



SQUIRE VALLEEVUE AND VALLEY RIDGE FARMS
2013 ANNUAL REPORT

T H E G R E E N C A M P U S



CASE WESTERN RESERVE
UNIVERSITY EST. 1826



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"...a place where the practical duties of life may be taught; where the teachers and students can come in close contact with Mother Earth..." -- Andrew Squire, 1932

THE CASE WESTERN RESERVE UNIVERSITY FARM, located on Fairmount Boulevard in the Village of Hunting Valley, is a 400-acre property that includes, within its boundaries, forests, ravines, waterfalls, meadows, ponds, a self-contained natural watershed, three residences, many other structures, and several miles of roads and trails. The farm came to the university as the result of five gifts: The late Andrew Squire gave 277 acres (Squire Valleevue Farm) in the late 1930s; the heirs of Jephtha 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 2013, nine acres were added to the property thanks to a generous gift by the Maltz family.

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.

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 &
Facilities Management

Farm Staff

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

Patty Gregory
Department Assistant

Christopher Bond
Horticulturist/Food Program Coordinator

Alan Alldridge
Food Program and Landscape Assistant

Meaghan Wierzbic
Food Program, Technician III

Corinne Burr
Food Program Associate

Shane Brown
Facilities Group Leader

Joe Miller
Facilities Crew Assistant

Zoey Bond
Manor House and Special Events
Program Coordinator



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 on-site maintenance of the Farm's facilities 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 farm events coordinator. Other staff members, in the expanding Food Program, include Alan Alldridge, Meaghan Wierzbic and Corinne Burr. In 2012, Joe Miller was hired as facilities assistant, reporting to Shane Brown.

ACADEMIC AND RESEARCH PROGRAMS

UNDERGRADUATE AND GRADUATE COURSES

Academic programs at the University Farm have greatly expanded during the last thirteen years. In 2013, the farm's indoor and outdoor facilities were used by 19 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 2,500 students and faculty visited the farm to take classes.



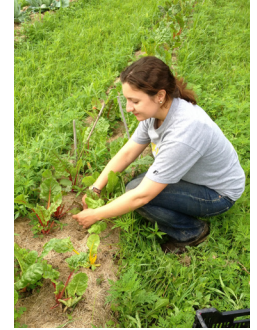
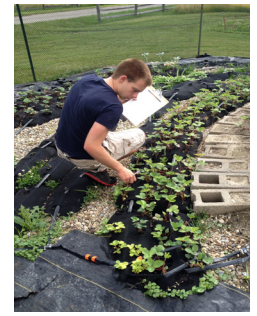
Undergraduate and graduate courses offered included fourteen lab sections with over 600 students enrolled in the Genes and Evolution (BIOL 214), Principles of Ecology Lab (BIOL 351L/451L), Aquatic Ecology Laboratory (BIOL 339), Introductory Entomology (BIOL 318L/BIOL 418L), eight capstone projects by the Frances Payne Bolton School of Nursing students, Public Health Nutrition (NTRN 550), the Dorothy Ebersbach Academic Center for Flight Nursing Summer Camp, and several art classes including ceramics and photography.

CONTINUING EDUCATION

The Laura and Alvin Siegal Lifelong Learning Program offered 20 continuing education courses year-round during 2013. The Summer in the Country program offered ten courses: Painting in the Outdoors, Writing Poetry, Journal Writing, Farm History, Writing Nonfiction, Beekeeping, Growing Your Own Food, Fibers, Bird Watching, 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 Autumn in the Country 2013 program offered seven classes, including Writing Nonfiction, Painting in the Outdoors, Walk Through Nature, Introduction to Beekeeping, Blueberry University, Foraging for Food, and Fibers at the Farm. The Winter in the Country program offered Growing Your Own Food, Beekeeping, and Writing Nonfiction.



RESEARCH

The greatest participation in academic activities includes 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 continued to increase. Projects included graduate, undergraduate capstone projects and high school senior research. These research programs are expected to increase with the hiring by the Department of Biology of two new ecology faculty members, Sarah Diamond and Ryan Martin. Both of these researchers will be developing their field programs at the farm.

Active research projects onsite include: Studies on amphibian 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. 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. Constance Hausman, plant and restoration ecologist with the Cleveland Metroparks, continues her 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 growing the teaching opportunities at the farm while increasing habitats for wildlife and reducing energy consumption.

A natural gas-fueled bus was approved by the University in the fall of 2013 and will provide regular transportation to faculty, staff, and students from campus to the Farm. The new bus scheduled to arrive early 2014, will meet the needs for academic and recreation activities at the Farm.

