Station News Aprogress report for staff

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Departmental News

50TH ANNIVERSAIRY AT THE STATION FOR DR. DAVID HILL by Dr. Abigail Maynard

When Dr. David Hill started at the Station fifty years ago, June 28, 1957 to be exact, he only planned to stay for a year. Dave had just finished his PhD at Rutgers and had intended to return there to teach. When the invitation to return came as expected, he turned it down because he had fallen in love with Connecticut. Fifty years later, though officially retired, you can still find him every day at Lockwood Farm tending his crops.

Dave did not start his career at the Station growing crops at Lockwood Farm. He spent his early years at the Valley Laboratory working on the State Soil Survey and was coauthor of the first three county surveys. His specialty was interpreting soil survey information, especially concerning sanitary facilities. He moved to New Haven in 1966 after his work with the Soil Survey ended.

Dave's work with soils did not end with his move to New Haven. He completed an extensive study of Connecticut and Rhode Island's tidal marshes and the resulting Station bulletin is still requested. His research also included the movement of water and nutrients through the soil (fingers) that continues to be cited.

Dave's career changed when he was asked to assist in the Day-Waverly community garden in New Haven's inner city. Because the soil was poor, Dave established a demonstration plot in the community garden where he tried different methods to improve the soil with various soil amendments. This led to research at Lockwood Farm investigating various mulches and their effect on vegetable yields. In 1982, Dave was asked to head the Station's New Crops Program. For the past 25 years, he has studied over 35 fruits and vegetables, many of which had never before been grown in Connecticut. Many growers learned how to grow specialty crops like globe artichokes, Belgium endive, and jilo from his research.

Why is Dave still out there at Lockwood Farm day after day? He simply loves to grow things and everyone who meets him can not help but be affected by his enthusiasm. He is considered the vegetable expert at the Station. Growers respect him not only for his knowledge but also they know that he, like them, has been out there with the crops day after day. He always has time for visitors at the farm and loves to tell about the particular plot he is working on. Quite simply, Dave represents the best of the Station: loyal, dedicated, well-informed, hardworking, all with a friendly demeanor. Indeed, Connecticut is fortunate that Dave made that decision to stay all those years ago.

Administration

DR. LOUIS A. MAGNARELLI, as Chairman, conducted a meeting of the Invasive Plants Council in Windsor (November 13); greeted students and teachers from Bunnell High School (Stratford) before they toured the Station (18 students and 2 teachers) (November 14); and welcomed members of the Federated Garden Club in Jones Auditorium and gave a report on Station research (36 members) (November 27).

Grants and Fundraising Office

MS. TESS FOLEY hosted a workshop brainstorming session on the topic of "Strengthening Outreach for Grant Submissions" at the CAES (15 attendees) (November 13).

Analytical Chemistry

DR. BRIAN EITZER attended the Southern New England Beekeepers Assembly in New Haven (November 17) and attended a meeting of the Connecticut Separation Science Council in Meriden (November 27).

DR. WALTER J. KROL Served as coordinator for the New Haven Section of the ACS National Chemistry Week (NCW) poster contest. The posters from the contest were displayed for one month in the Jones Auditorium; presented an educational discussion and demonstration entitled 'Crops and Biofuels' to a group of individuals lead by George Whitney from The Institute for Learning in Retirement Inc. at Albertus Magnus College at CAES in New Haven (8 Participants) (November 1); interviewed by the New Haven Register for an article on biodiesel. The story appeared in the Sunday November 11, 2007 business section of the newspaper (November 8); presented an informal tour of analytical chemistry to a group of 15 High School students (November 14); participated in the Department of Homeland Security's Homeland Security Information Network (HSIN) for Food and Agriculture Webinar mediated by Peter Kyriacopoulos, Director of Public Policy, Association of Public Health Laboratories, Silver Spring, MD (November 14); presented a two hour, hands on, learning session on chromatography and the making of biodiesel fuel to 20 students from The Connecticut Pre-Engineering Program (CPEP) (November 17); and presented a talk entitled 'Biodiesel Fuel from Connecticut Oilseed' to the Organics Recycling and Composting Subcommittee of the State Solid Waste Management Advisory Committee in the Phoenix Auditorium at the State of Connecticut Department of Environmental Protection, Hartford, CT (November 27).

