

Station News A PROGRESS REPORT for staff and Friends of America's first Agricultural Experiment Station



Departmental News

THE CAES JOINS IN SUPPORT OF THE CT FOLK MUSIC FESTIVAL AND GREEN EXPO AND 2009 TOUR DES FARMS BIKE TOUR

By Tess Foley

The Connecticut Agricultural Experiment Station strongly supported this year's CT Folk Music Festival and Green Expo in New Haven, CT on Saturday, September 12, 2009.

This high-profile event has become a signature arts and environmental event in New Haven. This year's event also included for the very first time the 2009 Tour des Farms Bicycle Tour. In support of bringing this farm tour to the New Haven area, the CAES generously opened the Lockwood Farm in Hamden to the cyclists as one of the stops on their farm tour. Dr. Kim Stoner and Tess Foley were hosts to the cyclists. Riders were provided light snacks, water to refill their bottles, a guided tour of our Bird and Butterfly Garden, a beautiful place to rest and learn about the research of the CAES, and, very importantly, rest rooms!

Cyclists were treated to brief information talks and Q&A by Station Director, Dr. Louis Magnarelli, and Dr. Kim Stoner. Station Vice Director, Dr. Kirby Stafford, III was present for this event also. Many cyclists commented that the Lockwood Farm was one of their favorite stops on their tour.

A gorgeous musical serenade was provided by well-known New Haven guitarist Glenn Roth, who played for the cyclists as they visited the Farm.

Another major event, The Green Expo, took place in Edgerton Park in New Haven from 12 to 4 PM. The Station provided support to this event also. Ira Kettle, CT Honey Bee Inspector, provided a table top display, complete with some of his bees. Station entomologist, Dr. Gale Ridge provided a children's workshop on insects called, "Insects: The Good, The Bad, And the Ugly." And Lisa Kaczinski presented a talk and posters on her work in blue bird preservation and explained the two blue bird preservation trails she has established at Lockwood Farm and a Gouveia Vineyard.

The CT Folk Music Festival and Green Expo is supported in part by the Connecticut Commission on Culture and Tourism.

MS. TESS FOLEY took some photos to document the Station's first involvement with this event.



DR. LOUIS MAGNARELLI and **DR. KIRBY STAFFORD** give a brief talk to cyclists on the Farm Tour.



Cyclists arrive at Lockwood Farm to rest and tour the Farm.



Musician Glenn Roth serenades cyclists as they arrive at Lockwood Farm.



Two Precious Cuties are Mesmerized by **MR. IRA KETTLE'S** Honey Bee Display.



DR. KIMBERLY STONER talks to cyclists about research done at Lockwood Farm.



New Haven based musician Glenn Roth performs at Lockwood Farm.



Cyclists and Guest Musician at Lockwood Farm for Tour des Farms.



Sample pit at Lockwood Farm

Thank you to all who participated.

SOILS WORKSHOP AT LOCKWOOD FARM, HAMDEN

By Richard Cecarelli and Vickie Bomba-Lewandoski

On Thursday, September 10th, an afternoon workshop was presented to learn more about the soil types at Lockwood Farm and how to build a soil monolith. Representatives from the Natural Resource Conservation Service (NRCS) presented this demonstration. Some of the attendees were The Connecticut Agricultural Experiment Station (CAES) staff members, a Yale faculty member, a Connecticut Department of Environmental Protection (DEP) representative, and students from Trinity College. The digging of the soil pits began on Wednesday, September, 9th, and the monoliths were prepared during the workshop on the 10th. We worked with two soil series for the workshop Yalesville (fine sandy loam) from Lockwood Farm and the Windsor (loamy sand) soil series from a farm in East Windsor, which is also the “State Soil” for Connecticut. CAES was able to retain these two soil monoliths for our staff to use in presentations and displays.



Sample of soils at Lockwood Farm



Presentation by NRCS



Presentation by NRCS



Soil monoliths



NRCS showing us how to make a soil monolith

Administration

DR. LOUIS A. MAGNARELLI was interviewed about Asian longhorned beetles and mosquitoes by Ray Andrewsen of WQUN Radio in Hamden (September 2); gave a talk at Lockwood Farm to visitors as a part of the Tour des Farms program (September 12); gave a talk about Station research to the Experiment Station Associates in the Board Room at the Station (September 14); welcomed participants and gave a talk on Station research to the CT Landscape Designers Course (September 16); and was interviewed about Lockwood Farm by Mary Jasch of "Dig-It magazine (September 16).

