,” Smith said. “It will show what things can be distracting when you’re driving. It will definitely be more interactive — hands-on activities help with the learning process.”

In December 2011 State Farm Insurance awarded 4-H CARTEENS a second $25,000 grant to purchase program kits to teach students about the dangers of Traumatic Brain Injuries (TBI). To show teens the impact a brain injury will have on their motor skills, the kits simulate brain injury sustained by teen drivers that had been involved in a crash. Funding from the grant will also produce promotional banners for all CARTEENS counties and provide sponsorship of the CARTEENS Achievement Award.

“I want to express our gratitude to State Farm Insurance for taking an active interest in the 4-H CARTEENS program,” Jordan said.
CFAES Alumni Society Awards 13 Recognitions, 5 Scholarships

Congratulations to our 2012 Alumni Award and Alumni Scholarship winners, presented on March 3. And special thanks to the CFAES Ambassadors for hosting our award winners!

**Meritorious Service Award** Vice President and Dean Bobby Moser with L.H. Newcomb, PhD Agricultural Education

**International Alumni Award** Larry Miller and Don Palmquist accepted the awards on behalf of Yung-Chul Kim, MS, PhD Human and Community Resource Development; and Byung-Ryul “Barry” Choi, PhD Dairy Science.

**Alumni Society Undergraduate Scholarship Winners** In front, from left: Jim Leonard, president, CFAES Alumni Society; Casey Wilson, Agricultural Communication; Lauren Eismann, Animal Sciences; Ray Miller, Alumni Coordinator; and in back, from left: Derek McCracken, Agricultural Education; Jack Andrews, Animal Sciences; and Jodi Wildermuth, Agricultural Education.

**Distinguished Alumni Award** In front, from the left, Constance Cullman, BS, MS Agricultural Economics; Karen Hartnagel Milley, BS Food Science and Nutrition; and Blaine Cresser, BS Dairy Science, MS Agricultural Economics; and in the back, from the left, Kreg Leymaster, PhD Animal Genetics; Rick Rudd, BS, MS Agricultural Education; Edward W. Osborne, PhD Agricultural Education; and John C. Foltz, BS, MS Agricultural Economics.

**Young Professional Achievement Award** Vice President and Dean Bobby Moser with Carrie Thomas, BS Agribusiness and Applied Economics; Heather Biehl, BS, MS Food Science and Nutrition; and Shantanu Yousef, MS Food Science and Nutrition.

**Ambassadors** In the front, from left: Lauren Eismann, Animal Sciences; Casey Wilson, Agricultural Communication; Elizabeth Coons, Agricultural Communication; Katei Luthman, Food Science and Nutrition; Suzie McMullen, Agricultural and Extension Education; Mara Gordon, Agribusiness and Applied Economics; Jill Tyson, advisor. In the back, from left: Nicole Steinmetz, Agricultural and Extension Education; Jack Andrews, Animal Sciences; Jodi Wildermuth, Agricultural and Extension Education; Bev Lennartz, Agribusiness and Applied Economics; Stephanie Verhoff, Crop Science; Derek McCracken, Agricultural and Extension Education; Tom Christy, Agricultural Systems Management.

**International Alumni Award**
Sandridge Food Corporation Receives Special Award

From the left, Senator Larry Obhof; Dave Beck, President of CIFT; and Mark D. Sandridge, Chief Executive Officer of Sandridge Food Corporation.

THE MEMBERS OF THE House of Representatives of the 129th General Assembly of Ohio recognized the Sandridge Food Corporation of Medina, Ohio, and CEO Mark Sandridge (BS, Horticulture, 1976) on being selected to receive the Center for Innovative Food Technology Crystal Award for third place in the 2011 Edison Center Awards for Excellence competition.

The Sandridge Food Corporation was founded in 1965 by Mark’s father, Vincent R. Sandridge, with a few workers and a selected few fresh products. The family business has grown today to more than 490 employees and over 500 refrigerated fresh products. Sandridge is a leading regional producer of processed salad products, and in 2008 became the first refrigerated food manufacturer to invest in ultra high pressure processing technology to improve freshness and quality of products. Mark refers to the process as a “game changer” and allows movement to the next level of fresh refrigerated food processing.

The Sandridge Food Corporation was also selected as the 2011 Refrigerated & Frozen Foods magazine’s Refrigerated Foods Processor of the Year. The corporation is a certified Safe Quality Food (SQF) 2000 Level 2 food manufacturer. Their Grandma’s brand is widely recognized and is available in many food outlets.

For over 50 years, Sandridge has specialized in fresh, never frozen, products such as deli salads, sides, soups, sauces, and specialty dishes developed by their own culinary experts, accredited chefs, and food scientists.

Mark says, “When I look back to where I began in this industry and where I am now, I am always thankful to have dear friends from Ohio State in my life.”

Congratulations to Mark and the Sandridge Food Corporation for making the college proud, and thanks for your support of AG FALLFEST for many years with your fresh salads. GO BUCKS!

“I am always thankful to have dear friends from Ohio State in my life.” —MARK SANDRIDGE

Calendar of Events

Spring Football Tailgate
Saturday, April 21, 2012
Game at 1:30 p.m.
Luncheon Tailgate — Ag Admin Auditorium
Luncheon starts at 10:30 a.m.
OSU lacrosse game at 11 a.m. included.

Senior Toast
Friday, June 8, 2012
Ag Admin Auditorium
10:30 a.m.—Noon

Farm Science Review — 50th Year!
Sept. 18–20, 2012
Hospitality Tent, Molly Caren Ag Center
London, Ohio

Ag Fallfest 2012
Saturday, Oct. 6, 2012
Nebraska vs. Ohio State
OSU Alumni Association membership required to purchase game and meal

Away Football Game
Saturday, Oct. 13, 2012
Bus Trip, Ohio State vs. Indiana
Game time and cost to be determined

Hold the Date: Ag Fallfest 2012

date: Saturday, Oct. 6, 2012

time: Three hours before kickoff

location: Nationwide and Ohio Farm Bureau 4-H Center

Plus, Silent Auction for Alumni Scholarship Endowment

Watch the summer issue of Continuum for application instructions, costs, etc.

MUST BE OSU ALUMNI ASSOCIATION MEMBER TO APPLY FOR LOTTERY
Dean’s Corner

Bobby D. Moser
Vice President for Agricultural Administration and Dean, College of Food, Agricultural, and Environmental Sciences

College Majors That Are Invaluable

You may have seen a web-based story recently that questioned the usefulness of several majors that come out of the agricultural sciences. Those of us in the business of higher education and agriculture were astounded by the misinformation in that report. At Ohio State, for example, more than 90 percent of our graduates have a job or are pursuing advanced degrees within six months of graduation. And for good reason: The world needs people educated in the science of agriculture, and will continue to need those people. Consider this: Our planet recently reached the 7 billion population mark and the United Nations estimates we will have 2.3 billion more people to feed by the year 2050. We must address how to feed all these people with little expansion of land; in a way that conserves our water resources; and in a fashion that society judges acceptable and even more respectful of our environment. In addition, those in agriculture will make important contributions to our country’s energy requirements and will help provide feedstocks for other industrial materials. To meet these challenges, a growing number of passionate, smart, and well-prepared people have a lot of work to do. And I talk to these people every day in our campus classrooms, labs, and fields.

Agriculture has been one of the bright spots in the U.S. economy during the current recession and incredible opportunities exist for new economic development. Our graduates are currently writing their own story, and the headline reads: “College Majors That Are Invaluable.” To hear how four Midwestern land-grant deans responded to the web report, go to http://cfaes.osu.edu.