DR. MARYJANE INCORVIA MATTINA met with visitors to the U.S. from Algeria and Senegal to discuss food safety. These visitors were participants in a program at the Office of International Affairs at UCONN and were accompanied by Ellen Sloan from the Connecticut Department of Consumer Protection. The international participants were Hamid El Chibani, Omar Mbaye, Fatou Ndey Ndiaye (November 15).

DR. DAVID STILWELL hosted the regular meeting of the Connecticut Community Gardens Association (CCGA) (November 15).

Biochemistry and Genetics

DR. DOUGLAS DINGMAN met with Jerry Silbert M.D. (The Watershed Partnership, Inc.) to initiate work on locally produced milky spore pathogens to control white grubs in public playing fields (collaboration with DR. RICHARD COWLES) (November 14); attended the Southern New England Beekeepers Assembly (SNEBA) (November 17); and talked to students (Gifted and Talented Student Group, New Haven School system) about research on foul-brood disease in honey bees (November 28).

DR. NEIL MCHALE taught a mini course on "Breeding Ornamental Plants" for the Federated Garden Clubs of Connecticut (November 28).

DR. NEIL SCHULTES hosted high school students from Bunnell High School in Stratford CT for laboratory tours and discussed how plant genetic engineering is used to study photosynthesis (24 students) (November 14).

Entomology

DR. CHRIS T. MAIER displayed flies on Connecticut's endangered species list at a meeting of the Connecticut Entomological Society at the University of Connecticut, Storrs (November 16).

DR. KIRBY C. STAFFORD, III attended a flu pandemic communications planning session at the CT Department of Information Technology in East Hartford (November 1); participated in a meeting of the Cooperative Agricultural Pest Survey (CAPS) at the Valley Laboratory (November 2); spoke to members Naugatuck Valley Audubon touring the Station about activities in the Entomology Department (8 attendees) (November 9); spoke on ticks and Lyme disease to students at Trinity College in Hartford

(November 28); and interviewed by Natasha Lee, Fairfield Advocate, about tick studies in Fairfield County by the Fairfield County Municipal Deer Alliance and Eva Sapi, University of New Haven (November 29).

DR. KIMBERLY A. STONER spoke at the CT NOFA Annual meeting about the Organic Land Care Program, Jones Auditorium (65 attendees) (November 3); chaired a meeting of the Organic Land Care Committee, Valley Laboratory (8 attendees) (November 14); Introduced Station scientists (IRA KETTLE, DR. BRIAN EITZER, and DR. DOUGLAS DINGMAN) at the Southern New England Bee Assembly and spoke briefly about Experiment Station research on bees, Unitarian Society of New Haven (80 attendees) (November 17); with Bill Duesing of CT NOFA, taught a session of the Garden Study School on Organic Gardening with Vegetables and Herbs, Jones Auditorium (45 attendees) (November 27); and presented the Organic Land Care Program at the meeting of the Interstate Council of NOFA, Old Chatham, New York, (10 attendees) (November 29).

Forestry and Horticulture

DR. JEFFREY S. WARD along with SCOTT C. WILLIAMS, spoke on "Forestry and Wildlife" for students from the Coop High School, New Haven (11 students) (November 1); spoke on forestry and horticultural research for a tour of the Naugatuck Audubon Society (8 attendees) (November 9); participated in the Connecticut Tree Protective Association, Board of Directors meeting in New Haven (September 11); spoke on forestry and horticultural research for a tour of the Bunnell High School students (24 students) (November 14); and spoke on "Japanese barberry (Berberis thunbergii): control alternatives" at the CT Forest Conservation and Forest Science Forum in Storrs (60 attendees) (November 21).

