

SQUIRE VALLEEVUE AND VALLEY RIDGE FARMS 2012 ANNUAL REPORT





THE CASE WESTERN RESERVE UNIVERSITY FARM, located on Fairmount Boulevard in the Village of Hunting Valley, is a 389-acre property that includes within its boundaries forests, ravines, waterfalls, meadows, ponds, a self-contained natural watershed, seven residences, many other structures, and several miles of roads and trails. The farm came to the university as the result of four gifts: The late Andrew Squire gave 277 acres (Squire Valleevue Farm) in the late 1930s; the heirs of Jeptha Wade II gave Case Western Reserve 104 adjoining acres (Valley Ridge Farm) in 1977; and John and Elizabeth Hollister deeded five acres to Case Western Reserve in 1984 and another five acres in 1995.

In his will Squire wanted the farm to be cultivated and preserved as a farm for educational purposes, and to be a place where the practical duties of life may be taught; where the teachers and students can come in close contact with Mother Earth.

As a condition of the Wade gift, the university officers report annually to the Board of Trustees of the university and to the trustees of the Cleveland Museum of Natural History with respect to the operation of the donated property in 1977.

After 75 years, the farm continues to be a magnificent asset that provides a wide variety of opportunities for education, research, community service and recreation.

Stephen M. Campbell Vice-President for Campus Planning and Facilities Management

Farm Staff

Ana B. Locci Director and Department of Biology Adjunct Assistant Professor

Alan Alldridge Food Program and Landscape Assistant

Christopher Bond Horticulturist/Food Program Coordinator

Zoey Bond Manor House Program Coordinator

Shane Brown Facilities Group Leader

Patty Gregory Department Assistant

Meaghan Wierzbic Technician III

Joe Miller Facilities Crew Assistant

Corinne Burr Food Program Associate

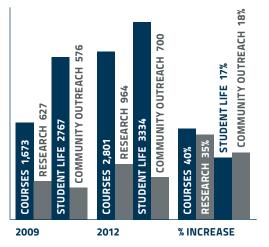


OPERATIONS AND FINANCES

Since 2011, Stephen Campbell, vice president for campus planning and facilities management, reports to the Division of Administration regarding the overall management of the farm.

Ana Locci, farm director and adjunct assistant professor in the Department of Biology, manages the farm operations, staff and finances. Locci reports directly to Stephen Campbell. Shane Brown, farm facilities group leader, is responsible for the daily onsite supervision of the farm and reports directly to Locci. Patty Gregory is the department assistant and Manor House program administrator. Christopher Bond is the farm horticulturist and Farm Food Program coordinator. A part-time staff member, Zoey Bond, is the Manor House event coordinator. Other staff members helping with the expanding Food Program include Alan Aldridge, Meaghan Wierzbic and Corinne Burr. In fall 2012, Joe Miller was hired as facilities crew assistant.

NUMBER OF PARTICIPANTS



ACADEMIC AND RESEARCH PROGRAMS

UNDERGRADUATE AND GRADUATE COURSES

Academic programs at the University Farm have greatly expanded during the last twelve years. In 2012, the farm's indoor and outdoor facilities were used by 20 credit courses at the undergraduate and graduate levels including courses in the fields of ecology, geology, entomology, engineering, SAGES classes and visual arts, as well as training courses for the nursing program and language immersion programs. Over 3,800 students and faculty visited the farm to take classes.

Undergraduate and graduate courses offered included twenty-four lab sections with over 600 students enrolled in the Genes and Evolution (BIOL 214),Principles of Ecology Lab (BIOL 351L/451L), Aquatic Ecology Lab (BIOL 369), Introductory Entomology (BIOL 318L/BIOL 418L), eight capstone projects by the Frances Payne Bolton School of Nursing students, Public Health Nutrition (NTRN 550), The Future of Food (USNA252), the Frances Payne Bolton School of Nursing Academic Center for Flight Nursing Summer Camp and several art classes including ceramic and photography.

RESEARCH

The greatest increase in academic activities was due to on-site research projects and participation in the Farm Food Program. The number of faculty and students actively doing research at the farm in the areas of ecology, environmental studies, engineering, conservation and nutrition continues to increase. Projects included graduate, undergraduate and high school senior research, and capstone projects.