Analytical Chemistry

DR. CHRISTINA ROBB visited Professor Peter Markow and Professor Sarah Higbie of St. Josephs College, West Hartford (September 17). The visit was to discuss their current and previous programs to introduce middle school girls to science. The current program "Go-Girls" is a 10-week program that encompasses biology, chemistry, mathematics and engineering to the girls. The program is held on Saturdays at St. Josephs College from 10am to 2pm.

Biochemistry and Genetics

DR. DOUG DINGMAN participated with other Station scientists on the WTIC radio talk show "Garden Talk" with hosts Len and Lisa. (August 1st); was interviewed by Averton Bailey (AP Press) on research results about American foulbrood prevalence in Connecticut (August 12); and presented a seminar to the Backyard Beekeepers Association (Weston, CT) entitled "American foulbrood - A hidden disease" (September 29).

DR. RICHARD PETERSON made a presentation to the Nelson/Irish laboratory group at Yale University on "Linear Gradients for C4 Photosynthesis in Maize Leaves" (October 1).

DR. NEIL MCHALE presented a lecture on "Evolution and Domestication of Crop Plants" to the Old Ripton Garden Club of Shelton (October 5) and was awarded a grant from the USDA/AFRI Plant Growth and Development Program for research on "Molecular Function of LAM1 in Leaf Development".

Entomology

MR. IRA KETTLE stood at the Asian Longhorned Beetle and Emerald Ash Borer displays and answered questions from the public at the Woodstock Fair in Woodstock (September 5-7); answered questions about Asian Longhorned Beetle and Emerald Ash Borer from visitors at the Hebron Fair (September 10-11); described the Asian Longhorned Beetle and Emerald Ash Borer to visitors at Edgerton Park in New Haven (September 12); did a honey bee demo and Asian Longhorned Beetle and Emerald Ash Borer outreach at Harkness Park in Waterford; his wife, Diana, volunteered her time with the bees when he was busy with the beetles (1,065 people visited the table) (September 13); and along with **MR. STEPHEN SANDREY, MR. PETER TRENCHARD**, and Kevin Grady (CT DEP) stood at the honey bee, Asian Longhorned Beetle, and Emerald Ash Borer displays and answered questions from the public at "Celebrating Agriculture" held at the Woodstock Fairgrounds; they passed out pollinator posters, ALB buttons, tattoos, bags, and magnets (874 people visited the table) (September 26).

Images from the Asian Longhorned Beetle and Emerald Ash Borer displays at the Woodstock Fair September 5-7.



Jordan Stern of Dayville, Connecticut, intently studies the ALB display.



Paul Larson, who kindly volunteered his time to assist us, explains ALB to visitors.

DR. CHRIS T. MAIER displayed two uncommon insects and briefly explained their biology at a meeting of the Connecticut Entomological Society in Jones Auditorium (10 attendees) (September 18).

DR. VICTORIA SMITH presented a talk titled “Asian Longhorned Beetle: A threat to our forests” to the Flanders Nature Center, at the Senior Center in Woodbury (5 attendees) (September 24).

DR. KIRBY C. STAFFORD III met with Terri Stern, Yale Peabody Museum, to discuss a tick display for the upcoming exhibit *Solving the Puzzle: Lyme Disease, West Nile Virus & You* (September 9); greeted bicyclists visiting Lockwood Farm for the Tour des Farms as part of the Connecticut Folk Festival (September 12); spoke about the Asian Longhorned Beetle at a meeting of the Connecticut Entomological Society in Jones Auditorium (10 attendees) (September 18); participated in the USEPA Regional Scientific Workshop on Biodiversity/Landscape Change and Lyme Disease-Science and Application and spoke on “Cultural, biological, and natural tick control for the management of Lyme Disease” (52 attendees plus 23 on the webinar) (September 22-23); and participated in an NASDA-APHIS Invasive Forest Pests Forum on Asian Longhorned Beetle in Worcester, MA (September 29).

