

NPDN News

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SENTINEL PLANT NETWORK DELIVERS WORKSHOP TO MID-ATLANTIC MEMBER GARDENS

Rachel McCarthy, NPDN-SPN, Cornell University and Dan Stern, American Public Gardens Association

On April 25 & 26, the Sentinel Plant Network held a workshop at Sarah P. Duke Gardens in Durham, NC for 35 public garden professionals working at member gardens in Delaware, Maryland, North Carolina, New York, Pennsylvania, South Carolina, Tennessee, Virginia, and Washington D.C. This Mid-Atlantic workshop accommodated 42 individuals from 21 gardens, NPDN and USDA-APHIS.

their observation skills and begin to work through the diagnostic process. The objective is not to make a diagnosis or identification but rather to recognize new problems so they can engage their state diagnostic lab when something seems suspect. The workshops

SPN's professional development workshops emphasize the importance of early detection and the benefits of participation in the program.

also provide an opportunity to update frontline plant health care professionals on regionally significant pests and emerging threats and give them a variety of new diagnostic tools to improve their monitoring efforts.

In Durham, NPDN-SPN training resources were debuted on Masson pine moth (*Dendrolimus punctatus*), beech bleeding canker (*Phytophthora kernoviae*) and Japanese pine sawyer (*Monochamus alternatus*). These new materials are part of SPN's emerging threats series. SPN's emerging threats features exotic pests and pathogens not known to be present in the US that are of interest to USDA-APHIS. Frontline professionals working at member gardens are asked to monitor their



"The Big Easy," by Patrick Dougherty is a temporary sculpture on the South Lawn in the Historic Gardens at Sarah P. Duke Gardens.

Since 2011, SPN has delivered 21 workshops. SPN's professional development workshops emphasize the importance of early detection and the benefits of participation in the program. Through lectures and hands on activities, participants learn how to sharpen



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- Sentinel Plant Network sample submission protocol and payments
- QMS workshop participants perform mock audit— an exercise in applying STAR-D principles

collections for these threats as well as any significant pests, which may be present locally or introduced to their area. Be sure to visit www.sentinelplantnetwork.org/issue/threats-us to learn more about all of SPN's emerging threats.

The Mid-Atlantic presentation team consisted of Matt Bertone and Shawn Butler, North Carolina State University Plant Disease and Insect Clinic; Eric Day, Virginia Tech Insect Identification Lab; Nancy Gregory, University of Delaware Plant Diagnostic Clinic; and Rachel McCarthy and Dan Stern, Sentinel Plant Network, NPDN and American Public Gardens Association. Nancy presented the foundation diagnostic lecture—an introduction to diagnosing plant problems, which covered both biotic and abiotic causes. The scouting walks, led by Eric and Nancy and the hands on laboratory sessions, taught by Matt and Shawn, compliment the diagnostics lecture and bring it all together.

The Sentinel Plant Network will offer two more professional development workshops this summer! Gardens from the northwest will be invited to participate in a workshop at the Hoyt Arboretum in Portland, OR on July 11 & 12 and gardens from the Midwest will be asked to attend a workshop at the Bernheim Arboretum and Research Forest in Clermont, KY on July 26 & 27. If you have not participated in an SPN workshop and would like to, please contact Rachel McCarthy at rachel.mccarthy@cornell.edu.

(Photos from top) Eric Day and Nancy Gregory with workshop participants on the scouting walk; Shawn Butler helps at one of the compound microscope stations; and Matt Bertone offers a clue about one of the unknown samples during the laboratory session.



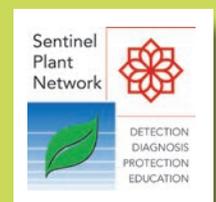
SAMPLE PROTOCOL AND PAYMENTS

Sentinel Plant Network member gardens are now expected to pay any fees associated with their sample. If you request that a physical sample be submitted and the garden has followed the proper protocol for submitting that sample, the garden will be reimbursed by the Sentinel Plant Network. If you receive a sample from a member garden but it does not include the new packing slip, please ask that they generate one using our online web form <https://publicgardens.org/programs/plant-protection-program/sentinel-plant-network/packing-slip>, and then send you a copy.

SPN sample submission protocol

1. SPN garden member contacts diagnostician and sends photos of suspect, significant plant problem
2. The diagnostician requests that a physical sample be sent
3. The sample is a high-quality sample and contains the proper forms (clinic sample submission form AND SPN packing slip)

If you have questions about the Sentinel Plant Network, SPN's sample submission protocol, or payment for samples, please contact Rachel McCarthy, NPDN-SPN manager at rachel.mccarthy@cornell.edu.