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 2013, labor was provided by farm staff, (Chris Bond, Alan Alldridge, Meaghan Wierzbic, Corinne Burr, Matt Burtonshaw, and Julie Jablonowski) several undergraduate students (Renaë Brown, Amanda Langhals, Abby Dwornik) and many other students, alum and staff volunteers. Volunteer hours accounted for almost one-seventh of the total labor. The farm delivered over seven tons of fresh food to the Case Western Reserve campus during the 2013 harvest season (over 18.5 tons since 2010), either in direct sale to Bon Appetit, or sales to the campus community in the form of farmer's markets and CSA shares. The farmer's market was set up throughout the year on campus at the Biomedical Research Building. It serviced over 1,500 customers, selling over 80 different products. The summer and fall CSA supported 80 shares in total, offering a variety of 30 different products. More than 6,000 pounds of produce were distributed among 74 different shareholders over the growing season. Teaching and research opportunities provided by the Farm Food Program in 2013 included visits by SAGES courses, three student research projects pertaining to weed control, honey bee pollination, nutrition education, evaluation of compost socks as well as hosting field trips for several local college and high schools.





In June 2013, the Farm administration invited the Case Western Reserve University community to come to the CWRU-owned Valley Ridge Farm to learn about ongoing site academics, research, and educational activities. The program, "Fridays at the Silo," took place on June 7, 14, 21, 28 and July 12 and 19, 2013 from 3pm to 7pm. The Silo Theater, a multipurpose room remodeled in 2010 thanks to the generosity of Mort and Iris November was the site for the indoor exhibitions. Fridays at the Silo was open to CWRU faculty, staff, students, and alum. The University affiliates and their families enjoyed relaxing evenings in a natural surrounding while learning about our food production and environmental programs. During the events guests visited the Farm Food Program's gardens to learn about different types of crops, planting methods, the irrigation system powered by solar panels, weed control methods, and beekeeping activities while a Farmer's Market offered fresh products for sale to the visitors.

The Bluebird Trail, in its 12th season, includes 54 Peterson houses located around the research ponds and nearby fields. Alumnus Bill Jirousek and university staff member Betsy Banks, both farm volunteers, check the houses regularly during the breeding season (April - August), record data, and band hatchlings. Many of the farm's bluebirds wintered over. A total of 161 birds fledged (168 in 2012) - 80 eastern bluebirds (57 in 2012), 62 tree swallows (86 in 2012), and 19 house wrens (25 in 2012) - 2013 was the best year for eastern bluebird population. Trail data, recorded and analyzed at the farm is part of a long-term study.

STUDENT LIFE

Student-initiated scheduled use of the farm facilities has increased greatly. Eighty-one student groups reserved the facilities in 2013. 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	Engineers Without Borders	Phi Mu
Alpha Chi Omega	Fellowship of Christian Athletes	Psi Omega Dental Honorary Society
Alpha Phi	Film Society	Relay for Life
Alpha Phi Omega Sorority	Graduate Student Senate	Residence Hall Association
Alpha Kappa Psi	Iranian Academic Association	Rich Lab
Anthropology Students	Institute of Electrical and Electronic Engineers, CWRU Chapter	School of Medicine Groups
American Medical Student Association	Inter Society Council	Sigma Phi Epsilon Fraternity
Archery Club	Inter-Varsity Christian Fellowship	Sigma Psi Sorority
Beta Nu of Theta Chi	Inter-Varsity Graduate Christian Fellowship	Solstice Women's A Cappella
Beta Theta Pi	International Chinese Students	Spanish Student Immersion
Biology graduate students	International Student Fellowship	St. Thomas More Society
Bioethics graduate students	Korean Graduate Students Association	Student Turning Point Society (WSOM)
Biomedical Engineering Graduate Student Association	Kappa Alpha Theta Sisterhood	Student Bar Association
Campus Crusade for Christ	Material Science graduate students	Student Sustainability Council
Case Alliance Dental Association	Public Health Nursing School Graduate Entry Program	Tau Beta Pi
Case Concert Choirs	Law School	Theta Chi Fraternity
Chi Alpha Christian Fellowship	Master of Public Health (MPH)	Track team
Chinese Students and Scholars Association	NICHE Students	Turkish Student Association (UTurk)
Chinese Student Christian Fellowship	Newman Catholic Student Association	Undergraduate Student Government
Cycling Club	OTZ Fall Retreat	University Program Board
College Scholars Program	Phi Delta Upsilon	UPCaM
Delta Chi	Phi Kappa Tau	Women and Men's Cross Country teams
Delta Gamma	Phi Gamma Delta	WSOM-CCI Informatics Division
Delta Sigma Theta	Phi Sigma Rho	WSOM OR/SC
Delta Upsilon		WSOM Operations Research
Delta Psi Omega		WSOM Finance
Delta Tau Delta		Zeta Beta Tau Fraternity
Electrochemical Society		

On Oct. 5, 2013, the fourth annual "Farm Harvest Festival" took place at Squire Valleevue Farm. The event was co-sponsored by the Case Western Reserve Student Sustainability Council (SSC) and 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 alum, 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, alum and their families. The fundraising effort was headed by SSC's Chair Steven Cramer and Co-Chairs Hannah Bidigare-Curtis and Paige Altimere. In total, almost \$8,000 was raised to support the Festival. SSC also coordinated volunteers from other student organizations. The council members reached out to all friends of the University by making class announcements, coordinating the volunteers groups, organizing student performance groups, sending emails, posting event fliers and promoting word-of-mouth. During the event SSC members welcomed visitors, and helped with the many indoor and outdoor activities. Event activities included decorating cookies, a cooking demonstration by Bon Appetit chefs, beekeeping and honey production exhibitions, a Farm Harvest Festival "memory basket", woodcarving exhibition and zumba classes hosted by 1-2-1 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, Cleveland Institute of Music as well as Case Western Reserve's new faculty took place at the farm picnic grounds. These orientation picnics introduced the new faculty and professional schools to the farm facilities and its usages.