DR. KIMBERLY A. STONER met with Priya Morganstern of the Pro Bono Partnership and Bill Duesing of CT NOFA on legal issues for community farms (September 1); visited Brenda Caldwell, farmer at Boulder Knoll Farm, to discuss late blight and other pest management issues (September 3); spoke to visiting bicyclists at Lockwood Farm and Boulder Knoll Farm in Cheshire as part of the Tour des Farms, organized by the Connecticut Folk Festival (30 attendees at Lockwood and 20 attendees at Boulder Knoll Farm) (September 12); spoke to the Cheshire Garden Club on “Threats to the health of honey bees and wild bees” (45 attendees) (September 14); participated in a meeting of the Organic Land Care Committee of NOFA at the Valley Laboratory (10 attendees) (September 15); visited Brenda Caldwell, farmer at Boulder Knoll Farm, to discuss seed saving of tomatoes and other pest management issues (September 17); and met with Jason Morrill of Massaro Farm in Woodbridge to discuss common issues of community farms and to prepare for the Community Farming Conference (September 28).

Environmental Sciences (formerly Soil and Water)

DR. THEODORE ANDREADIS participated in a state-wide conference call with Governor M. Jodi Rell and officials from the Departments of Health, Environmental Protection, Agriculture, Emergency Management and Homeland Security held at the state Armory in Hartford to update local municipal leaders and health districts on the current status of eastern equine encephalitis activity in the state (September 17); was interviewed about the current status of West Nile virus activity in the state this year by Bob Miller, Danbury News Times (September 18); was interviewed about eastern equine encephalitis activity in eastern

Connecticut by Emily Grove, Norwich Time (September 18); was interviewed about the detection of eastern equine encephalitis in Darien, Shelton, South Windsor and Voluntown by Fran Schneido WCBS Radio, New York (September 22); was interviewed about eastern equine encephalitis and West Nile virus activity in Connecticut and the northeastern US by Steve Kotchko, Connecticut Public Radio (September 22); hosted Dr. Todd Livdahl and a graduate student from Clark University and discussed techniques to identify mosquito pathogens and provided a tour of Experiment Station laboratories and facilities (September 23); was interviewed about eastern equine encephalitis and West Nile virus activity in Connecticut and the northeastern US by Susan Wolf, Redding Pilot (September 24); and was interviewed about eastern equine encephalitis and West Nile virus activity in Connecticut and the northeastern US by Tess Foley, WMNR Radio (September 25).

MR. GREGORY BUGBEE interviewed by Samai Hernandez of the Record Journal on the aquatic plant problems in North Farms Reservoir (September 4); interviewed by Nancy Cohen of National Public Radio on "Invasive Aquatic Plant Problems in Connecticut" (September 8); interviewed by Samai Hernandez of the Record Journal on the aquatic plant problems in North Farms Reservoir (September 16); spoke at a meeting of the Young's Pond Commission, in Branford, on "Controlling Nuisance Vegetation in Shallow Ponds (10 attendees)" (September 22); interviewed by Bob Wilson of TV-8 News on "Invasive Aquatic Plant Problems in Connecticut" (September 30).

MR. MICHAEL THOMAS assisted scientists and Earthwatch volunteers (ten science teachers) studying interactions between caterpillars and their natural enemies at the American Museum of Natural History Southwest Field Research Station in Portal, AZ (August 10) and demonstrated insect collecting techniques to the Yale University EEB Terrestrial Arthropods class at the Yale Forestry Camp in Norfolk, CT (6 students) (September 12).

Forestry and Horticulture

DR. JEFFREY WARD spoke on "Tree Biology" for the Arboriculture 101 class sponsored by The Connecticut Tree Protective Association, Jones Auditorium (49 attendees) (September 2); spoke on importance controlling invasive species for Sacred Heart University students at Veteran's Park cleanup in Bridgeport (60 attendees) (September 3); interviewed by Bridget Ruthman of the Waterbury Republican about the effect of weather on fall colors (September 3); along with **DR. SCOTT WILLIAMS**, met with Mark Clifton, Connecticut Yankee Council - Boy Scouts of America, to discuss invasive control options and collaborative projects in Killingworth (September 4); administered practical and oral examination to arborist candidates for the Connecticut Tree Protection Examining Board (September 9); interviewed by Ryan Hanrahan of NBC-30 about the effect of weather on fall colors (September 8); interviewed by Amanda Cuda of the Connecticut Post about fall colors (September 9); spoke on "Controlling Japanese Barberry: Alternative Methods and Impact On Tick Populations" at the Natural Areas Conference 2009 in Vancouver, WA (35 attendees) (September 16); interviewed by John Cox of the New Haven Register about the relationship between tree crowns and roots (September 22); interviewed by Mary Jasch of the New Jersey Chapter - American Society of Landscape Architecture about the relationship between barberry and ticks for their newsletter (September 23); spoke on "Quantifying Forest Change" at the Great Mountain Forest GMF Centennial in Norfolk (50 attendees) (September 26); and spoke on controlling invasive species at Oxford High School (14 students, 2 adults) (September 30).