Active research projects onsite include: Studies on salamander populations and movements by Michael Benard, Department of Biology assistant professor. Jean Burns, Department of Biology assistant professor, continues her research program on the mechanisms governing community assembly in plant communities. Ana Locci and Denny Fernandez, University of Puerto Rico Department of Biology professor, worked with two SPURS scholars from the University of Puerto Rico to study several aspects of the Farm Food Program gardens and its surrounding areas. Christopher Cullis, Department of Biology professor and chair, and his graduate students are working at the Debra Ann November Research Greenhouse growing flax plants to study the mechanisms by which DNA within the cell can change rapidly, particularly in response to external stimuli. Joseph Koonce, Department of Biology emeritus professor, has continued his efforts to create a high-resolution environmental monitoring network at the farm to improve understanding of the interaction of environment and populations of animal and plant species at the scale of the individual organism for research and teaching. David Burke and Kurt Smemo, assistant scientists at the Holden Arboretum and adjunct assistant professors of the Department of Biology, continue studying phosphorus limitation and soil microbial community composition in hardwood forests of the farm. In 2012, Constance Hausman, plant and restoration ecologist with the Cleveland Metroparks, started a research study to collect quantitative vegetation data from good examples of typical upland forest types of the glaciated Allegheny Plateau region.







CONSERVATION PROGRAMS AND GREEN INITIATIVES

The conservation programs continue to expand at the farm. The programs are focused on the expansion of the teaching opportunities at the farm while increasing habitat for wildlife and reducing energy consumption.

The Farm Food Program continues to provide new educational opportunities for faculty and students by studying local food production in a sustainable way using methods consistent with organic farming. During the spring, summer and fall of 2012, labor was provided by farm staff, (Chris Bond, Alan Alldridge, Meaghan Wierzbic, Corinne Burr) several undergraduate students (Evan Lanese, Angela Kaczowka, Raia Contractor and Jacob Hooks) and many other students. alum and staff volunteers. Volunteer hours accounted for almost one-fifth of the total labor. The farm had delivered over five tons of fresh food to the Case Western Reserve campus for the 2012 harvest season (over 11 tons since 2010), either in direct sales to Bon Appetit or sales to the campus community in the form of farmer's markets and CSA shares. The farmer's market, set up throughout the summer on the quad and at the BRB lobby during the fall months, serviced over 650 customers, selling over 45 different products. The summer and fall CSA supported 50 shares in total, offering a variety of over 30 different products. More than 1,700 pounds of produce were distributed among 30 different shareholders over the summer; and more than 1,100 pounds of produce were distributed among 20 shareholders in the fall. Teaching and research opportunities provided by the Farm Food Program in 2012 included visits by SAGES courses, four student research projects pertaining to soil, cover crops, beneficial insects, weed control, seed bank studies and nutrition education, as well as hosting field trips for several local college and high schools.

One-acre of native prairie was planted in 2012 with the assistance of University Schools' student Hyden Lane. Currently, the farm has a total of 5 acres of prairie restoration. The initial 4-acre prairie continues a very successful establishment with 17 wildflowers and various grasses to date observed in the prairie restoration area. No prescribed burning was done in 2012. The prairie site also serves as an educational tool for farm visitors. The project was supported with funds provided by Brian and Cindy Murphy.

The Bluebird Trail, in its 11th season, includes 58 Peterson houses located around the research ponds and nearby fields. Alumnus Bill Jirousek and university staff member Betsy Banks, both farm volunteers, checked the houses regularly during the breeding season (April – August), recorded data, and banded hatchlings. Many of the farm's bluebirds wintered over, and the first Bluebird egg was laid on April 18, 2012. The last bluebird fledged on Aug. 28, 2012. A total of 168 birds fledged (141 in 2011) – 57 eastern bluebirds (60 in 2011), 86 tree swallows (56), and 25 house wrens (25) – the fourth best year for eastern bluebirds and best year for tree swallows. Trail data, recorded and analyzed at the farm as part of a long-term study, continues to be included in the Holden Arboretum's and Cornell University's (national database) totals.



STUDENT LIFE

Student-initiated scheduled use of the farm facilities has increased greatly. Seventy-five student groups reserved the facilities in 2012. The student reservations included groups using the Pink Pig, Sheep Barn, Manor House, Kutina Classroom and picnic areas. Among the student groups using the facilities were:

Academic Integrity Board Alpha Chi Omega Alpha Phi Alpha Phi Omega Sorority Alpha Kappa Psi Anthropology Students Archery Club American Medical Student Association Beta Nu of Theta Chi Beta Theta Pi Biology graduate students Bioethics graduate students Biomedical Engineering Graduate Student Association Campus Crusade for Christ Case Alliance Dental Association (CADA) Case Amateur Radio Club (W8EDU) Chi Alpha Christian Fellowship Chinese Students and Scholars Association Chinese Student Christian Fellowship CWRU Fellowship of Christian Athletes CWRU Film Society CWRU School of Medicine Student Groups CWRU Archery Club CWRU Women and Men's Cross Country teams CWRU Track team **CWRU** Cycling Club College Scholars Program Delta Chi Delta Gamma Delta Sigma Theta Delta Upsilon Fraternity Delta Psi Omega Delta Tau Delta Electrochemical Society/CWRU Student Chapter Engineers Without Borders Group German Immersion Students Graduate Student Senate Institute of Electrical and Electronic Engineers, Case Student Chapter Inter Society Council Group Inter-Varsity Christian Fellowship Inter-Varsity Graduate Christian Fellowship