DR. MARTIN P.N. GENT presented posters on "Modeling uptake and translocation of DDE in Cucurbita" and "A dynamic linear model of water content and movement in whole plants" at the American Society of Agronomy annual meeting in New Orleans LA (3000 attendees) (November 4-8); gave a talk on "Nutrient and Water management" at the Greenhouse Tomato Conference in Sturbridge MA (200 attendees) (November 13); and demonstrated the use of a copper ionization unit to sterilize nutrient solutions in the Ebb and Flood greenhouse to Ratus Fischer (Fischer EcoWorks) and Lars Mohan (Aqua-Perl, Denmark) (November 27).

DR. ABIGAIL A. MAYNARD reported on Station activities at a quarterly meeting in the Council on Soil and Water Conservation in Middletown (18 attendees) (November 1); spoke to 10th graders at Hamden Hall Country Day School about a career in agricultural science (15 students, 2 teachers) (November 8); toured the Scotts composting and bagging facility in Lebanon with Solid Waste Management Advisory Committee (November 14); participated in DEP's Solid Waste Management Advisory Committee in Hartford (November 27); participated in a meeting of the Organics Recycling and Composting Subcommittee in Hartford (November 27); and spoke to 11th graders at Hamden Hall Country Day School about a career in agricultural science (21 students, 2 teachers) (November 29).

DR. WILLIAM R. NAIL met with Ann and Steve Sawyer to evaluate a potential vineyard site in Preston (November 13); participated in the annual meeting of NE-1020: Multi-State Evaluation of Winegrape Cultivars and Clones in Austin, TX (November 7-8); and participated in a meeting of the State Advisory Committee for Agriculture Education at Southington Agriculture Science Center in Southington (November 28).

MR. MICHAEL R. SHORT proctored the final exam of the CT Accredited Nursery Professional course for CT Nursery and Landscape Association (November 20 and 28).

MR. JOSEPH P. BARSKY was elected Connecticut's representative to the Executive Committee of the New England Society of American Foresters (November 29).

MR. SCOTT C. WILLIAMS along with ROLLIE HANNAN, led a large animal capture demonstration for students of the Wildlife Sampling Techniques class from the University of Connecticut, North Branford, CT (15 attendees) (November 7).

Plant Pathology and Ecology

DR. SANDRA L. ANAGNOSTAKIS gave a talk on "Breeding chestnut trees" to a Botany class from Quinnipiac University in Jenkins (12 adult attendees) (November 5).

DR. DONALD E. AYLOR gave a lecture entitled "The aerobiology of apple scab" in a graduate level course in Atmospheric Dispersion at The University of Connecticut, Storrs (7 adult attendees) (November 13); and gave a lecture entitled "Pollen-mediated gene flow in the environment" in a graduate level course in Atmospheric Dispersion at The University of Connecticut, Storrs (7 adult attendees) (November 15).

DR. SHARON M. DOUGLAS participated in the Cooperative Agricultural Pest Survey (CAPS) Meeting and discussed the National Ramorum Blight Survey 2007 and the Chrysanthemum White Rust Survey 2007 at the Valley Laboratory (15 adult attendees) (November 2); gave a talk about plant pathology and the role of the Plant Disease Information Office to members of the Naugatuck Valley Audubon Society in Jenkins Laboratory (8 adult attendees) (November 9); gave an invited talk entitled "Greenhouse tomatoes: Disease identification and management" at the Greenhouse Tomato Conference in Sturbridge, MA (187 adult attendees) (November 13); was interviewed about the poster presented at the American College of Allergy, Asthma, & Immunology Annual Meeting in November 2007 regarding Christmas trees and mold by Amanda Cuda of the Connecticut Post (November. 19); presented a lecture entitled "Understanding plant diseases" as part of the Garden Study School sponsored by the Federated Garden Clubs in Jones (45 adult attendees) (November 28); and was interviewed about the mold and Christmas tree issue by Rick Dungey of the National Christmas Tree Association (November 28).

DR. WADE H. ELMER presented the seminar "Incidence of plant pathogens in salt marshes affected by sudden wetland dieback" at the Biennial meeting of the Estuarine Research Foundation in Providence, RI (60 adult attendees) (November 8) and gave presentations on "The role of earthworms in keeping plants healthy" and "Salt marsh vegetation dieback" to a group of talented and gifted students from the New Haven School System in the Plant Pathology greenhouse (3 adult and 25 youth attendees) (November 28).