DR. ABIGAIL MAYNARD along with **DR. DAVID HILL**, judged fruits and vegetables at the North Haven Fair (September 10); spoke about the New Crops Program when participants in a garden tour visited Lockwood Farm (19 attendees) (September 13); attended a monthly meeting of the Solid Waste Advisory Committee at DEP (September 22); and spoke on composting and utilization of compost in the Discovery Center at the Durham Fair (40 attendees) (September 25).

DR. WILLIAM NAIL participated in a meeting of the Connecticut Farm Wine Development Council at the Department of Agriculture in Hartford (September 10); participated in a meeting of the Connecticut Vineyard and Winery Association and (September 14); and gave a presentation on harvest strategies and activities at the Connecticut Food Council in Farmington (19 attendees) (September 14).

DR. SCOTT WILLIAMS participated in the Connecticut Urban Forest Council meeting in Middlefield (September 9); gave invited lecture titled "Effectiveness of Deer Repellents on Yews in Connecticut" at the Nursery and Landscape Research Tour at the Valley Lab (35 attendees) (September 10); gave a lecture about the inter-relationship between Japanese barberry and blacklegged ticks and *Borrelia burgdorferi* prevalence at the COVERTS Project Seminar in Chaplin (40 attendees) (September 12); met with University of Connecticut graduate student Lindsay Dreiss to discuss research involving Japanese barberry (September 22); and spoke about deer research and capture techniques at Lyman Memorial High School in Lebanon (45 students) (September 25).

MR. MICHAEL SHORT along with **MR. JOSEPH P. BARSKY**, toured the Ecology & Evolutionary Biology Greenhouses at UCONN and visited with Plant Growth Facilities Manager Clinton Morse (September 22).

MR. JOSEPH .P. BARSKY spoke on methods of controlling invasive species for Sacred Heart University students at Veteran's Park cleanup in Bridgeport (60 attendees) (September 3) and visited Jamie Fisher, White Memorial Foundation - Litchfield, to explain use of thermoprobes and dataloggers to monitor soil temperatures (September 3).

Griswold Research Center

Mr. Robert Durgy gave a talk on common garden insect pests at the Community Gardening Conference in Hartford (11 adult attendees) (September 19).

Plant Pathology and Ecology

DR. SANDRA L. ANAGNOSTAKIS was interviewed at Lockwood Farm about chestnuts by TV reporter Stephanie Valickis for the show "Crossroads Magazine" (September 22). The show aired on Saturday morning (September 26) on WTXN CW-20 and WCTX My-TV9. Reported on Experiment Station chestnut research at the annual meeting of the Multistate Research Project NE-1033, "Biological improvement of chestnut through technologies that address management of the species, its pathogens and pests" in Ocean Grove, NJ (September 24-27).

DR. SHARON M. DOUGLAS met with **DR. LOUIS MAGNARELLI** and Mr. Richard Bergmann, ESA member, to discuss how the Experiment Station can expand outreach to landscape architects in the state (September 3); participated in a conference call about the "CAES Girls and Science Mentorship Program" with **MS. TESS FOLEY** and Mr. Richard Therrien, K-12 Science Supervisor for New Haven Public Schools (September 4); participated in a meeting of the Board of Directors of the Connecticut Tree Protective Association (15 adult attendees) (September 8); participated in the administration of the oral exam for an arborist license by the Connecticut Tree Protection Examining Board (September 9); and participated in a conference call for members of the Board of Directors for the APS Foundation (September 21).

DR. WADE H. ELMER attended the NRCS demonstration at Lockwood Farm (15 attendees) (September 10); attended the Connecticut Greenhouse Grower's Association: Evening at the Greenhouse" at Kurt Weiss Farm in Cheshire (22 adult attendees) (September 15); gave the presentation "Plant parts and their diseases" to the second-grade classes at Mile Creek School in Old Lyme (92 children and 9 adult attendees) (September 25); and participated in the Committee for Agriculture Education in Bloomfield (18 adult attendees) (September 29).