QMS workshop participants perform mock audit – an exercise in applying STAR-D principles *Karen Snover-Clift and Dawn Dailey O'Brien, NEPDN, Cornell University*

In last month's NPDN News, you may have seen an article on the first NPDN STAR-D Quality Management System (QMS) Introduction workshop, held on February 28–March 2, 2017 in Beltsville, Maryland. The development of this workshop was a significant addition to the STAR-D training opportunities for our members.

A key component of that training was the mock audit held at the USDA-APHIS-PPQ-S&T, Beltsville Laboratory. The mock audit occurred on the third day of the workshop and it gave the QMS workshop participants a chance to fuse together all the ideas and concepts they had been hearing about over the first two days. They took on the role of QMS auditors during mock audit which included four laboratory and document review stations. The participants applied QMS principles to analyze, document and resolve various issues that may occur in live laboratory audits.

This activity required an enormous commitment by the workshop development team which included **Kathy Burch** (USDA-APHIS-PPQ-S&T), **Dawn Dailey O'Brien** (Cornell University), **Jason French** (New Mexico State University), **Deric Picton** (USDA-APHIS-PPQ-S&T) **Pat Shiel** (USDA-APHIS-PPQ-S&T) and **Karen Snover-Clift** (Cornell University) and by the staff members of the Beltsville Laboratory. It required the creation of a complete laboratory documentation and record system for a fictitious laboratory, which we dubbed the "Figment Plant Diagnostic Clinic"; a homework assignment and role play exercise to prepare for the mock audit; four (4) stations of actor scripts with accompanying physical props, listings of needed specific station equipment, documents and materials and expected non-conformances; and mock audit participant worksheets and accompanying answer keys.

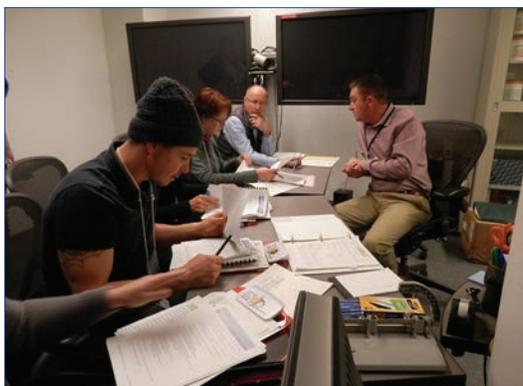
Deric Picton served as the on-site coordinator and procured several "volunteers" from the Beltsville Laboratory staff to work with the QMS workshop instructors as actors for our simulated audit. The planning team and the Beltsville staff tried to make this a fun activity while ensuring teaching moments were

created throughout the mock audit activity. As you read the following listing of our actors, you may find amusement in the real-world titles of our actors and the roles they played in the mock audit...their acting role required them to suppress much of their experience. **John Bienapfl (Molecular Biologist-Beltsville Laboratory) played the role of Al Ternia**, a part-time student employee that was assigned to perform an ELISA test because a diagnostician had called in sick that day. The main issue for Al was that he had never received any type of training to perform the ELISA but was performing it because no one else was available. **Deric Picton (Lab Operations Manager/Diagnostics Coordinator-Beltsville Laboratory) played the role of Jerry Rigged**, the most senior technician of the laboratory was performing a PCR procedure on the mock audit day. Jerry was a very knowledgeable technician but seemed to think he didn't need to follow the written procedures because he wrote them and knew where liberties could be taken. **Jason French (Plant Diagnostic Clinician-NMSU) played the role of Kale Yarborough**, the Laboratory Quality Manager that was available to answer any questions about the lab's system and provided any documents and records the participants requested; and **Tanisha Robinson (Research Associate-Beltsville Laboratory) played the role of Eliza Menelli**, a technician that had worked in the lab for about a year. Eliza signed in the samples submitted to the lab and tried to convey minor submission form and packaging mistakes to the participants. In supporting roles **Michael Stulberg (Molecular Biologist-Beltsville Laboratory) played Phil A. Dendron**, the Lab Director; and **Yasmin Rivera (Molecular Biologist-Beltsville Laboratory) as Jasmine Rice**, a student worker. All the actors did a great job...actually they did a great job four times... they had to repeat their performance as our groups of 4–5 participants circulated through the stations.

The planning team and actors hoped they had developed an ideal learning environment for the participants by ensuring this was a challenging yet enjoyable activity...with some interjected humor from time to time. To prepare the group, Dawn Dailey O'Brien put on a curly wig and she and Jason French committed to the roles of Wilma Flagstone and Fred Flintstone, external auditors in a role play exercise. They and **Kathy Burch** (as Betty Rubble, the very nervous laboratory quality manager) ended day 2 with

an entertaining portrayal of the audit process.