DR. FRANCIS J. FERRANDINO gave a talk on "The effect of host growth on the dynamics of plant disease epidemics" to a Botany class from Quinnipiac University in Jenkins (12 adult attendees) (November 5).

MS. MARY K. INMAN gave a talk entitled "General care and diagnosis of common problems of houseplants" at the East Hampton Public Library as part of their "Take a Break" series of lunchtime seminars (15 adult attendees) (November 1).

DR. ROBERT E. MARRA gave a lecture on "Molecular biology in plant disease diagnostics" to a Botany class from Quinnipiac University in Jenkins (12 adult attendees) (November 5) and spoke about plant pathology and plant disease diagnostics to two groups of high school students from Bunnell High School (total of 2 adult and 24 youth attendees) (November 14).

MR. PETER THIEL gave a presentation entitled "Sudden wetland dieback" to a Botany class from Quinnipiac University in Jenkins (12 adult attendees) (November 5).

Soil and Water

DR. THEODORE ANDREADIS attended the 56th Annual Meeting of The American Society of Tropical Medicine and Hygiene in Philadelphia, PA and presented 4 poster presentations: (1) *Isolations of Jamestown Canyon virus* (Bunyaviridae: Orthobunyavirus) from field-collected mosquitoes (Diptera: Culicidae) in Connecticut, USA: a ten-year analysis; (2) Genetic relationships of Jamestown Canyon viruses(Bunyaviridae: Orthobunyavirus) infecting Connecticut mosquitoes (Diptera: Culicidae); (3) Regional comparisons of the host feeding patterns of major vectors of West Nile and eastern equine encephalitis viruses in the US; and (4) Effects of landscape patterns and bird community composition on West Nile virus transmission patterns in Connecticut. (over 2,000 attendees) (November 4-8) and presented

an overview of the State Mosquito/Arbovirus Surveillance Program and West Nile virus to a group of 5 members of the Naugatuck Audubon Society (November 9).

DR. PHILIP ARMSTRONG attended the 56th Annual Meeting of The American Society of Tropical Medicine and Hygiene in Philadelphia, PA and presented 2 poster presentations: (1) *Genetic relationships of Jamestown Canyon viruses*(*Bunyaviridae*: Orthobunyavirus) *infecting Connecticut mosquitoes* (*Diptera: Culicidae*); (2) *Isolations of Jamestown Canyon virus* (*Bunyaviridae*: Orthobunyavirus) *from field-collected mosquitoes* (*Diptera: Culicidae*) *in Connecticut, USA: a ten-year analysis*. (over 2,000 attendees) (November 4-8).

DR. GREGORY BUGBEE spoke on *Invasive Aquatic Plants in Connecticut* to the Naugatuck Audubon Society at the Kellogg Environmental Center in Derby (10 attendees) (November 12); spoke to two classes from Bunnell High School on *Soil Testing and Invasive Aquatic Plants* (approximately 30 students) (November 14); was interviewed by Nancy Barnes of the New Milford Times on Eurasian water milfoil in Lake Candlewood (November 19); and taught a class on *Lawn Care* to the Federated Garden Club in Jones Auditorium. (approximately 40 attendees) (November 28).

DR. MICHELLE MARKO attended the general meeting of the Connecticut Invasive Plant Working Group held at the Valley Laboratory (November 9) and was interviewed by Nancy Barnes of the New Milford Times regarding Eurasian watermilfoil in Candlewood Lake and the milfoil weevil (November 16).

DR. GOUDARZ MOLAEI attended the 56th Annual Meeting of The American Society of Tropical Medicine and Hygiene in Philadelphia, PA and presented 2 poster presentations: (1) *Regional comparisons* of the host feeding patterns of major vectors of West Nile and eastern equine encephalitis viruses in the US; and (2) Effects of landscape patterns and bird community composition on West Nile virus transmission patterns in Connecticut. (over 2,000 attendees) (November 4-8).