International Chinese Students Retreat International Student Fellowship Korean Graduate Students Association Kappa Alpha Theta Sisterhood Material Science Graduate Students Public Health Nursing School Graduate Entry Program Newman Catholic Students Association OTZ Student Fall Retreat Phi Kappa Tau Phi Gamma Delta Phi Sigma Rho Phi Mu Public Health Nursing School Graduate Entry Program Psi Omega Dental Honorary Society Relay for Life Student Planning Group Residence Hall Association Exec Board Rich Lab Graduate Student Sigma Phi Epsilon Fraternity Sigma Psi Sorority Solstice Women's A Cappella Spanish Student Immersion St. Thomas More Society Student Turning Point Society (WSOM) Student Bar Association Student Sustainability Council Tau Beta Pi Theta Chi Fraternity Turkish Student Association (UTurk) Undergraduate Student Government University Program Board UPCaM WSOM Finance MS Students Zeta Beta Tau Fraternity

On Oct. 6, 2012, the third annual "Farm Harvest Festival" event took place at Squire Valleevue Farm. The event was co-sponsored by the Case Western Reserve Student Sustainability Council (SSC) and the University Farm. The festival was intended to expose students to activities at the farm and raise awareness of the Farm Food Program. The event guest list included alumni, staff, graduate and undergraduate students and their families. The attendance was estimated to be around 600 with approximately 450 undergraduate and 50 graduate students, and 100 staff, faculty, alumni and their families. SSC members Elena Stachew, Abby Dwornik and Ian Kidd made an excellent effort obtaining funds, raising \$5,600 for the event. The council members reach out to all friends of the university by making class announcements, creating a website, coordinating the volunteer groups, organizing student performance groups, sending emails, posting event fliers and promoting word-ofmouth. During the event SSC members welcomed visitors, parked cars, served food and helped with the many indoor and outdoor activities. Event activities included decorating cookies, a cooking demonstration by Bon Appetite chefs, beekeeping and honey production exhibitions, sales of the farm history book, a Farm Harvest Festival "memory basket", and outdoor Zumba and voga classes donated by 121 Fitness Center. Other outdoor "hands-on" activities included a tall grass field maze, crop maintenance tasks in the greenhouse, potting up and taking home herb plants, and a plant identification contest. whose winners received a basket of fresh farm grown produce.

Orientations for the School of Medicine, School of Dental Medicine and Case Western Reserve new faculty also took place at the farm picnic grounds. These orientation picnics introduce the new faculty and professional schools to the farm facilities and its usages.

Several student groups continue to use the farm for special projects as part of their extra curriculum activities. The farm provides unique space and opportunities for outdoor projects for groups such as Case Western Reserve's chapter of Engineers Without Borders (EWB-Case). This group finished its water project at the farm that will be used as a test for current and future international projects and to improve the farm's community gardens' irrigation system. EWB-Case is a humanitarian student organization committed to partnering with developing communities in order to improve quality of life. This partnership involves the implementation of sustainable engineering projects by internationally responsible engineering students collaborating with professional engineers. For the 2012-2013 the EWB group is working on the design of an indoor hydro culture system with the assistance of farm staff Alan Aldridge.







COMMUNITY SERVICE

As part of its strategic plan, the university is committed to encouraging other organizations to use the farm. Area museums, academic institutions, local schools and community service groups are encouraged to use the farm's facilities, property and research areas for academic purposes.

The School Visitation Program is a hands-on program designed to reinforce concepts and field methods in the areas of environmental science, food production and ecology for local middle and high school students. During the academic year 2011-2012, the farm hosted 16 school visits with 580 students, 25 teachers and 48 chaperones. The schools participating were Shaker Hts. Middle School, Padua Franciscan, Charles F. Brush, Beaumont, Ruffing Montessori, Michael R. White, Hathaway Brown, Beachwood, St. Christopher, Metro Catholic and Charles F. Brush. The visit by Metro Catholic School was sponsored by Mort and Iris November.

The Cleveland Museum of Natural History ran the first Junior Forensics Camp for grades 9-12 at the farm from June 25 to 29, 2012. During this forensic anthropology camp, students excavated buried pig bodies that had been buried in the farm's fields and woods for over a year. They learned archaeological excavation techniques. Bones were analyzed in the laboratory spaces and lectures in anatomy and pathology were also given.

Center for Civic Engagement and Learning obtained two Ohio Campus Compact (OCC) AmeriCorps VISTA summer fellowships for Case Western Reserve undergraduate students Caitlin Hearn and Amanda Langhals. The OCC program strategically connects college resources with communities in need. Corps members gain valuable experience and educational awards and campuses expand their civic outreach. Throughout the summer, Hearn and Langhals worked at the University Farm and with a local refuges community group: the Refugee Response Farm in Ohio City. The refugees have come to America from countries including Bhutan, Burma, Tanzania and Liberia.