Valley Laboratory

DR. CAROLE CHEAH gave an update on CT's Hemlock Woolly Adelgid biological control program for the walking tour on Plant Science Day (15 attendees) (August 5); gave a presentation on hemlocks, biological control and HWA at the 100th Anniversary Open Forest Day, Great Mountain Forest, Norfolk (40 attendees) (September 26); and an evening presentation on biological control of mile-a-minute in CT at

UCONN Torrington for the Invasive Plants and Insects Program organized by the Northwest Conservation District and Town of Torrington (20 persons) (September 30).

DR. RICHARD COWLES presented "Systemics for Asian Longhorned Beetle," for the Valley Laboratory Field Day, Windsor (13 attendees) (September 10); interviewed by Megan Jenny of the Toxics Action Center, regarding chemical control practices for Asian longhorned beetle control (September 17); and conducted a web seminar for a Northeast Regional IPM program, on the topic "Root weevils and white grubs in strawberries," (20 attendees) (September 22).

DR. JAMES A. LAMONDIA welcomed participants and spoke about cover crops for management of nematode pathogens of nursery and landscape plantings as a part of the Valley Laboratory Nursery and Landscape Research Tour (12 persons) (September 10); was interviewed about shade tobacco harvest by Mark Curtis of National Public Radio (September 24); and was interviewed about tobacco diseases affecting the crop in CT and MA by Bob Salsberg of the Associated Press in Boston (September 25).

DR. TODD L. MERVOSH manned a booth with information about CAES and invasive species at Farm Fest, held at Hilltop Farm in Suffield (approximately 300 attendees) (September 7); spoke about his experiments on control of Japanese knotweed and on efficacy of various granular herbicides in nursery containers at the Nursery and Landscape Research Tour at the Valley Laboratory (15 attendees) (September 10); and presented a display of native plants and invasive plants at the Suffield Land Conservancy booth at 'Suffield on the Green' (approximately 500 attendees) (September 12-13).



Photo of **DR. TODD MERVOSH** taken at the Suffield Farm Fest by a Suffield resident, Steve McKeen.

DR. HUGH SMITH gave a presentation on insectary plants for enhancement of biological control for the Landscape and Nursery Research Tour at the Valley Laboratory (September 10) and attended a workshop on "Biological Control in Greenhouses" in Vernon (September).

Journal Articles Approved September 2009

Elmer, Wade H. What's causing Sudden Vegetation dieback in Connecticut's salt marshes? Wrack Lines (Newsletter, CT Sea Grant, UCONN)

LaMondia, James A. and Richard S. Cowles. Evaluation of strawberry breeding lines for tolerance to black root rot and BVW feeding. Phytopathology (abstract)

LaMondia, James A., De-Wei Li, and Charles R. Vossbrinck. First report of blight of common bean caused by *Phytophthora capsici* in Connecticut. Plant Disease.

Li, De-Wei. *Spadicoides subsphaerica* sp. nov. from Connecticut. Mycotaxon

Marco, Michele D. and **Jason C. White.** Direct comparison of herbicidal and biological treatment on *Myriophyllum spicatum* control and biochemistry. Aquatic Botany

Stoner, Kimberly A. Late blight: What can organic farmers do? Gleanings (CT NOFA Newsletter)

Xiang, H., Pan, G, Xu, J. Zhang, R., **Charles R. Vossbrinck**, Zhou, Z. and Xiang, Z. A tandem duplication of manganese superoxide dismutase in *Nosema bombycis* and its evolutionary origins. Molecular Evolution

Williams, Scott C. and **Jeffrey S. Ward.** Beware of increased tick abundances in Japanese barberry infested forests. CT Weekly Ag Bulletin.

Grant Awards April 2009

DR. WADE ELMER was awarded a Specialty Crop Block Grant from the Connecticut Department of Agriculture \$25,000.

DR. THEODORE ANDREADIS AND DR. PHILIP ARMSTRONG received an Epidemiology and Laboratory Capacity for Infectious Disease Grant for West Nile Virus Surveillance for \$55,000 from the Centers for Disease Control and Prevention and the State of Connecticut Department of Public Health.

DR. NEIL MCHALE was awarded a grant from the USDA/AFRI Plant Growth and Development Program for research on "Molecular Function of LAM1 in Leaf Development" \$126,000.

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