Several student groups continued to use the Farm for special projects as part of their extra curricular activities. The Farm provides unique spaces and opportunities for outdoor projects for groups such as Case Western Reserve's chapter of Engineers Without Borders (EWB-Case). For the 2012-2013 the EWB group worked on the design of an indoor hydro-culture system with the assistance of farm staff member, Alan Alldridge. The system is currently being tested.

FACILITY 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 events but hold many memories for university alumni. Many of the facilities are known by name: the Sheep Barn; the Pink Pig, our "rustic cottage;" several picnic areas; the Main Barn and the Kutina Classroom; and Andrew Squire's own country estate, the Manor House.

During 2013, 76 groups booked the various picnic areas, generating 5,482 person-visits. The Sheep Barn hosted 71 groups, generating 4,285 person-visits. The Pink Pig accommodated 116 groups, generating 2,190 person-visits. The Kutina Classroom provided space for 93 groups generating 1,787 person-visits. The Manor House hosted 37 events comprised of 7 student groups, 13 university groups, 6 nonprofits, 3 corporate events, 6 university-affiliated private events, and 2 weddings. The Manor House serves the Cleveland community's nonprofit, corporate, and university affiliated private groups. Some of the nonprofit groups using the House include the Western Reserve Land Conservancy and the Deaconess Community Foundation.



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 2012-2013, the farm hosted 12 school visits with 717 students, 30 teachers and 48 chaperones. The schools participating were Shaker Hts. Middle School, Padua Franciscan, Charles F. Brush, Ruffing Montessori, Michael R. White School, Hathaway Brown, Beachwood, and Beaumont High School.

The Cleveland Museum of Natural History ran its second Junior Forensics Camp for grades 9-12 at the Farm from June 24 to 28, 2013. 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. The program was developed and directed by Dr. Jeff Day.

The Farm hosted the third Annual Honey Bee Conference and Field Day of the Greater Cleveland Beekeepers Association on Saturday May 11. Featured speakers, Ross Conrad and Janet Clayton talked about environmentally friendly beekeeping practices, urban beekeeping and bee health. Continuing education classes were offered on introduction to beekeeping, splitting beehives and bee biology and diseases. The event was coordinated by association president, Richard Manley. Over 100 visitors attended the one-day conference. The Farm provided meeting, classes and field work spaces including the unveiling of the new A.I. Root Observational Apiary.



Hathaway Brown School and Case Western Reserve University continued their collaboration and usage of the Farm facilities. During the academic year 2012-2013, 46 events were hosted at the Farm facilities bringing more than 1,190 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's week-long retreat, EC student hikes and picnics, faculty and staff professional meetings, and social events.

GRANTS AND GIFTS

The Maltz family's generous gift to the University allowed the purchase of 9-acres adjacent to the Farm property during early summer. This fifth gift to the University increased the property to 400 acres. This new property contains two ponds, forested and meadow areas that will allow the expansion of the research and conservation programs onsite.



The Farm Annual Fund raises funds to support new Farm initiatives and programs and 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 2013. There have been a total of 22 benches donated to the Farm by families of alumni, faculty and staff. This program helps to improve the Farm's outdoors while providing a new funding source to update the facilities.

Five trees, planted as a part of our Farm Tree Planting Dedication Program to honor several faculty members, were sponsored by the Great Lakes Energy Institute.

The A.I. Root Company provided a very generous gift to build the A.I. Root Observational Apiary. This new teaching and research site allows researchers, students and casual visitors to observe from a very close distance our honey bee hives.



Other generous donors for the Farm Food Program include the Ivy Garth Seed Company for their continued donation of seeds, Bon Appetit Management Company for their generous \$1,000 donation to sponsor a summer student, Filtrex International for their generous gift of GardenSoxx and SiltSoxx products, the Cutco Corporation for their gift of tools, the Dosatron International Company for their donation of a fertilizer injector and the Le Dames Escoffier organization through their "Green Table Grants" to build winter cold frames and purchase growing lights for the hydroponic systems.



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 helps 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 400 acres of green space. Many of the Farm's buildings are over 100 years old and require extensive upkeep to preserve their rich history.
- **Planned Giving:** A planned gift to the farm provides a benefit to you and your family by bringing immediate and deferred tax advantages to both you and your heirs.
- **The Farm Tree Planting Dedication Program:** A \$1,100 gift gives donors the opportunity to commemorate a lost loved one, honor someone special or commemorate a special occasion by choosing from a shade or ornamental tree that will be planted in our Memorial Arboretum.

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: studentaffairs.case.edu/farm/support/



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