DR. JOSEPH PIGNATELLO attended the Annual Meeting of the Soil Science Society of America, held in New Orleans, LA and gave a presentation entitled, *The effect of halide concentrations on the advanced oxidation process treatment of membrane concentrates from municipal wastewater recycling for brackish water aquaculture.* (approximately 100 attendees) (November 4-8).

MS. ROSLYN SELSY presented a poster entitled, *Connecticut Invasive Aquatic Plant Maps* and a digital poster on the same topic at the Northeast Arc Users Group Conference held in Burlington, Vermont. (500 people in attendance) (November 4-7); presented a poster entitled, *Connecticut Invasive Aquatic Plant Maps* and staffed a table on the CAES Invasive Aquatic Plant Program for GIS Day at the State Capitol. (100 people in attendance) (November 14), The paper poster also was on exhibit for the month of November in the Capitol Concourse; and attended the GIS Council Meeting as the CAES representative (November 14).

DR. JASON WHITE met with Nancy Marek, a graduate student from Yale, to discuss her thesis project on Phytoremediation of Brownfield sites (November 29).

Valley Laboratory

DR. CAROLE CHEAH was interviewed by Public Radio of Western New England WFCR's Karen Brown about hemlock woolly adelgid, (December 7).

DR. JAMES A. LAMONDIA examined candidates for the Connecticut arborist license and participated in the quarterly meeting of the Connecticut Tree Protection Examining Board in New Haven (December 12).

DR. DE-WEI LI hosted visiting Professor Guihua Zhao of the Jiangsu Polytechnic College of Agriculture and Forestry in China and conducted a collaborative research project "Biocontrol of Blue Staining Fungi of lumber of *Populus* spp." (Nov. 14 to Dec. 4). During Prof Zhao's visit, both Prof. Zhao and DeWei visited fungal herbaria at USDA, Beltsville, MD (BPI), Cornell University (CUP), State University of New York at Syracuse, and Harvard University (Farlow Herbarium) to examine the specimens of *Ophiostoma*,

Ceratocystis, and Helicosporous fungi. The examination of some type specimens is necessary to clarify the taxonomic delineation of some species of the aforementioned genera.

DR. TODD L. MERVOSH participated in a symposium planning committee meeting for the Connecticut Invasive Plant Working Group at the Valley Laboratory (12 attendees) (December 12).

Journal Articles Approved November 2007

- Anderson, John F. and Louis A. Magnarelli. Biology of Ticks. Infectious Disease Clinics of North America
- Cowles, Richard S. New Insights Into Biology and Management of Annual Bluegrass Weevil. Newsletter Clippings, (CT Association of Golf Course Superintendents)
- Li, X-Y, E. A. Cowles, Richard S. Cowles, R. Gaugler, D. L. Cox-Foster. Characterization of Immunosuppressive Surface Coat Proteins from *Steinernema glaseri* That Selectively ... International J. Parasitology
- Gent, Martin P. N. Effect of Shade on Water and Nutrient Use in Greenhouse Tomato. Abstract, Northeast Region American Society for Horticultural Science, January 2008, New Brunswick, NJ
- Gent, Martin P. N. and Vincent Malerba. Using Forced Air Heat to Warm the Soil. Proceedings, New England Vegetable and Fruit Conference, Manchester, NH, December 2007
- Krol, Walter J., Brian D. Eitzer, Terry Arsenault, MaryJane Incorvia Mattina. Pesticide Residues in Produce Sold in Connecticut, 2006. Station Bulletin
- Krol, Walter J., Brian D. Eitzer, MaryJane Incorvia Mattina, Terry Arsenault. Pesticide Residues in Produce Sold in Connecticut, 2006. Department of Agriculture
- Nail, William R. Trellis Construction for the Long Haul. Proceedings of the 2007 New England Vegetable and Berry Conference
- Nail, William R. Critical Issues in Early Vineyard Establishment. Proceedings of the 2007 New England Vegetable and Berry Conference
- Stoner, Kimberly. Strategies to Control Insects in Successive Plantings in High Tunnels. Proceedings of the New England Vegetable and Berry Conference

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