Hathaway Brown School and Case Western Reserve continued their collaboration and usage of the farm facilities. During the academic year 2011-2012, the usage of farm facilities brought more than 750 students, staff and guests to the farm. Their use of the farm facilities included the Sheep Barn, Pink Pig, Kutina Classroom, Manor House and picnic areas. Visits included environmental programs for second, fourth and fifth graders, 11th and 12th-grade AP biology class field trips, Spanish immersion programs, middle school aquatic education, Advance Dance Company week-long retreat, EC student hikes and picnics, faculty and staff professional meetings, and social events.

CONTINUING EDUCATION

Summer in the Country, a program sponsored by the Office of Continuing Education, offered six courses: painting in the outdoors, writing poetry, journal writing, farm history, writing nonfiction and walking through nature. Each class had between nine and 20 participants resulting in 694 person-visits to the farm during the months of May to July.

The Laura and Alvin Siegal Lifelong Learning Program offered several continuing education courses at the farm during fall. The Autumn in the Country program offered five classes, including writing nonfiction, painting in the outdoor, farm history, walk through nature and for the first time introduction to beekeeping.

FACILITIES USAGE

All of the facilities continue to be a popular destination for university classes, department events and meetings, student group meetings and retreats, and outreach programs. Events hosted at the various facilities range from international conferences and training programs to small weekend retreats. The historic facilities are not only excellent for retreats but hold many memories for university alumni. Many of the facilities are known by name: the Sheep Barn; Pink Pig, our "rustic cottage;" several picnic areas; the Main Barn and Kutina Classroom; and Andrew Squire's own country estate, the Manor House.

During 2012, 107 groups booked the various picnic areas, generating 6,670 person-visits. The Sheep Barn hosted 88 groups, generating 4,954 person-visits.

The Pink Pig accommodated 110 groups, generating 2,071 person-visits. The Kutina Classroom provided space for 74 groups generating 1,062 personvisits. The Manor House hosted 35 events comprised of eight student groups, 18 university groups, five nonprofits, and four university-affiliated private events. The Manor House serves the Cleveland community's nonprofit, corporate and affiliated private groups. Some of the nonprofit groups using the house included the Western Reserve Land Conservancy and Swedish Cultural Society.

GRANTS AND GIFTS

A Farm Annual Fund to raise funds to support new farm initiatives and programs was initiated in 2005. By means of this fund, individuals can now contribute directly to the farm during the university's annual fund drive. To date, \$32,000 has been raised thanks to the generosity of farm friends and neighbors. This fund is already being used for new initiatives such as trails brochures, green initiatives and support for the Farm Visitation Program.

Two new benches were generously donated to the farm in 2012. There have been a total of 20 benches donated to the farm by families of alumni, faculty and staff. This program helps to improve the farm outdoors while providing a new funding source to update the facilities.

Mort and Iris November generously sponsor the one-day visit of Metro Catholic School. Their gift provided funds for teaching supplies, transportation and lunch for 25 students. During their visit, students learned about the science behind the organic food production at the farm including beekeeping activities.

Other generous donors for the Farm Food Program include the Ivy Garth Seeds and Plants Company for their continued donation of seeds, Bon Appetit Management Company for their generous \$6,000 donation for the purchase of passenger van and potato harvesting implement, and the Walter T. Kelley Company's donation of an observation hive for the Honey House.

THANKS FOR YOUR GENEROUS SUPPORT TO THE FARM

Your continuous support has allowed us to develop new academic programs and to update our teaching and research facilities. Thanks again for your generosity.

Your philanthropy for the farm can be expressed in several ways including:

- Farm Annual Fund: Gifts received in any amount to provide unrestricted income to develop new academic and conservation initiatives, as well as small facilities improvements.
- Farm Bench Dedication Program: A \$2,000 bench donation would help to update our art teaching facilities and to improve our outdoor areas at the farm. For more information please go to: studentaffairs.case.edu/farm/support/bench.html
- University Farm Endowment: This fund was established in 2007 to help improve and maintain the property with more than 20 structures and 389 acres of green space. Many of the farm buildings are over 100 years old and require extensive upkeep to preserve their rich history.
- Planned Giving: A planned gift to the farm would provide a benefit to you and your family by bringing immediate and deferred tax advantages to both you and your heirs.

If you would like to contribute or have questions about any of these opportunities, please contact us at 216.368.0274 or visit our website at studentaffairs.case.edu/farm/support/.





University Farms Squire Valleevue and Valley Ridge Farm 37125 Fairmount Boulevard Hunting Valley, Ohio 44022