A few notable items of the mock audit included Kathy and Dawn writing a requirement into the Figment Laboratory policies that required all employees wear a lab coat, gloves and goggles for EVERY activity in the lab. The participants picked up on a violation of this requirement quickly! Kale Yarborough (Jason French) over emphasized the point that sticky notes are not official documents and are not the proper way to inform other staff of important issues by adding numerous sticky notes around his station and computer monitor. Eliza Menelli (Tanisha Robinson) got distracted from signing in samples with a phone call requesting confidential client information which she gave away without hesitation. A large Philodendron plant was placed in the molecular testing laboratory in violation of their no plant material policy, but the story went on to include the detail that the Lab Director, one Phil A. Dendron, required that particular type of plant in all his labs. Jerry Rigged (Deric Picton) blatantly dismissed the lab's "no food allowed" policy by eating a danish and coffee and blaming his boss's very strict policy of employees reporting to their work station immediately... because of that policy he HAD to bring his breakfast in the lab! He also wowed the participants with is very unique, duck feet as his protective foot wear. Jasmine Rice (Yasmin Rivera) even walked up at one point and took a bite out of the danish! The mock audit activity was a huge success



(Photos clockwise from top left) Jason French as Kale Yarborough being interviewed by Tracey Olson, Tamla Blunt, and Clinton Greub

Deric Picton as Jerry Rigged being interviewed by Corinne Rhodes, Caleb Ayin, and Jorge Fuentes Fuster (behind the clipboard). Notice the duck feet shoe protection.

Pat Shiel, a course instructor, explains the findings of Al Ternia's (played by John Bienapfl) station to Elizabeth Dorman, Jeremy Welter and Maria Del Pilar Marquez

Deric Picton as Jerry Rigged with Jorge Fuentes Fuster inspecting the pipettes. Note the unauthorized danish and coffee as well as the large plant in the molecular testing area!

John Bienapfl as Al Ternia being interviewed by Paul Manzanares, Thuc Dang, and Mandy Little

Tanisha Robinson as Eliza Menelli explaining how she signs sample into the laboratory to Paul Matthews, Jennifer Schoener, Corinne Rhodes, Caleb Ayin, and Jorge Fuentes Fuster

because the workshop participants took the activity very seriously, they did their homework assignment and prepared, they seemed very eager to learn and they actively participated in the workshop. We want to thank Mark Nakhla for allowing us to converge on his facility, use his laboratories and equipment, manipulate the laboratory set-up to meet the mock

audit needs and use the very valuable time of his staff members to conduct this training. We also want to thank everyone involved including the instructors, the participants and the Beltsville laboratory staff members—those that served as our actors and others that helped in ways not mentioned here. 🌱

PAC Highlights

PROGRAM AREA COMMITTEES

Diagnostics Committee

*Clarissa Balbalian, Committee Chair,
Mississippi State University*

The Diagnostics Committee had a conference call on April 13, 2017. The following agenda items were discussed:

- Colin Stewart, Asst. Director, Pests, Pathogens and Biocontrol Permits USDA-APHIS-PPQ: How the APHIS proposed revision to regulations in 7 CFR part 330 that govern the movement into and within the United States of plant pests, biological control agents, and soil affects diagnosticians. Public comment period ends April 19, 2017.

The bulk of the proposed revisions are largely codifying existing policy. Lists that have been released to relieve the regulatory burden on certain plant pests and biocontrol agents. The comment period is open and proposals can be made for additional pathogens to be considered for deregulation. The proposed regulations

and Environmental Impact Statement can be found at: <https://www.regulations.gov/docket?D=APHIS-2008-0076>

- NPDN Executive Committee response to APHIS revision to 7 CFR part 330

The network will be providing a consensus statement but individual comments can be also submitted—a few sentences or bullets with your name and institution will suffice.

- Qualtrics survey: cooperative effort Diagnostics and Training and Education (*Sladana and Lina*)

Lab methods proposed for addition to National Repository dictionary, diagnostician resource and training needs, First Detector website changes

- Beltsville Trainings, STAR-D Trainings

There was a 6-week Beltsville Training schedule that kicked off with the first STAR-D QMS workshop. There were 55 total

participants. Farm Bill funding has already been secured for the 2018 Beltsville workshops and a survey will be sent out (Sept/Oct) to gauge interest. STAR-D: They are hoping to hold a Document Rodeo and two Phase-2 workshops, as well as an external auditor training with a webinar-based series.

The full minutes for the meeting can be found on the NPDN diagnostics webpage. The next meeting will be June 22, 2017 at 1:00 PM ET. ☺

Visit the NPDN homepage at www.npdn.org for more information on Program Area Committees. Login and password required.

UPCOMING EVENTS

Meetings

August 5–9, 2017
2017 APS Annual Meeting
San Antonio, Texas

August 12–17, 2017
National Plant Board 2017 Annual Meeting
Savannah, Georgia

November 5–8, 2017
Entomology 2017
Denver, Colorado

March 19–22, 2018
Ninth International Integrated Pest
Management (IPM) Symposium
Baltimore, Maryland

PHOTO OF THE MONTH

cedar-apple rust sign
(*Gymnosporangium
juniperi-virginianae*)



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